Usenet Newsgroup Archive: rec.radio.amateur.homebrew

1999-06 - 1999-12

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Date span: 1999-06-01 through 1999-12-31

Source text: rec.radio.amateur.homebrew.txt

Source item: https://archive.org/details/usenet-rec

Messages included in this PDF: 5,235

Messages are presented chronologically by archived date.

Binary or encoded payloads are not printed as blocks of encoded text; a placeholder appears where such material was detected. The original source text is unchanged.

1. Re: EI9GQ Homebrew Radio Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-01 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01beac05$90511740$04e5abc3@default>
Source record: 69745
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur,uk.radio.amateur

Hi Eamon,

Just a suggestion - why not state your website address
IN FULL in your newsgroup messages.

It is then only necessary for the reader to 'mouse click'
on the address rather than spend the next five minutes
changing over to 'Internet search' and having to enter the
full address himself, with the many possibilities of error
and eventually giving up the whole idea as a bad job.

For example, if you click on my full website address below
my signature you will be transfered there almost
immediately.

Then help yourself to some free technical radio software
progams. Been a long time since we had a very early
morning chat on 160m. I must confess I havn't tried just
lately.
--
****
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp

****

Eamon Skelton <dont@want.spam> wrote in article
<7ihg0g$he8$1@scotty.tinet.ie>...
> The EI9GQ homebrew radio page has moved to
www.qsl.net/ei9gq
>
> Recent additions include:
> A simple VHF CW transmitter.
> 2M to 10M receive converter.
> 6M to 30M receive converter.
> 30W mosfet PA for the 80M SSB rig.
> Pre-programmed PIC now available for the iambic keyer.
>
> 73, Ed. EI9GQ
>
> e-mail ei9gq@qsl.net
>
>
>
>

>
>
>
>
>
>

2. FS: New Roller Inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-01 00:00:00 UTC
From: k9sqg@aol.com
Message-ID: <19990531202239.27349.00004604@ng66.aol.com>
Source record: 69746

Have for sale, three roller inductors. None have ever been in service and look brand new, the older "single" one is dusty but should clean up sparkling clean.

Have two of the following:
24 uh, 22 turn edgewound roller inductor. Has dual contact arrangement that eliminates electrical "skipping" during rotation prevelant with most single roller/contact inductors. Has a potentiometer gear driven for an electrical position indicator. Has an insulated switching mechanism that activates at about the mid inductance range. The inductor is rated at 20 Amps. The construction is similar to the 40 uh one on page 66 of Surplus Sales of Nebraska catalog (it sells for $245). This 24 uh inductor was selling for $219 each by Surplus Sales at the Dayton Hamvention this year. I am selling both as a pair for $175 total, shipped to your door, conus only.

Have one of the following:
29 turn edgewound roller inductor, dusty, but apparently never used. The coil itself is 3 1/2 inches in diameter with a length of 6 inches. It has dual rollers to eliminate "skipping" during rotation. This is every bit as beefy as the ones above. All insulating surfaces are ceramic. Has a ceramic insulated flex coupling. The ends are triangular shaped but the corners are rounded. Selling for $75, shipped to your door, conus only.

If you have a high power amplifier, tuner, or antenna project in mind, these inductors will do the trick.

Thanks for reading the ad.

73

Evan

3. FS: New Roller Inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-01 00:00:00 UTC
From: k9sqg@aol.com
Message-ID: <19990531202445.09478.00005190@ng-fz1.aol.com>
Source record: 69747

Have for sale, three roller inductors. None have ever been in service and look brand new, the older "single" one is dusty but should clean up sparkling clean.

Have two of the following:
24 uh, 22 turn edgewound roller inductor. Has dual contact arrangement that eliminates electrical "skipping" during rotation prevelant with most single roller/contact inductors. Has a potentiometer gear driven for an electrical position indicator. Has an insulated switching mechanism that activates at about the mid inductance range. The inductor is rated at 20 Amps. The construction is similar to the 40 uh one on page 66 of Surplus Sales of Nebraska catalog (it sells for $245). This 24 uh inductor was selling for $219 each by Surplus Sales at the Dayton Hamvention this year. I am selling both as a pair for $175 total, shipped to your door, conus only.

Have one of the following:
29 turn edgewound roller inductor, dusty, but apparently never used. The coil itself is 3 1/2 inches in diameter with a length of 6 inches. It has dual rollers to eliminate "skipping" during rotation. This is every bit as beefy as the ones above. All insulating surfaces are ceramic. Has a ceramic insulated flex coupling. The ends are triangular shaped but the corners are rounded. Selling for $75, shipped to your door, conus only.

If you have a high power amplifier, tuner, or antenna project in mind, these inductors will do the trick.

Thanks for reading the ad.

73

Evan

4. Re: help with transverter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-01 00:00:00 UTC
From: hamm4fun@aol.com
Message-ID: <19990531211516.21412.00006473@ng63.aol.com>
Source record: 69748

Ten-Tec has some kits for 2m, a little over $100 for the kit, over $200 ready to drive.

5. Re: 73 magazine???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-01 00:00:00 UTC
From: w5ikb <w5ikb@livingston.com>
Message-ID: <37534CE1.ED382C10@livingston.com>
Source record: 69749

I guess if you can put up with Wayne Green's trash, the magazine is not too bad. I got tired of him bragging about all his trips and how smart he was and canceled my subscription.

Harry Brown wrote:

> For even lower prices for 73 and other magazines, send an e-mail to
> bcmag1@ixpres.com and request their catalog.
>
> You will find 73 for $8.75 a year, CQ and CQ-VHF also for $8.75 per year.
>
> I've delt with them for many years and they are the cheapest source I'm
> aware. When you don't offer million dollar sweepstakes, you can offer
> magazines for much lower prices.
>
> No association with this source except for being a satisfied customer.
>
> 73, Harry, W3IIT
>
> Steve Ratzlaff wrote in message <3751A746.4843FD7F@flash.net>...
> >Hi Jeff,
> >73 magazine still alive and well.
> >http://www.waynegreen.com
> >email: design73@aol.com
> >subscriptions: one year, $24.97, 70 N202, peterborough, NH 03458-1107
> >

6. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-01 00:00:00 UTC
From: OBI-WAN PEROGI <theoldbrookltnkid@ameritech.net>
Message-ID: <375361BC.3A7B@ameritech.net>
Source record: 69750
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

```
Dean Craft wrote:
>
> Sir wrote in message <37363938.123C@sir.com>...
> >Rich Mulvey wrote:
> >>
> >> On Fri, 7 May 1999 08:21:11 -0500, jpos <jpos@mobilemark.com> wrote:
> >> >No one complains about having to learn how to use windows before they
> can
> >> >surf the net....
> >> >
> >>
> >> Considering that I was "surfing the net" before it was even
> >> *possible* with MS-Windows, you might want to choose a different
> >> analogy. Sigh.
> >>
> >
> >The best analogy would be having to learn Morse Code in order to use the
> >internet, as Morse Code has as much to do with knowing how to operate
> >and work the internet as it does with knowing how to operate and work a
> >Ham radio.
>
> True enough; however, it has everything to do with the es-prit de corps of
> ham radio. Knowing that one has gone through, and survived, the identical
> trials and tribulations of his or her counterparts, builds a unique bond of
> dedication and purpose. The instant gratification crowd of today has no
> appreciation for that bond.
>
> Dean Craft -- W4IHK
I apprecaite Bond, James Bon
--
REMEMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
ESPECIALLY WHEN YOU'RE ON A DATE. BURP!!!!
```

7. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-01 00:00:00 UTC
From: OBI-WAN PEROGI <theoldbrookltnkid@ameritech.net>
Message-ID: <37536213.2574@ameritech.net>
Source record: 69751
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Woofle wrote:
>
> On Mon, 26 Apr 1999 18:22:42 -0400, "The Conqueror"
> <joetheripper@hotmail.com> wrote:
>
> >I was just wondering why they still keep the Morse code testing requirements
> >if the military doesn't use it anymore and telegraphs are not that common. I
> >think because they stopped it for the marines, there's no point in using it
> >in ham radio either. And if you want to say it is for security, you are not
> >allowed to use codes when intended to obscure meaning.
> >
> >-Dan K3DRQ
> >
> >k3drq@qsl.net
> >
> >
>
> Now, LOOK. Haven't you watched the movie Independence Day?
> It was Morse Code that saved the world! :-)

WWhere in the movie is this???? It is becasue the yfigured out the
code; and it wasn't Morse Code either.
>
> >
> >

--
REMEMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
ESPECIALLY WHEN YOU'RE ON A DATE. BURP!!!!

8. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-01 00:00:00 UTC
From: OBI-WAN PEROGI <theoldbrookltnkid@ameritech.net>
Message-ID: <3753629E.73EC@ameritech.net>
Source record: 69752
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Rich Mulvey wrote:
>
> On Fri, 7 May 1999 08:21:11 -0500, jpos <jpos@mobilemark.com> wrote:
> >No one complains about having to learn how to use windows before they can
> >surf the net....
> >
>
> Considering that I was "surfing the net" before it was even
> *possible* with MS-Windows, you might want to choose a different
> analogy. Sigh.
You must be talking about bulletin boards or usenet.
>
> - Rich
>
> --
> Rich Mulvey
> http://mulvey.dyndns.com
> Amateur Radio: aa2ys@wb2wxq.#wny.ny.usa

--
REMEMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
ESPECIALLY WHEN YOU'RE ON A DATE. BURP!!!!

9. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-01 00:00:00 UTC
From: OBI-WAN PEROGI <theoldbrookltnkid@ameritech.net>
Message-ID: <37536303.74CA@ameritech.net>
Source record: 69753
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Sir wrote:
>
> Rich Mulvey wrote:
> >
> > On Fri, 7 May 1999 08:21:11 -0500, jpos <jpos@mobilemark.com> wrote:
> > >No one complains about having to learn how to use windows before they can
> > >surf the net....
> > >
> >
> > Considering that I was "surfing the net" before it was even
> > *possible* with MS-Windows, you might want to choose a different
> > analogy. Sigh.
>
> The best analogy would be having to learn Morse Code in order to use the
> internet, as Morse Code has as much to do with knowing how to operate
> and work the internet as it does with knowing how to operate and work a
> Ham radio.
I fail to see how knowing Morse Code will help you learn how to operate
a radio. I do not know Morse Code and can operate a C.B. Radio, FRS
Radio, Shortwave Radio, Scanner Radio...
--
REMEMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
ESPECIALLY WHEN YOU'RE ON A DATE. BURP!!!!

10. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-01 00:00:00 UTC
From: OBI-WAN PEROGI <theoldbrookltnkid@ameritech.net>
Message-ID: <37536357.1E13@ameritech.net>
Source record: 69754
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Jim wrote:
>
> Sir <sir@sir.com> wrote:
>
> >The best analogy would be having to learn Morse Code in order to use the
> >internet, as Morse Code has as much to do with knowing how to operate
> >and work the internet as it does with knowing how to operate and work a
> >Ham radio.
>
> Now that sounds like a plan, a Morse code test to get on the internet
> would keep some of you no-code peckerwoods

I guess Morse Code helps with the insults, huh?

out of the DX newsgroup
> and about a half dozen other ones this 'discussion' doesn't belong in.
>
> Is it REALLY necessary to post this crap to every ham newsgroup there
> is ? Some of us have already learned Morse code, we aren't looking for
> any good reasons not to....
>
> 73, Jim KH2D

--
REMEMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
ESPECIALLY WHEN YOU'RE ON A DATE. BURP!!!!

11. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-01 00:00:00 UTC
From: OBI-WAN PEROGI <theoldbrookltnkid@ameritech.net>
Message-ID: <3753638A.C7E@ameritech.net>
Source record: 69755
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

```
Michael Young wrote:
>
> I think you're making a strong argument for maintaining the status quo.

Exactly the way I feel.
>
> Michael.
>
> Sir <sir@sir.com> wrote in message news:37363938.123C@sir.com...
> > Rich Mulvey wrote:
> > >
> > > On Fri, 7 May 1999 08:21:11 -0500, jpos <jpos@mobilemark.com> wrote:
> > > >No one complains about having to learn how to use windows before
> they can
> > > >surf the net....
> > > >
> > >
> > > Considering that I was "surfing the net" before it was even
> > > *possible* with MS-Windows, you might want to choose a different
> > > analogy. Sigh.
> >
> > The best analogy would be having to learn Morse Code in order to use
> the
> > internet, as Morse Code has as much to do with knowing how to operate
> > and work the internet as it does with knowing how to operate and work
> a
> > Ham radio.

--
REMEMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
ESPECIALLY WHEN YOU'RE ON A DATE. BURP!!!!
```

12. Re: Morse code/Electroni Theory

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-01 00:00:00 UTC
From: OBI-WAN PEROGI <theoldbrookltnkid@ameritech.net>
Message-ID: <375363F7.7895@ameritech.net>
Source record: 69756
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Mark Morgan wrote:
>
> On Sun, 9 May 1999 23:23:53 -0400, "Dean Craft" <w4ihk@mindspring.com>
> wrote:
>
> >True enough; however, it has everything to do with the es-prit de corps of
> >ham radio. Knowing that one has gone through, and survived, the identical
> >trials and tribulations of his or her counterparts, builds a unique bond of
> >dedication and purpose. The instant gratification crowd of today has no
> >appreciation for that bond.
>
> That is saying that it is a hazing ritual. If more of you wanted to be
> honest and call it that and defend it on that bais I'd have more
> resopect, I'd alos be on HF becuase the FCC would acted even sooner to
> end but..
>
> It is also incorrect and inaccurate to say that the trails of all
> people learning Code are indentical, as can be claerly seen by reading
> the claims of the ProCoders on the ease of learning code
> >
> >Dean Craft -- W4IHK
> >
> >
> >
>
> Mark Morgan
> kb9rqz.
>
> Privacy of unsolicted email is not assured
> Unsolictied email will be published forwared
> or ourwise disclosed as I see fit.
>
> sending unsolitcied Email will be
> deemed aceptance of these terms
Why should we have to learn Morse code and Electronic Theory? Is it
becasue all the old timers had to? That is about the only reason.
Status Quo
--
REMEMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
ESPECIALLY WHEN YOU'RE ON A DATE. BURP!!!!

13. List of the rec.radio newsgroups

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-01 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <7ivt03$qig@news.Hawaii.Edu>
Source record: 69757
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

```
Archive-name: radio/personal-brief-introduction

In an effort help ensure a poster's article reaches the appropriate
audience, below is a list of the rec.radio newsgroups. In most cases,
a group's name will explain its purpose. Cross-posting should rarely
be necessary.

rec.radio.broadcasting (devoted to the broadcast industry; moderated)
rec.radio.cb
rec.radio.info (periodic informational bulletins; moderated)
rec.radio.scanner
rec.radio.shortwave
rec.radio.swap (for buying, selling, and trading; not a discussion group)

rec.radio.amateur.antenna
rec.radio.amateur.boatanchors (tube-type communications equipment)
rec.radio.amateur.digital.misc (packet, pactor and other digital modes)
rec.radio.amateur.dx (long-distance amateur communications)
rec.radio.amateur.equipment (questions, comments regarding commercially-
built amateur gear; not for buying/selling)
rec.radio.amateur.homebrew (devoted to home-building ham gear)
rec.radio.amateur.policy (issues include code, restructuring, local
restrictions in conflict with FCC R&R)
rec.radio.amateur.space (satellites, meteor scatter, EME)
rec.radio.amateur.misc (any topic not covered in the above groups)

(At least two other English language radio hierarchies exist, prefixed
with "uk" (United Kingdom), and "aus" (Australia), in place of "rec.")

Again, cross-posting should rarely be necessary. Many times, a long-
running thread results from a single cross-posted article, and the
contents of such a thread drift further and further away from being
"on-topic" in the various NGs that receive each and every followup.

For more detailed information, see "Guide to the Rec.radio Newsgroups"
posted on the 15th of each month.

Jeffrey Herman, KH6O
(rec.radio.amateur working-group)
```

14. Re: WTB: Old Mobile/Cellular phones

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-01 00:00:00 UTC
From: David P <pickards@zen.co.uk>
Message-ID: <JgP43.118$hg1.1044@newreader.ukcore.bt.net>
Source record: 69758

Yeah sorry!!!

David
Roy Lewallen wrote in message <37531DF5.27CF6443@teleport.com>...
>David P wrote:
>>
>> Hi,
>> I'm after a good supply of Analogue Cell phones/Mobile phones.
>> I'm intending making a 50mhz (6m) HT out of them and I need a few of
them.
>> There is a company in the UK called Bull Electrical that sell them for
£10
>> ($7). That's a bit much for what I want.
>>. . .
>
>£10 is more like $16 (U.S.).
>
>Roy Lewallen, W7EL

15. Re: 1.5 GHz Bandpass Filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-01 00:00:00 UTC
From: Jpos <jpos@mobilemark.com>
Message-ID: <dZT43.1192$0c5.607@nntp0.chicago.il.ameritech.net>
Source record: 69759

Hi Peter,

Look into Murata and Toko. They have ceramic filters centered at 1575MHz for
GPS. They normally have a bandpass of 4MHz.
Hope this helps.

Jerry N9DKQ

Peter Bolch wrote in message <7iuil6$812$1@news.netcologne.de>...
>Hi,
>
>
>I'm looking for a narrow (20 - 30 MHz) bandpass filter with a center
>frequency arround 1.5 GHz. There seem to be no helix filters with this
>bandwidth available and the coupled resonator ceramic filters (e.g. the
>Siemens types) are hard to get here.
>
>Might a cavity filter be a solution? If so, how are the dimensions of the
>cavity calculated?
>
>Any other ideas? Literature?
>
>
>Peter
>
>

16. Tube type xmtr problem solved - Tnx

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-01 00:00:00 UTC
From: cartercook@aol.com
Message-ID: <19990601135048.22552.00006863@ng-cj1.aol.com>
Source record: 69760

A couple of weeks ago, I posted a query asking for troubleshooting ideas on a tube type xmtr I am building.Many of you responded and I am grateful for your suggestions. Thanks to a local ham who brought his scope over yesterday, the problem is solved.

My problem was lack of drive from the osc tube to the grid of the final.In both the the osc and final plate ckts - 6AG7 and 6DQ5, respectively- resides an rf choke, naturally. I even bought two new chokes to fit those spots. The chokes I used were encapsulated, about the size of a half watt resistor. The scope showed us that these modern, solid state-intended chokes were saturating under normal hollow state circuit conditions. I dug through my junk box and came up with a couple of no name, no indicated value, ancient "pie" wound rf chokes and subbed them into place. The transmitter immediately came to life.

Moral: use tube type parts on tube xmtrs whenever possible.

Special thanks to Jack, the local ham who brought his scope and elmered me through this troubleshooting issue.

Carter
W5URW
Carter Cook

17. Re: Need design for amplified crystal radio - Drive small speaker, with

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-01 00:00:00 UTC
From: NO SPAM <NOSPAM@mail.rsccd.org>
Message-ID: <37543334.B06EC816@mail.rsccd.org>
Source record: 69761
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Mark Zenier wrote:

> In article <374D5F02.DDEB80@mail.rsccd.org>,
> NO SPAM <NOSPAM@mail.rsccd.org> wrote:
> >Neat! Cool! I was right, the transistors should be germanium because
> >the supply voltage is so low. I've made amplifiers that run off 1.5V,
> >so it's not difficult. The only problem I see is where to find the
> >transformers for the last circuit.

> John L., it that you?

Yeah, dat's me. Thanks. Whatever possessed them to use a
transformer, when it would be easier to just drive a headphone
directly at that voltage. Like, a 16 or 32 ohm headphone works just
fine with a 1 or 2 volt supply and a couple transistors for the totem
pole output stage. We're only dealing with a dozen milliwatts or so
of power here.

> Mouser has quite a collection of miniature and sub-mini transformers,
> the kind that were so common in the old '60s transistor projects.

> Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

18. Re: Need design for amplified crystal radio - Drive small speaker,with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-01 00:00:00 UTC
From: NO SPAM <NOSPAM@mail.rsccd.org>
Message-ID: <3754327F.6E5FBD53@mail.rsccd.org>
Source record: 69762
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

John Smith wrote:

> Many years ago, I tried to make a "super ground" reference by burying
> several metal objects several meters apart and connecting them all together.
> Before I connected them I tried to measure the resistance between each wire,
> and found both DC and AC voltages between them all.
> I cant remember the values, (I think it might have been over a volt) so
> there must be quite a bit of current flowing around our globe.

> John Smith
> Cape Town

Either that or the soil was acidic or alkaline. That might make
dissimilar metals behave like that.

One thing is for certain: The AC voltage were man-made. The
frequency was probably your local power line frequency. Or there
might be a slight chance that it was a transmission from one of those
navy ELF transmitters that are for submarines. They operate in the
sub 100 Hz frequencies.

19. Re: Need design for amplified crystal radio - Drive small speaker, with

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-01 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37543578.484B37F5@teleport.com>
Source record: 69763
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Sorry I missed the original posting. Quite a few silicon transistors
are happy running with a Vce of 1 volt or even less, so you might not
need to use germanium for your application. Of course, you do need
enough voltage to turn the base-emitter junction on, so you wouldn't
be able to use silicon transistors with a supply voltage of less than
about 0.6 - 0.7 volts.

Roy Lewallen, W7EL

NO SPAM wrote:
>
> Mark Zenier wrote:
>
> > In article <374D5F02.DDEB80@mail.rsccd.org>,
> > NO SPAM <NOSPAM@mail.rsccd.org> wrote:
> > >Neat! Cool! I was right, the transistors should be germanium because
> > >the supply voltage is so low. I've made amplifiers that run off 1.5V,
> > >so it's not difficult. The only problem I see is where to find the
> > >transformers for the last circuit.
>

20. IC-2800H

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-01 00:00:00 UTC
From: Bo Chan <VE7WBC@qsl.net>
Message-ID: <37543bc0@carrera.intergate.ca>
Source record: 69764
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,tw.bbs.rec.radio.amateur

Anyone know the extra feature (not show in user manual, like U/U, V/V,
cross-band repeat, DTMF remote control, mods .....etc) for IC-2800H?

Best Regards,
Bo

21. 22volt 2.4amp transformers f/s

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-01 00:00:00 UTC
From: wadley@showhill.com
Message-ID: <375454C3.5E12@showhill.com>
Source record: 69765

I have at least 20 ea. 22 volt 2.4 amp transformers in plastic case, with jack for computer type ac cord (120V 60Hz input). About 4" cubed, 3.5 lbs. each, unused mint condition, $3.75 each or 4/$14 or 10/$30 plus UPS.
36330 zip.(Alabama) Can be used with a rectifier and appropriate sized cap to power 28 V filaments, or as is for 21 V or 24 V sweep tube filaments. Also good for 24 V power supply. Call (334)347-5281 day/eve/wknd.

22. Tubes for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-01 00:00:00 UTC
From: hitriode@iinet.net.au
Message-ID: <37544a8e.1949145@news.m.iinet.net.au>
Source record: 69766

Sylvania: 7027A $US25-00
Siemens EF86 NOS $US20-00
Amperex: E810F/7788 $US15-00.
E180F $us8-00
Sylvania 6BQ5/El84 $US12-00
Nuvistors: Sylvania. 7586. Flat tops. $US12-00. {$30 From Antique
Electronics}
All New in Boxes.

RUSSIAN: EL84/6BQ5.
1x EL84 =$US4-00.
10 x EL84 =$US 3.75.
20 x EL84 =$US 2.50.
Russian Svetlana: EL34
1x El34= $US10-00
10X El34 = $us9-00
Russian 5881/6L6WGC
X 5881 +$US8-00
10X5881 +$US 9-00
Can supply matched.
AUSTRALIA

23. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-01 00:00:00 UTC
From: 1AngryMan@antisocial.com
Message-ID: <7j1imlkff1@dagobah.blueriver.net>
Source record: 69767
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

ï¿½
>
>Sir wrote:
>>
>> Rich Mulvey wrote:
>> >
>> > On Fri, 7 May 1999 08:21:11 -0500, jpos <jpos@mobilemark.com> wrote:
>> > >No one complains about having to learn how to use windows before they can
>> > >surf the net....
>> > >
>> >
>> > Considering that I was "surfing the net" before it was even
>> > *possible* with MS-Windows, you might want to choose a different
>> > analogy. Sigh.
>>
>> The best analogy would be having to learn Morse Code in order to use the
>> internet, as Morse Code has as much to do with knowing how to operate
>> and work the internet as it does with knowing how to operate and work a
>> Ham radio.
>I fail to see how knowing Morse Code will help you learn how to operate
>a radio. I do not know Morse Code and can operate a C.B. Radio, FRS
>Radio, Shortwave Radio, Scanner Radio...

It's just another hoop to jump through!
The old we had to do it so screw you, all you got to do it too, to make us
happy old over-the-hill hams!

>--
>REMEMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
>ESPECIALLY WHEN YOU'RE ON A DATE. BURP!!!!

You also need to stop eatin that NAZI food and switch to somthing healthy like
ToFo or veggamite!

--
==========
"I would never belong to any group,
that would have me as a member!"
Grocho Marx
==========
Opinions are like armpits, everybody has
at least two, and they usually stink !!!
==========
Send Email to 1AngryMan@antisocial.com

24. H.D. DC Filter choke

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-01 00:00:00 UTC
From: qroking@aol.com
Message-ID: <19990601174507.15356.00002613@ng-fm1.aol.com>
Source record: 69768

Hi All, Have a very heavy duty DC filter choke for a choke input filter design for a big linear amp. Its 10 Hy. @ 1 amp for 3000-3400 volt range and also have the resonating cap to go with it. This unit is commercial grade. A similiar unit from Peter Dahl is $250.00 plus shipping......I sell choke and capacitor shipped to you CONUS for $165.00. Please e-mail direct...Thanks 73 LOU

25. Amateur Radio Information!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-01 00:00:00 UTC
From: sabbatai_zvi@hotmail.com
Message-ID: <375450b2.37809525@news.earthlink.net>
Source record: 69769
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.swap

Hi! No need to search and search all over the internet for RADIO INFORMATION!!

All kinds of schematics on-line, projects, and 10,000 links to Cool web information.

Listings of where to find everything about amateur radio that is NOT on the web too! All free!

Visit:

http://home.earthlink.net/~af4k/hamlynx.htm

You will be glad that you did!

73

26. Re: 2m Portable project info wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-01 00:00:00 UTC
From: Eamon Skelton <dont@want.spam>
Message-ID: <7j1lgsnjj1@scotty.tinet.ie>
Source record: 69770

VHF/UHF Manual, RSGB, page 6.19
"A 144MHz FM Black Box"
By G3TDZ

73, Ed.

EI9GQ home brew radio page
www.qsl.net/ei9gq

27. Re: EI9GQ Homebrew Radio Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-01 00:00:00 UTC
From: Eamon Skelton <dont@want.spam>
Message-ID: <7j1qb3$q7o$1@scotty.tinet.ie>
Source record: 69771

Reg Edwards wrote in message <01beac05$90511740$04e5abc3@default>...
>Hi Eamon,
>
>Just a suggestion - why not state your website address
>IN FULL in your newsgroup messages.
>
>It is then only necessary for the reader to 'mouse click'
>on the address rather than spend the next five minutes
>changing over to 'Internet search' and having to enter the
>full address himself, with the many possibilities of error
>and eventually giving up the whole idea as a bad job.

Hi Reg, thanks for your suggestion. www.qsl.net/ei9gq works fine with my newsreader (Outlook Express.) I assumed that all other newsreaders worked the same way. I see from your message header that you are using MS Internet News. Does this program need to see 'http://www' to recognise a hyperlink ?

>For example, if you click on my full website address below
>my signature you will be transfered there almost
>immediately.
>
>Then help yourself to some free technical radio software
>progams.

Been there, done that and I will certainly be returning again.

>Been a long time since we had a very early
>morning chat on 160m. I must confess I havn't tried just
>lately.
>--

I look forward to it. I always thought there was something perverse about radio amateurs communicating via e-mail :-)

73, Ed.
EI9GQ home brew radio page.
http://www.qsl.net/ei9gq

28. Re: EI9GQ Homebrew Radio Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-01 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01beaccd$cb155a80$ceefabc3@default>
Source record: 69772

Ed said -
> Does this program need to see 'http://www' to recognise a
hyperlink ?
==========
I don't understand the technicalities, but I use Windows95
with Microsoft Internet Explorer-3, which is an extremely
common combination.

All I know is - when 'http://' is included in the website
address everything works first time just by clicking on it.
Otherwise it doesn't.

I am on 160m, but only occasionally, from the Black
Country, West Midlands, with a microphone in one hand and
a wine glass in the other, between 22.30 and 23.30.

Regards Ed, from Reg, G4FGQ

29. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-01 00:00:00 UTC
From: OBI-WAN PEROGI <theoldbrookltnkid@ameritech.net>
Message-ID: <37549698.733E@ameritech.net>
Source record: 69773
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

1 Angry Man wrote:
>
> O©╫
> >
> >Sir wrote:
> >>
> >> Rich Mulvey wrote:
> >> >
> >> > On Fri, 7 May 1999 08:21:11 -0500, jpos <jpos@mobilemark.com> wrote:
> >> > >No one complains about having to learn how to use windows before they can
> >> > >surf the net....
> >> > >
> >> >
> >> > Considering that I was "surfing the net" before it was even
> >> > *possible* with MS-Windows, you might want to choose a different
> >> > analogy. Sigh.
> >>
> >> The best analogy would be having to learn Morse Code in order to use the
> >> internet, as Morse Code has as much to do with knowing how to operate
> >> and work the internet as it does with knowing how to operate and work a
> >> Ham radio.
> >I fail to see how knowing Morse Code will help you learn how to operate
> >a radio. I do not know Morse Code and can operate a C.B. Radio, FRS
> >Radio, Shortwave Radio, Scanner Radio...
>
> It's just another hoop to jump through!
> The old we had to do it so screw you, all you got to do it too, to make us
> happy old over-the-hill hams!
>
> >--
> >REMEMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
> >ESPECIALLY WHEN YOU'RE ON A DATE. BURP!!!!
>
> You also need to stop eatin that NAZI food and switch to somthing healthy like
> ToFo or veggamite!
Excuse me bbut sauerkraut is Polish food and not nazi food.
Please take yuor dum witted insults somewhere else.
>
> --
> ==========
> "I would never belong to any group,

> that would have me as a member!"
> Grocho Marx
> ======================================
> Opinions are like armpits, everybody has
> at least two, and they usually stink !!!
> ======================================
> Send Email to 1AngryMan@antisocial.com

--
REMEMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
ESPECIALLY WHEN YOU'RE ON A DATE. BURP!!!!

30. Ham Radio Estate Sale, More items, lower prices

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-01 00:00:00 UTC
From: Joe Mehaffey <joe@mehaffey.com>
Message-ID: <37549981.E2DD8ADC@mehaffey.com>
Source record: 69774
Cross-posted to: rec.radio.amateur.equipment,alt.ham-radio.marketplace,rec.radio.amateur.homebrew

```
We have lowered the prices of all of Clay Whiffen's
remaining equipment including tranceivers and test
equipment. Also added were a) 8KW tri-fuel emergency
generator and b) Cisco 766 ISDN modem/router.

Please take a look at: http://celia.mehaffey.com/k3ix.htm

Thanks
Joe Mehaffey
W2JO
--
--
Got a Question about GPS technology? Looking for a GPS FAQ
site?
See: http://joe.mehaffey.com
```

31. 2 mt receiver from QST magazine

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-01 00:00:00 UTC
From: "M.U." <m.ursi@flashnet.it>
Message-ID: <3753EE85.4D1E2327@flashnet.it>
Source record: 69775
Cross-posted to:
rec.radio.amateur.misc,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I am interested in the article about a 2 mt. receiver published on QST
Arrl magazine February
1999 issue.

Has anybody built and tested such receiver?
Can anybody be so kind to let me know how to get the issue or someway
the photocopies of the article?

Thanks in advance

Max
Italy

32. Cortland NY Hamfest 6/12/99

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-02 00:00:00 UTC
From: amn1@cornell.edu
Message-ID: <amn1-0206991519180001@132.236.42.109>
Source record: 69682
Cross-posted to: ithaca.marketplace,cornell.marketplace,alt.ham-radio.marketplace,rec.radio.swap,,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

SARC HAMFEST JUNE 12, 1999

The annual Skyline Amateur Radio Club Hamfest will be taking place at the
Cortland County Fairgrounds from 7am - 2pm.
Admission is $5 and tables(8 feet) are $10 each indoors.
Fleamarket spaces are available at $2.00 per 10 foot space outdoors.

For full information and directions check out our hamfests page @
http://www.dreamscape.com/sarc/hamfest.html

For information or table reservation please email sarc@sanyips.com.

33. Re: Opinions on choice of two moblie antenna options??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-02 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <375583B0.5B14@ixpres.com>
Source record: 69683

N8BLK wrote:
> However if you are interested in signal strength, the
> base loaded whip is such a bad idea that it can be eliminated, SGC advertising
> notwithstanding.
> -art clemons-

I agree Art, AND:
We are not even talking yet about cost-effectiveness (or the lack thereof)! That alone should relegate the 'auto tuner' to being a non-choice, even without its performance disadvantages (rapid QSY but with poor efficiency and high cost does not a solution make, for me).

Advertising is contrived to sell things, not assist potential buyers in making an informed decision. To become informed requires technical homework that one has to do on his own initiative, from unbiased sources. This excludes advertising copy or 'user testimonials' from those who have already made their purchase, and therefore have a propensity to substantiate their own choice. It also, unfortunately, usually excludes 'product reviews' in magazines who also accept advertising from the manufacturer. Ad writers are banking that their target audience will not make the effort to be technically informed. It turns out to be a good bet, sad to say.
Does no one get buyer's remorse these days? Too bad; it is a great teacher.

Don, W6JL

34. Re: 1.5 GHz Bandpass Filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-02 00:00:00 UTC
From: Dave Eckhardt <dave_eckhardt@hp.com>
Message-ID: <37557FDD.8F4@hp.com>
Source record: 69684

Jpos wrote:
>
> Hi Peter,
>
> Look into Murata and Toko. They have ceramic filters centered at 1575MHz for
> GPS. They normally have a bandpass of 4MHz.
> Hope this helps.
>
> Jerry N9DKQ
>
> Peter Bolch wrote in message <7iuil6$812$1@news.netcologne.de>...
> >Hi,
> >
> >
> >I'm looking for a narrow (20 - 30 MHz) bandpass filter with a center
> >frequency arround 1.5 GHz. There seem to be no helix filters with this
> >bandwidth available and the coupled resonator ceramic filters (e.g. the
> >Siemens types) are hard to get here.
> >
> >Might a cavity filter be a solution? If so, how are the dimensions of the
> >cavity calculated?
> >
> >Any other ideas? Literature?
> >
> >
> >Peter
> >
> >
>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>> <<<<<<<<<<<<<<<<<<<<<<<<<<<

Originally published in the 1985 ARRL Handbook, I did a 1296 MHz
interdigital filter made of commonly available material. It was in the
Handbook for nearly 10 years and was part of a 1296 to 10-meter
transverter. You could shorten the resonators a bit by the ratio of
1296 to 1500, or about 10%. If I remember, the filter had a 3 dB
bandwidth of about 15 MHz. The slightly higher frequency with the same
design (shortened by 10%) should give you just about what you want.

Dave - W6LEV

35. List Of Stamp Applications [990602]

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-02 00:00:00 UTC
From: cjX@hth.com
Message-ID: <375540af.11393313@news.sverige.net>
Source record: 69685
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

Hi,

Below is the latest index of L.O.S.A and you can download the
complete L.O.S.A from the following places...

WWW:

http://www.hth.com/losa.htm

FTP:

ftp://ftp.parallaxinc.com/pub/text/losa.txt

1.0 What is L.O.S.A all about?

This list was started back in -95 when I heard about (more or less)
uniqe problems that was solved by using a BASIC Stamp. Especially Guy
Gustavson's story (see #001) about how he saved his beloved cat Kesha
gave me the inspiration to start writing L.O.S.A. I hope Kesha still
is alive and having a great life. Now 4 years later there are 150+
applications described and I hope you will enjoy reading all (or
parts) of them.

The main purpose of this list is to get an idea of what other people
are using their BASIC Stamps for and maybe get some inspiration or
hints for your own projects. Some of the projects described in the
list also have links to source code and schematics for download.

1.1 How can I contribute to this list ?

If you have done something (big or small) with the BASIC Stamp that
you are willing to tell others please use the form given below and
write a short description, nothing fancy is needed just a simple
explanation. If you have source code to share that's even better but
it's not necessary.

Visit the following Web site and fill in the contribution form...

http://www.hth.com/losa.htm

1.2 Why are some links dud's ?

Since people changes their e-mail and web addresses some links may be
dud's. If you previously contributed with one (or more) of the
applications please take a quick look and check your e-mail address

and/or web-links. I'm only able to keep the list updated if I'm
informed about changes, thanks in advance.

1.3 List of contributions

> = Indicates a new or updated application since last time.

001 Robo-Cat
002 Logic Rudder
003 Interfacing MAX186 8 channel 12bit A/D
004 Scrolling LED Sign
005 Tone Decoder
006 Pager
007 HexWalker Mobile Robot
008 Robo Bug
009 EXPBOT Robot controlled by Stamp
010 Andrews Ever Evolving Lego Robot
011 Factory Monitoring System
012 Wave to the Cats/Desk Temperature
013 Gamer's Die Roller
014 Stamp II Serial I/O
015 Voice and CW Fox Hunt Transmitter IDer
016 Lift (elevator) Controller
017 Paging with the Stamp
018 Switching Sytem
019 Door Entry Card Reader
020 Telephone Card Reader
021 DTMF Decoder
022 Ion chamber radiation monitor
023 Barn Monitor
024 Dallas one-wire interface
025 Sculpture control
026 Commercial clothes dryer controler
027 Morse Code Keyer
028 Traffic Light Controller
029 Automotive Lamp Control
030 Single Switch Scanning Device for Disabled
031 Bell timer for school bell control
032 RIMS controller for beer making
033 Stamp 1 and ISD 25XX Sound Chip Application
034 Camera Wireless Controller
035 Simple Battery Check using the BS2-IC
036 Photocell MIDI Controller
037 DCF-Clock
038 Radio-controlled Digital Clock
039 Weather Station I
040 Private Aid To Navigation
041 Stamp II in Space
042 MAT32 long integer math routines
043 Distinctive Ring Detector

044 Extended Stamp Memory
045 Debate Stoplite
046 Digital nametag
047 ST506 Disk Seeking Demo Controller
048 Robot: Multi-Stamps Communicate via Shared Memory
049 NiMH Battery Charger/Conditioner
050 555 Timer as A/D Converter
051 Bits of Light
052 Process Control
053 Near Space Capsule
054 PIC Debugger
055 DS1820 Temp Sensor
056 Air muscle hexapod robot
057 Lights
058 Caller-ID Interface
059 Wind speed and wind direction measurement device
060 Calibrated Dust Feeder for Air Cleaner Tests
061 Use of a Serial EEPROM as a Lookup Table
062 Displaying Quantities on a 200 mV Panel Meter
063 Programmable Proportional Air Valve
064 Basic Stamp machine control application
065 Compass Interface for Navigation
066 Truck + ? identification
067 Meteoreological Station
068 Stamp Controls Electronic Tester for flex circuits
069 Game Timer
070 Photoghrapic light meter
071 Data System Remote Control on unmanned aircraft
072 Speaking Instructor
073 Small Mobile Robot
074 R/C helicopter altitude control unit
075 Automobile Rally Odometer Interface to Laptop
076 LCD drivers
077 Stamp I / PC Interface Demo
078 Stamp Photo Meter
079 Stiquito(TM) 97 HexaPod Robot
080 XRaCS DTMF Radio X10 Control with Voice Response
081 Interfacing the Basic Stamp 2 with I2C Devices
082 The WeatherStamp Meteorological Station
083 Maxxum 7000 Remote Release Widget
084 Xs And Os games for college project
085 Stamp II Mouse Emulator (Version 6)
086 Basic Alarm System
087 Interfacing with a Printer
088 Dinosaur Quiz Game
089 Chemical Injection System
090 RS-232 connections between Stamp and host
091 Video Character Overlay Generator Controller
092 Suction tube depth measurement display
093 Electronic Compass with Basic Stamp 2

094 Event Logger with 8K 24C65 I2C memory
095 Fixing the depth of a suction-pipe with the BS 2
096 Superchaser
097 Corky'z Robotz
098 Cloudrider: analog network with BS2 and BS1's
099 Yet Another Real Time Clock, Dallas DS1287
100 Amateur RadioSatellite Tracking (Az/El) Controller
101 DTMF Decoder
102 PC to STAMP via RS232 routines
103 PC Frequency Counter
104 Sub-Millisecond Reaction Timer
105 Computerized Dynamics Cart
106 Ham Radio Interface Using the Basic Stamp 2
107 Remote tempsensors communicates over the power lines
108 Interfacing a BASIC Stamp to SRAM
109 Stepper controller pulse generator
110 Automatic rang caller
111 Automatic emergency broadcast system
112 BASIC Stamp I as an welding machine
113 PLM-24 to X-10 Gateway
114 Semi-Automated Combusitible Gas Indicator Tester
115 Counter-rotating Servos
116 Joystick Controlled Robotic Arm
117 Anti Traction Control Device
118 Cat Chasing Lego Robot and Other Circuits
119 Camlift
120 Control 15 Servos in Parallel
121 8 Digit "Smart" Alphanumeric Display
122 Cycle Testing AC Motor Controller
123 Controlling an LCD by BS2 via I2C Bus
124 The Newcastle Robotic Bilby Project
125 The EM1 (Electric mule)
126 Distance Measurement with GP2D02 SHARP Sensor
127 TI82 Interface
128 Operator Interface for Multiple Stamps
129 Infrared Glucose (Blood Sugar) Monitor
130 Fox For ham radio or Automated Propogation Beacon
131 GPS Data Overlay on Video
132 10Base-T Cable Tester
133 Kodak DC40/50/120 camera control
134 Implement S.N.A.P network protocol in a BASIC Stamp
135 Stamp/PC RS-485 Network
136 Easy-to-build BS keyboard/display w/ 10 keys/LEDs
137 Joystick control: BS2, 2 motors & 2 HBridges
138 Basic Stamp 2 Mobile Robot
139 Home Automation and Security System
140 UM3750 Read Code
141 Magnetic Stripe Reader
142 Telephone Remote Control and Remote Alarm
143 Tube preamplifier control section

144 Interrupt for PBASIC
145 dLOG
146 Compass
147 BS-2 serial VISCA interface
148 Servo tester
149 Small-bot
150 Repeater Controller
151 ESD Tester for Foot and Wrist Straps
152 Beneficial Insect Dispenser
153 Bugsey
154 Vector2X Compass Module with the new BS2SX Stamp
155 Serial Mouse to BS2 Interface
156 Radio Repeater Controller
157 Keypad reader
># 158 Automatic Vehicle Location / Mobile Asset Tracking
># 159 Interfacing a 4X4 keypad to the stamp II
># 160 Interfacing a Max186 8 Channel ADC to a stamp II
># 161 Realistic Manual Shifter for PC Driving Games
># 162 Contact ID handshake board
># 163 Basic Stamp II I2C protocol for several ICs

Regards,

/Christer

[NOTE: Clear the "X" from my e-mail address if you want to e-mail me]

-=-
* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
-=-
Send and receive serial data over the power lines... For more info
about the PLM-24 Power Line Modem go to http://www.hth.com/plm-24/
-=-

36. Re: Tube type xmtr problem solved - Tnx

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-02 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <375592C6.5D6F351F@fallschurch.esys.com>
Source record: 69686

We have been following your progress, hoping for this cheery outcome!
73 de W1AEL

--
The contents of this message are my personal opinion.
I do not speak for the company.
Allan H. Kaplan, Staff Engineer
Raytheon Systems Company
7700 Arlington Boulevard, MS A404
Falls Church, Virginia 22042
703-560-5000, x4717 voice-mail
703-208-1259 facsimile

37. ICOM IC-22U Manual Needed???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-02 00:00:00 UTC
From: Bill Crann <bcrann@nf.sympatico.ca>
Message-ID: <3755999d.0@209.128.1.3>
Source record: 69687

I have problems with my IC-22U and I am looking for a service manual for it.
Can anyone help me. Thanks.

38. Re: SWR-Meter for UHF/VHF, homemade?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-02 00:00:00 UTC
From: la8ak@online.no
Message-ID: <3755c035.535769673@news.online.no>
Source record: 69688

On Mon, 31 May 1999 11:17:57 +0200, Thomas Beckert
<Thomas.Beckert@alcatel.de> wrote:

>Hello all,
>is there a homebrew-site for selfmade SWR/Powermeters for
>2m,70cm and 23cm Hamband's ?
>Or does anyone know how to build one for this frequencies and can give
>me an example ?
>hf-power is not more than about 2 watts (QRP) to be measured.
>
>thanks in advance
>
>72'
>Thomas, DL4SZ
one possible solution is shown in UHF Unterlage I/II (DJ9HO): B.3.2
Einfaches VSWR-Ger�t mittels Koaxialkabel.
It is useful for 144-1296MHz, I use it for 2m

it was some interest for the book series, but I have only an old
address:
Fachbuchverlag WEINER
Vogelherder Str 32, D-8670 Hof/Saale
Teil V has the following ISBN 3-927528-05-6

Also be aware of new printed versions of bilingual (English/German)
DUBUS technik I/II books for VHF/UHF/SHF techniques - dated 1980 and
1985, they will appear later this year, but you should send a msg if
you are interested to have your copies.
DJ9BV: dubus@t-online.de
DL4EBY: tklaus@berlin.snafu.de

73
Jan-Martin
LA8AK

39. FA: AM 6155 & AM 6154 eBay

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-02 00:00:00 UTC
From: Arthur Moe <kb7ww@uswest.net>
Message-ID: <3755B86D.B3C2CAAD@uswest.net>
Source record: 69689
Cross-posted to:
alt.ham-radio.marketplace,rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,alt.ham-radio.vhf-uhf

I have placed on eBay one each AM 6155 and AM 6154. They can be seen at:

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=111814746
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=111825356

Thanks for looking.
Art

40. Re: homebrew qrp hf

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-02 00:00:00 UTC
From: Bill <whagen@NOREPLY.inreach.com>
Message-ID: <3755DD7C.3E64@NOREPLY.inreach.com>
Source record: 69690

BUJIAJ8 wrote:
>
> I am interested in building a 40 meter home brew unit for cw... qrp.... can
> anybody help me out with resources for this first amateur homebrew project.
> please email.
>
> bill
> kd5fxt
do a search engine search with the kewords 'Michigan Mighty Mite',
a great crystal qrp setup, different coils for different bands.

--
Please remove the word "NOREPLY" from the email adress. Sorry for the
inconvenience, but it helps keep down the spam.

41. Frequency Multipliers using PIN diodes as SRD's

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-02 00:00:00 UTC
From: rick@area.com
Message-ID: <7j4nsf$o4v$1@vax.area.com>
Source record: 69691

A few weeks ago there was some discussion about building comb generators
and frequency multipliers. At that time I stated that step recovery
diodes (SRD's) were difficult and expensive to get. However, I recently
learned that cheap and available PIN diodes can be used as SRD's.
This is described in Hewlett Packard Application Note 1054. It is
available at their web site at:

<<http://www.hp.com/HP-COMP/rf/app_index.html>>

Click on "AN-1054. Low [Cost] Frequency Multipliers Using Surface Mount PIN
Diodes". Note that due to a typo, the word "Cost" is missing from
the link.

Rick Karlquist N6RK
rick@area.com

42. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-02 00:00:00 UTC
From: OBI-WAN PEROGI <theoldbrookltnkid@ameritech.net>
Message-ID: <3755F7AC.1486@ameritech.net>
Source record: 69692
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

1 Angry Man wrote:
>
> >> >REMEMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
> >> >ESPECIALLY WHEN YOU'RE ON A DATE. BURP!!!!
> >>
> >> You also need to stop eatin that NAZI food and switch to somthing healthy like
> >> ToFo or veggamite!
>
> >Excuse me bbut sauerkraut is Polish food and not nazi food.
> >Please take yuor dum witted insults somewhere else.
> >
>
> You have a signature like the one below and then you say I should take my "dum witted" (your
> spelling) insults somewhere else? Kinda like the pot calling the kettel black ain't it?
>
> And any how since the Blitzkreg of 1939 it's German cause the NAZI's stole it like everything
> else Hitler could get his hands on!! And possession is 9/10 of the law!!
>
> >REMEMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
> >ESPECIALLY WHEN YOU'RE ON A DATE. BURP!!!!
>
> --
> ==
> "I would never belong to any group,
> that would have me as a member!"
> Grocho Marx
> ==
> Opinions are like armpits, everybody has
> at least two, and they usually stink !!!
> ==
> Send Email to 1AngryMan@antisocial.com
Well Hilter can kiss my D U P A. Just becasue the freaking idiot stole
it doesn't make it German.
--
REMEMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
ESPECIALLY WHEN YOU'RE ON A DATE. BURP!!!!

43. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-02 00:00:00 UTC
From: OBI-WAN PEROGI <theoldbrookltnkid@ameritech.net>
Message-ID: <3755F8D8.7B84@ameritech.net>
Source record: 69693
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

```
Walt Davidson wrote:
>
> On Thu, 29 Apr 1999 19:05:50 -0500, Sir <sir@sir.com> wrote:
>
> >What if you wanted to play the flute, but a law required that you learn
> >how to play the harp before you were allowed to play the flute?
> >
> >What if you didn't like the harp and only wanted to play the flute, and
> [crap snipped]
>
> Then I suggest you take up flute-playing as a hobby and forget about
> amateur radio.
>
> 73 de G3NYY
>
> --
> Walt Davidson Email: walt@ surf-zone.co.uk
Oh brother
--
REMEMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
ESPECIALLY WHEN YOU'RE ON A DATE. BURP!!!!
```

44. Info wanted BIRD 4360 Hammate

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-02 00:00:00 UTC
From: Gord Skiffington <skiffing@nbnet.nb.ca>
Message-ID: <3756243C.2A6C@nbnet.nb.ca>
Source record: 69694
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.radio.amateur.equipment

Howdy....Attempting a repair on my Bird Hammate model 4360 (hf) wattmeter. The pickup has at least one burnt resistor....appears to be 35 ohms...wonder if anyone can confirm this (the remaining fragments are pretty small!). Of the remaining components part of the pickup assembly, there is a glass encased axial lead device which quickly looks like a diode but lifted shows no junction voltage/difference (short) either fwd or reverse....it is a little different looking than diodes I've seen and wonder if anyone can confirm that it (was) a diode or is something else (fuse maybe?). Daring to ask...does anyone have a schematic for this little wattmeter who could describe the components of the pickup (rotating directional coupler) assembly re values etc. Thanks - See if I can get my fleamarket "prize" working LOL.

73 - Gord VE1AJF

45. rec.radio.amateur.homebrew IS NOT a sale group

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-02 00:00:00 UTC
From: Bob Headrick <bobh@proaxis.com>
Message-ID: <928385526.546.18@news.remarQ.com>
Source record: 69695

It seems like the camels nose (or other end) is in the tent. This groups is not a sale group, although some have the opinion that they can post sale stuff anywhere they please, and others think that "precedent" means that once others post here that it is OK for all. Just a reminder - this is a group for discussion, not for selling. Rec.radio.swap is the group for selling radio related items.

Lets keep some sanity in the rec.radio groups lest they all become overrun like rec.radio.amateur.equipment has. Alternately I suppose we can look forward to 2,189,741 postings per week as pointers to ebay in every group in usenet.

- 73 Bob W7OV

46. Re: Coils made by TOKO

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-02 00:00:00 UTC
From: Clint Sharp <clint@clintsmc.demon.co.uk>
Message-ID: <rgVDCKAc7ZV3Ew7u@clintsmc.demon.co.uk>
Source record: 69696
Cross-posted to:
alt.radio.pirate,aus.radio.amateur.misc,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.misc

In article <7j3gvbepj1@news8.svr.pol.co.uk>, Leon Heller <leon@lfhelle
r.freeserve.co.uk> writes
>
>Maplin only sells a very small part of the Toko range.
>
Are Cirkit still in business? They, AFAIR, used to do a fairly good
range of Toko coils, by no means complete but pretty good.
>
>--
>Leon Heller, G1HSM
>+44 (0) 181 428 7509
>leon_heller@hotmail.com
>http://www.geocities.com/SiliconValley/Code/1835
>
>

--
Clint Sharp

47. WTB: Large Johnson Matchbox junker

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-02 00:00:00 UTC
From: k9sqg@aol.com
Message-ID: <19990601221552.11239.00009838@ng-fp1.aol.com>
Source record: 69776

Do not need cabinet, just the insides from a large Johnson Matchbox.

73

Evan

48. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-02 00:00:00 UTC
From: 1AngryMan@antisocial.com
Message-ID: <7j299j$td9$1@dagobah.blueriver.net>
Source record: 69777
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

>> >REMEMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
>> >ESPECIALLY WHEN YOU'RE ON A DATE. BURP!!!!
>>
>> You also need to stop eatin that NAZI food and switch to somthing healthy like
>> ToFo or veggamite!

>Excuse me bbut sauerkraut is Polish food and not nazi food.
>Please take yuor dum witted insults somewhere else.
>

You have a signature like the one below and then you say I should take my "dum witted" (your
spelling) insults somewhere else? Kinda like the pot calling the kettel black ain't it?

And any how since the Blitzkreg of 1939 it's German cause the NAZI's stole it like everything
else Hitler could get his hands on!! And possession is 9/10 of the law!!

>REMEMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
>ESPECIALLY WHEN YOU'RE ON A DATE. BURP!!!!

--
==========
"I would never belong to any group,
that would have me as a member!"
Grocho Marx
==========
Opinions are like armpits, everybody has
at least two, and they usually stink !!!
==========
Send Email to 1AngryMan@antisocial.com

49. Re: EI9GQ Homebrew Radio Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-02 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01bead17$97ce8620$5ecaac3e@default>
Source record: 69778
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur,uk.radio.amateur

Walt,

Thanks for your well-intentioned suggestion but my computer
is already clogged up with many megabytes of so-called
'convenience' programs which have brought with them more
problems than solutions.

They are at loggerheads amongst themselves, squabble
frequently and can be forced apart only by hitting the
re-set button.

Bill Gates should have been obliged to de-bug the bloody
lot before being allowed to go to bed on his wedding night.
--
****
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp

****

50. Re: EI9GQ Homebrew Radio Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-02 00:00:00 UTC
From: tallguy@whitecliffsdx.freeserve.co.uk
Message-ID: <375ff49d.8711138@news.freeserve.net>
Source record: 69779
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur,uk.radio.amateur

On Wed, 02 Jun 1999 06:17:45 GMT, no.junk.mail@thank.you (Walt
Davidson) wrote:

>On 1 Jun 1999 00:00:52 GMT, "Reg Edwards" <G4fgq.Regp@btinternet.com>
>wrote:
>
>>Just a suggestion - why not state your website address
>>IN FULL in your newsgroup messages.
>>
>>It is then only necessary for the reader to 'mouse click'
>>on the address rather than spend the next five minutes
>>changing over to 'Internet search' and having to enter the
>>full address himself, with the many possibilities of error
>>and eventually giving up the whole idea as a bad job.

>If you had a *proper* newsreader (like mine, Forte Agent), you would
>not encounter any such difficulties.

What do you expect from a G4, c'mon!
;-)
Cheers,

Jon.

Jon Harris
Radio: 26WC001/G7JPH
Motorcycle: TRX850, GPz550
WEB: http://www.whitecliffsdx.freeserve.co.uk
Email: tallguy@whitecliffsdx.freeserveDEADWOOD.co.uk
(Remove the DEADWOOD to reply)
---

51. Re: Coils made by TOKO

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-02 00:00:00 UTC
From: Leon Heller <leon@lfheller.freeserve.co.uk>
Message-ID: <7j3gvbepj1@news8.svr.pol.co.uk>
Source record: 69780
Cross-posted to:
alt.radio.pirate,aus.radio.amateur.misc,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.misc

john <john@grandads.demon.co.uk> wrote in message
news:0rpWDFAIDgP3Ew5P@grandads.demon.co.uk...
> In article <7hfccm$9cj$1@medousa.forthnet.gr>, Sotiris Antoniou
> <samant@ath.forthnet.gr> writes
> >Hi,
> >I am trying to purchase some coils made by TOKO (small quantities).
Please
> >can someone give me an address for England or U.S.A. Any help would be
> >very much appreciated.
> >
> >Best Regards.
> >Sotiris Antoniou .
> >samant@ath.forthnet.gr
> >
> Hello Sotiris,
> Maplin Electronics have stores throughout the U.K.
> Telephone: 01702-554000
> Fax: 01702-554001
> Feel free to e-mail me if you need more details.
> --
> Hope this helps,
> Best wishes,
> John.

Maplin only sells a very small part of the Toko range.

--
Leon Heller, G1HSM
+44 (0) 181 428 7509
leon_heller@hotmail.com
http://www.geocities.com/SiliconValley/Code/1835

52. Re: EI9GQ Homebrew Radio Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-02 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37556AEA.452FCB68@teleport.com>
Source record: 69781
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur,uk.radio.amateur

Walt Davidson wrote:
> Reg,
>
> If you had a *proper* newsreader (like mine, Forte Agent), you would
> not encounter any such difficulties.
>
> I mouse-clicked on the address exactly as Eamon gave it in his posting
> and Netscape opened and took me straight to his Web Page. No probs.
>
> 73 de G3NYY
>
> --
> Walt Davidson Email: walt@ surf-zone.co.uk

The newsreader bundled with Wordperfect and Netscape v. 4 in the several-hundred-dollar Corel Suite 8 doesn't qualify as a "proper" newsreader by your standard. (I purchased Agent but found it to be too complex for my simple needs so don't use it.)

Communication of all kinds, including postings on the web, would be much more effective if written for the convenience and understanding of the reader rather than the convenience and ego of the writer.

Roy Lewallen, W7EL

53. Re: Higher gain copper cactus???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: Woodsman <woodsman@apexmail.com>
Message-ID: <7j76f0$1c5@newsops.execpc.com>
Source record: 69632
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

To clarify: I guess what I was thinking is that I am assuming this is a 1/2 wavelength antenna (rough guess based on size) and that if I double the appropriate dimensions I could make it a full wavelength antenna with better performance. With this design I am confused as to what portions resonate on each band to check this with the appropriate calculations. The change to 1" tubing was only to give added rigidity to compensate for the extra length. By the way, I built it today (as in the plans) and it works great!! Now if I can just make it even better....
73 de Eric

54. Re: Higher gain copper cactus???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: Amstar Foschinste <omuxy@whimsit.net>
Message-ID: <7j6ige$e74$1@news.mr.net>
Source record: 69633
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

By doubling all your measurements you might have an antenna of the same gain but on half the freq. So if you started on 2 meters , your new antenna would probably work on 73 Mhz or so. If you are building a j pole, you can roughly double the gain by making a super j pole. This is done by adding a section to the long side through a matching coil which is often just a section of stiff copper wire bent back on itself and sort of circled around the pole. The short side would be 1/4 wave, the long side would be 3/4 wave, then the 1/4 wave matching circle, then a 5/8 wave section on top of that. The gain is reputedly 6 db but I doubt if its quite that high. You could also make a j beam for about 10 db gain. If you want more gain yet, you should be building a co linear type with stacked 5/8 wave sections.

Woodsman wrote in message <7j6ovn$46g@newsops.execpc.com>...
>Hi , I am building a dual-band copper cactus tonight:
>http://www.geocities.com/Baja/4990/cjpole.htm
>Thinking I could build a higher gain version for a base station
>by using 1" copper tubing and approximately doubling all
>measurements. Anyone ever try this?? Anyone think it will
>work? Also, I know you are supposed to be able to adjust SWR
>by moving the wire on the long extension, any procedures or
>do you just wing it (I have a SWR meter to check)? If I don't get
>any real negative feedback I may just try it an report the results.
>73 de Eric
>
>

55. Re: Higher gain copper cactus???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: Woodsman <woodsman@apexmail.com>
Message-ID: <7j79po$l49@newsops.execpc.com>
Source record: 69634
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

>I guess what I was thinking is that I am assuming this is a
>1/2 wavelength antenna

I take that back. Perhaps it is active as a full wavelenth offset vertical dipole on 2M? 60.75" off the center conductor and 16.75" off the the shield for an approx wavelength of 77.5" which would be for 144.94mHz?? Also, if I am figuring this right then lowering the wire on the taller antena section should make it longer, and thus lower the resonating frequency? And it's resonating on 70cm because the 2m band is approx 3x the wavelength of the 70cm band? I should have started building antennas a long time ago-this is educational!!
Eric

56. Re: Higher gain copper cactus???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: Woodsman <woodsman@apexmail.com>
Message-ID: <7j7hjp$mej@newsops.execpc.com>
Source record: 69635
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Ok-I am determined to build rather than buy-recommended books or web
sites on this type of construction? Also, I gather from your post that
exceeding
1 wavelength does not produce any additional gain, but instead you use
mulitple
segments of a resonant length?
Thanks, Eric

>You could
>also make a j beam for about 10 db gain. If you want more gain yet, you
>should be building a co linear type with stacked 5/8 wave sections.
>

57. Re: rec.radio.amateur.homebrew IS NOT a complaint group

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@megsinet.net>
Message-ID: <375750AD.3494EA2E@megsinet.net>
Source record: 69636

John Miles wrote:
>
> Bob Headrick wrote:
> >
> > It seems like the camels nose (or other end) is in the tent. This groups is
> > not a sale group, although some have the opinion that they can post sale
> > stuff anywhere they please, and others think that "precedent" means that
> > once others post here that it is OK for all. Just a reminder - this is a
> > group for discussion, not for selling. Rec.radio.swap is the group for
> > selling radio related items.
> >
>
> Sorry, Bob, that prohibition is way too general to be reasonable. If an
> individual is looking to sell parts or test equipment whose attributes
> and prices make them especially useful for homebrewing, I want to see a
> notice here. I am not interested in digging through 2,000
> "FS:YEASU(sic) FT-6000SUX ***RARE!!!***" posts on rec.radio.swap to see
> if someone is offering a few diodes or a used scope probe I'd be
> interested in.

At the same time, I don't think many of us are interested in digging through
2,000 "FS:YEASU(sic) FT-6000SUX ***RARE!!!***" posts on this newsgroup to
find a few discussions, either.

> Likewise I'll continue to post notices here on the rare occasions I'm
> looking to sell something that's likely to be useful to someone who
> builds stuff. If you really can't deal with that, set your newsreader
> filter accordingly.
>
> OTOH, maybe you're referring to the latest trend of people posting ads
> for commercial factory-built ham gear and other off-topic items on the
> group. If so, I agree 100%. Let's all gang up and flame 'em to a crisp
> -- but preferably in email. Repeated abuses should be brought to the
> attention of the user's ISP as well.

The newsgroup can survive quite nicely with the regulars occasionally
jumping in with extras or neat finds. But looking through here right now,
I see three for-sale posts from K9SQG; I don't recall him ever participating
in a discussion I've seen. If this is the homebrew newsgroup, then what
does this little K9SQG item:

> Do not need cabinet, just the insides from a large Johnson Matchbox.

have to do with it? If he wants to buy one, rec.radio.swap is the appropriate
place; if he wants to make one, this is, but he doesn't seem to want that.

Or "QRO KING", who appears to have a little business going making leenyars
and doesn't mind retailing parts on the side.

Most of the crap that's here is of that kind. People you *never* see here
participating in the newsgroup are using it as their own personal sales
tool. That dog don't hunt.

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

58. WTB Vector modulator modules by General Microwave

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: Norman Gillaspie <norman@pcseng.com>
Message-ID: <375766aa@jolt.pagesat.net>
Source record: 69637

I am looking for a couple of vector modulators modules or
voltage variable phase shifters that cover the 2.4Ghz.

General Microwave makes them.

norman@pcseng.com

59. use 75 ohm attenuator for 50 ohm mesaurements

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: af389@lafn.ORG
Message-ID: <3757040C.3099FA27@lafn.org>
Source record: 69638

Hi,

I have an 80 db max switch selectable 75 ohm Heathkit attenuator unit
I plan to temporarily use for some 50 ohm measurements.

I am connecting 1 db T pads, 75 ohms in and 50 ohms out, to
the input and output ports of the 75 ohm unit.

My question is, when I set the 75 ohm unit to 3db, what is the overall
attenuation? DO the attenuations add? Do I have attenuation set by
switches plus IN and OUT pads attenuation?

I am not sure how to calculate the overall effective attenuation? Also
is it advisable to use larger attenuator T Pads at the input and output?

Is this use of T pads a workable scheme?
Alternate suggestions?
73, W6MIK
--
David Shalita (Dave)
af389@lafn.org
Van Nuys, CA

60. homebrew qrp hf

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: bujiaj8@aol.com
Message-ID: <19990602201221.09814.00000904@ng62.aol.com>
Source record: 69697

I am interested in building a 40 meter home brew unit for cw... qrp.... can anybody help me out with resources for this first amateur homebrew project. please email.

bill
kd5fxt

61. ? registration of double sided boards

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: Don <bjmcpher@usit.net>
Message-ID: <3755D833.7AE7F37C@usit.net>
Source record: 69698

Hi

I'm getting ready to make my first dbl sided board using toner transfer (press n peel). Does anyone have any tried and true methods for getting the two sides to be alligned with each other? Anything I SHOULDNT try? And I'm also interested in the same thing as applicable to positive pre-sensitized boards, as I may try them when my pnp stuff runs out.

Thanks,

Don

62. WTB Drake PS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: guido@mail.icongrp.com
Message-ID: <7j4ru9$4j6$1@nnrp1.deja.com>
Source record: 69699

A friend of mine is looking for a Drake TR4-AC4 power supply. If you have a working unit and would like to sell it, please contact Tom, AA9FC directly at 219-924-8083.

Please do not respond via e-mail. He is not on-line. Thanks.

--
==========
John Gianotti, KF9GW

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

63. More work on my sub-miniature tube "AA5" set, mixer stage

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: wa2ise@netcom.com
Message-ID: <wa2iseFCqC7r.C9L@netcom.com>
Source record: 69700
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Seems I never truely finish a radio, they are "works in progress"....

Anyway, found I could get better conversion gain if instead of connection the second control grid (of a dual control pentode, 5636) to the cathode of the hartley style local oscillator triode, I connect to its grid instead. A significant increase in gain. But at the price of a tad bit of local oscillator pulling by strong stations at the top of the AM MW band.

See my updated web page on this at http://www.netcom.com/~wa2ise and click the link.

64. AMP PARTS FOR SELL

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: ts950sdx@aol.com
Message-ID: <19990602234143.01007.00000327@ng-fn1.aol.com>
Source record: 69701

2 NEW IN THE BOX 3-1000Z TUBES EIMACS $300 EACH

1 PLATE TRANSFOMER 4000 VOLTS @ 2 AMPS
200/205/210/220 PRI TAPS
2000/4000 TAPS SEC TAP
OIL FILLED CASE " PEANUT OIL"
WT 150###
$300

PLATE AND LOAD CONTROL CAPS
FROM A SB 220 GREAT SHAPE $75
MORE STUFF TO COME
THANKS JOE

65. Re: Big Wheel Antenna??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: gholl@my-deja.com
Message-ID: <7j5492$701$1@nnrp1.deja.com>
Source record: 69702
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

In article <3748646E.9A80118F@onramp.net>,
"Larry D. Clark" <buddycl@onramp.net> wrote:
> Hi
>
> I just ran across an antenna named "big wheel". The only
> design info I've been able to find so far is in German.
> Unfortuantely, my ability to read/speak German left me
> 20 years ago. Could someone point me to some info
> on the net that is in Engrlish?
>
> larry
> kd5foy
> em12
>
>
I was just reading an article about the "Big Wheel" in Antennex
Archives. You can find Antennex at http://www.antennex.com
Also Norm KB6KQ makes VHF/UHF Loops - his new web site is at:
http://www.kb6kq.com

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

66. Tak Lee IF coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: armand1@hotmail.com
Message-ID: <XMn53.2409$mN1.244745@newsgate.direct.ca>
Source record: 69703

Can anyone provide a source for Tak Lee IF coils?

thanks Armand

67. Re: rec.radio.amateur.homebrew IS NOT a sale group

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@megsinet.net>
Message-ID: <37562E9F.3862F036@megsinet.net>
Source record: 69704

Bob Headrick wrote:
> It seems like the camels nose (or other end) is in the tent. This groups is
> not a sale group, although some have the opinion that they can post sale
> stuff anywhere they please, and others think that "precedent" means that
> once others post here that it is OK for all. Just a reminder - this is a
> group for discussion, not for selling. Rec.radio.swap is the group for
> selling radio related items.
>
> Lets keep some sanity in the rec.radio groups lest they all become overrun
> like rec.radio.amateur.equipment has. Alternately I suppose we can look
> forward to 2,189,741 postings per week as pointers to ebay in every group in
> usenet.

Well said.

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

68. Re: Coils made by TOKO

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: Mike Cheponis <Mike@Wireless.Com>
Message-ID: <375640AB.6FB70CCF@Wireless.Com>
Source record: 69705
Cross-posted to:
alt.radio.pirate,aus.radio.amateur.misc,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.misc

Digikey <http://www.digikey.com> sells plenty of Toko stuff.

GL -Mike

Leon Heller wrote:

> john <john@grandads.demon.co.uk> wrote in message
> news:0rpWDFAIDgP3Ew5P@grandads.demon.co.uk...
> > In article <7hfccm$9cj$1@medousa.forthnet.gr>, Sotiris Antoniou
> > <samant@ath.forthnet.gr> writes
> > >Hi,
> > >I am trying to purchase some coils made by TOKO (small quantities).
> Please
> > >can someone give me an address for England or U.S.A. Any help would be
> > >very much appreciated.
> > >
> > >Best Regards.
> > >Sotiris Antoniou .
> > >samant@ath.forthnet.gr
> > >
> > Hello Sotiris,
> > Maplin Electronics have stores throughout the U.K.
> > Telephone: 01702-554000
> > Fax: 01702-554001
> > Feel free to e-mail me if you need more details.
> > --
> > Hope this helps,
> > Best wishes,
> > John.
>
> Maplin only sells a very small part of the Toko range.
>
> --
> Leon Heller, G1HSM
> +44 (0) 181 428 7509
> leon_heller@hotmail.com
> http://www.geocities.com/SiliconValley/Code/1835

69. HELP.basic radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: JJhastings <nature@aus-online.com.au>
Message-ID: <7j5qgk$c92$1@news1.mpx.com.au>
Source record: 69706

need some basic information on design of a kids basic walky talky set up??
thanks alot......

70. Re: IC-2800H

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: dennis.spiess@reckitt.com
Message-ID: <7j5u89eop1@nnrp1.deja.com>
Source record: 69707
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <37543bc0@carrera.intergate.ca>,
"Bo Chan" <VE7WBC@qsl.net> wrote:
> Anyone know the extra feature (not show in user manual, like U/U, V/V,
> cross-band repeat, DTMF remote control, mods .....etc) for IC-
2800H?
>
> Best Regards,
> Bo
>
>
There are many web sites that list radio modes. A simple search should
give you a number of hits. Also try the Icom site. I think they post
modes for their radios.
G'Luck & 73
--
Den Spiess W2DEN

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

71. Re: rec.radio.amateur.homebrew IS NOT a sale group

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: "Daniel J. Velez" <dvelez@citizen.infi.net>
Message-ID: <7j5r5k$b5h$1@nw003t.infi.net>
Source record: 69708

It's a lost cause, Bob. Give it up.

Bob Headrick wrote in message <928385526.546.18@news.remarQ.com>...
>It seems like the camels nose (or other end) is in the tent. This groups
is
>not a sale group, although some have the opinion that they can post sale
>stuff anywhere they please, and others think that "precedent" means that
>once others post here that it is OK for all. Just a reminder - this is a
>group for discussion, not for selling. Rec.radio.swap is the group for
>selling radio related items.

72. Problems with 121MHz Crystal Oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: vk3em@hotmail.COM
Message-ID: <19990603130203.2931.qmail@hotmail.com>
Source record: 69709

Hi People,

I've been tearing my hair out over a 121 MHz crystal
oscillator.
My original idea was to use this as the 1st LO for a 2m to HF
down converter (for a 23MHz to 25MHz IF) for a fox hunting
system. My previous attempt used a 40MHz crystal but I had
problems with the 80MHz harmonic mixing with local FM broadcast stations.

The problem with the 121MHz crystal oscillator is this.
It oscillates at 60.5 MHz! Now, 60.5 is exactly 1/2 of 121 Mhz,
but how can the crystal operate at this frequency? Surely a
121MHz crystal will be a 5th or 7th overtone? I know nothing
else about the crystal except that there is 121.000 stamped on
the case.

I've tried several different circuit configurations,
values, voltages and even a grounded base oscillator that
Ulrich Rohde suggested in his book on receievers (His values
were for 120MHz). I've simulated his circuit and found that
the free running osc frequency (no crystal) with his values
is 65 MHz. I've tried several different slug tuned coils
in the collector and still no go.

When the crystal does oscillate at 60.5MHz I do get 121 MHz as a
harmonic, but its about 20dB down on 60.5 MHz.

I've wasted a lot of time on this osc, so I will
probably go back to the 40 MHz and trippler with a
lot of filtering to notch 80MHz. I'd just like to know if
anyone else has seen this weird behaivour or am I not
understanding my crystal theory properly?

Anyone have any ideas on this?

Regards,
Luke
VK3EM

_____
Get Your Private, Free Email at http://www.hotmail.com

73. Re: Problems with 121MHz Crystal Oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <3756D469.60AE4D30@bellsouth.net>
Source record: 69710

Luke Enriquez wrote:
> The problem with the 121MHz crystal oscillator is this.
> It oscillates at 60.5 MHz! Now, 60.5 is exactly 1/2 of 121 Mhz,

I have seen crystals for VHF equipment marked with the operating
frequency of the *equipment*, not that of the crystal. For example, a
crystal marked "146.7" which actually oscillates on 45.333mHz.
(multiply by 3, then add 10.7..) Is it possible this crystal was out of
an aircraft radio transmitter and is intended to double to 121mHz?
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

74. Re: HELP.basic radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <3756D3A0.2E4627AB@bellsouth.net>
Source record: 69711

JJhastings wrote:
> need some basic information on design of a kids basic walky talky set up??

These things are more complex than you might think. (it's only mass production that gets the cost so low) I'm not sure I'd try to undertake one without considerable experience -- in any case, a homemade variety is likely to be illegal in many countries. (it certainly is here in the USA unless operated by licensed amateurs within amateur bands)

All that said.. I'd take a look at
http://www.intio.or.jp/jf10zl/
. It has a number of interesting circuits for simple low-powered transmitters and simple receivers.
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

75. Re: Big Wheel Antenna??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: Gerhart Hlawatsch <ghl@uni-muenster.de>
Message-ID: <3756AAF9.B068A1A3@scitel.de>
Source record: 69712
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

> Larry D. Clark wrote in message <3748646E.9A80118F@onramp.net>...
> >Hi
> >
> >I just ran across an antenna named "big wheel". The only
> >design info I've been able to find so far is in German.
> >Unfortuantely, my ability to read/speak German left me
> >20 years ago. Could someone point me to some info
> >on the net that is in Engrlish?
> >
> >larry
> >kd5foy
> >em12
> >
> >

I built one for 2m once upon a time (I think 1969) after a recipe of
Rothammel: Antennen (An east German author). It was a stacked
version with two planes. Though my technical possibilities were
very limited at that time I got it working reasonably well and
had som nice qsos up to 300 km in distance at good conditions.

If you can get along with my english I can translate for you
the crucial passages.

Ham spirit!

Best Regards
Gerhart

76. simple radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <3756E273.42043106@bellsouth.net>
Source record: 69713

(sorry to break the thread; Netscape decided (incorrectly!) that I had copied this message into my outbox from somewhere else, and refused to send anything until I deleted the entire contents of the outbox!)

JJhastings wrote:
> need some basic information on design of a kids basic walky talky set up??

These things are more complex than you might think. (it's only mass production that gets the cost so low) I'm not sure I'd try to undertake one without considerable experience -- in any case, a homemade variety is likely to be illegal in many countries. (it certainly is here in the USA unless operated by licensed amateurs within amateur bands)

All that said.. I'd take a look at
http://www.intio.or.jp/jf10zl/
. It has a number of interesting circuits for simple low-powered transmitters and simple receivers.

--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

77. Re: Problems with 121MHz Crystal Oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <3756E2AF.D3073BBF@bellsouth.net>
Source record: 69714

Luke Enriquez wrote:
> The problem with the 121MHz crystal oscillator is this.
> It oscillates at 60.5 MHz! Now, 60.5 is exactly 1/2 of 121 Mhz,

I have seen crystals for VHF equipment marked with the operating
frequency of the *equipment*, not that of the crystal. For example, a
crystal marked "146.7" which actually oscillates on 45.333mHz.
(multiply by 3, then add 10.7..) Is it possible this crystal was out of
an aircraft radio transmitter and is intended to double to 121mHz?
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

78. 75 ohm attenuator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: af389@lafn.ORG
Message-ID: <3756A5A7.D3967AB2@lafn.org>
Source record: 69715

I have a Heathkit 75 ohm switchable attenuator, up to 80db.
I want to use it in my 50 ohm applications until
I can buy a good 50 ohm unit.

I lost a reference to method where pads
can be placed at input and output of 75 ohm unit, to
allow use as a 50ohm unit. Using the pads allowed a rough esitmate of
the 50 ohm atteunation versus switch settings.

I believe the pads where 75 to 50 ohms pads.

Appreciate any hints with the math and needed pads.
73, W6MIK
--
David Shalita (Dave)
af389@lafn.org
Van Nuys, CA

79. Re: EI9GQ Homebrew Radio Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <3756BD84.B73D1281@teleport.com>
Source record: 69716
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur,uk.radio.amateur

Walt Davidson wrote:
>
> On Wed, 02 Jun 1999 10:33:30 -0700, Roy Lewallen <w7el@teleport.com>
> wrote:
>
> >The newsreader bundled with Wordperfect and Netscape v. 4 in the
> >several-hundred-dollar Corel Suite 8 doesn't qualify as a "proper"
> >newsreader by your standard. (I purchased Agent but found it to be too
> >complex for my simple needs so don't use it.)
>
> The fact that you chose to pay several hundred dollars for your
> newsreader doesn't necessarily make it any better than mine (for which
> I paid $25). In fact it probably says more about you than about the
> newsreader! :-)

It would indeed, if the newsreader was all I had gotten for the money.

> Netscape - of which the current version is 4.6 - is
> free.
>
> >Communication of all kinds, including postings on the web, would be
> >much more effective if written for the convenience and understanding
> >of the reader rather than the convenience and ego of the writer.
>
> Yes, but they wouldn't be half as much fun!

And it does seem true that some of the people posting on the newsgroup
are indeed having a lot more fun than the people reading their
postings.

Roy Lewallen, W7EL

80. Re: HELP.basic radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <3756BFCA.967673DB@teleport.com>
Source record: 69717

Doug Smith wrote:
>
> JJhastings wrote:
> > need some basic information on design of a kids basic walky talky set up??
>
> These things are more complex than you might think. (it's only mass
> production that gets the cost so low) I'm not sure I'd try to undertake
> one without considerable experience -- in any case, a homemade variety
> is likely to be illegal in many countries. (it certainly is here in the
> USA unless operated by licensed amateurs within amateur bands)
> . . .

Actually, home-built devices are specifically permitted under Part 15 of the FCC rules (section 15.23). The "builder is expected to employ good engineering practices to meet the specified technical standards to the greatest extent practicable." Like commercial Part 15 devices, they're subject to the non-interference provisions of the regulations (section 15.5).

A walkie-talkie which complies with the Part 15 technical standards referred to above would have a very limited range, nowhere near the range of an amateur or commercially-purchased "personal communication" unit.

Roy Lewallen, W7EL

81. Re: IC-2800H

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: "Edward L. Dowdy" <eldowdy@net66.com>
Message-ID: <mnz53.277$zX5.17734@typ42b.nn.bcandid.com>
Source record: 69718
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,tw.bbs.rec.radio.amateur

www.icomamerica.com

Bo Chan wrote in message <37543bc0@carrera.intergate.ca>...
>Anyone know the extra feature (not show in user manual, like U/U, V/V,
>cross-band repeat, DTMF remote control, mods ....etc) for IC-2800H?
>
>
>
>Best Regards,
>Bo
>
>
>
>

82. Re: Coils made by TOKO

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <wJ7rZTAv1sV3Ewrr@falstaf.demon.co.uk>
Source record: 69719
Cross-posted to:
alt.radio.pirate,aus.radio.amateur.misc,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.misc

In article <rgVDCKAc7ZV3Ew7u@clintsmc.demon.co.uk>, Clint Sharp
<clint@clintsmc.demon.co.uk> writes
>In article <7j3gvbepj1@news8.svr.pol.co.uk>, Leon Heller <leon@lfhelle
>r.freeserve.co.uk> writes
>>
>>Maplin only sells a very small part of the Toko range.
>>
>Are Cirkit still in business? They, AFAIR, used to do a fairly good
>range of Toko coils, by no means complete but pretty good.
>>
Very much so. Their range is not extensive but convenient to access, if
you want the more exotic ones try BEC www.bec.co.uk who are their UK
importers and stock pretty much the entire range.

Robin
>>--
>>Leon Heller, G1HSM
>>+44 (0) 181 428 7509
>>leon_heller@hotmail.com
>>http://www.geocities.com/SiliconValley/Code/1835
>>
>>
>

Robin Birch robin@falstaf.demon.co.uk

M1ASU/2E0ARJ Old computers and radios always welcome

83. Re: Problems with 121MHz Crystal Oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: hamm4fun@aol.com
Message-ID: <19990603150708.06129.00000068@ng-cf1.aol.com>
Source record: 69720

Whats happening sounds pretty normal to me. Trying to get crystal to oscilate directly at 120 MHS is going to be tuff. Just settle with the 60 and use a multiplier.

84. Re: Cellular Phones

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: wb5agz@dc.cis.okstate.edu
Message-ID: <7j6llbnpk1@lotus.onenet.net>
Source record: 69721

There was an article in "QST" several years ago about some
people who worked for Novatel in Canada who had come up with firmware
mods that allowed for operation in the 902 MHZ band. I don't remember
much as to what kind of operation was possible, but it had to be
pretty clever to get around the fact that cell phones operate full
duplex with a fixed separation of 45 MHZ which would complicate things
as the 902 MHZ band is only 26 MHZ wide. I think the mods made use of
the phone's data modem but I don't know what they were doing with it.

Martin McCormick WB5AGZ Stillwater, OK
OSU Center for Computing and Information Services Data Communications Group

85. Re: help with transverter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: Dave Eckhardt <dave_eckhardt@hp.com>
Message-ID: <3756D615.1E55@hp.com>
Source record: 69722

Nicholas M Cooling wrote:
>
> HI
>
> I would like to start looking into vhf and uhf ssb and cw. I don't want to
> spend the mega bucks in a bigger radio (I have a dx 70t). Does anyone know
> of a transverter kit that is reasonable and work for 2m and or 440.
>
> thanks
>
> Nick Cooling N3TOZ
>>>>>>>>>>>>>>>>>>>>>>>>>>>> <<<<<<<<<<<<<<<<<<<<<<<<

A little more expensive, but check Down East Microwave, as well. They
have a presence on the www, so you can "look" at their equipment and
prices online.

Dave - W6LEV

86. cheap HF radio idea

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7j6nhd$2ma$1@uranium.btinternet.com>
Source record: 69723

I have tried in the past to make various HF superhets, but have been unable to get good results due to problems getting the oscillator and aeriel tuned circuits aligned and tracking properly. I had the idea of making a receiver based around a crystal controlled converter, perhaps using one or two tuned RF stages, a mixer and crystal controlled local oscillator, followed by a band pass filter, which would develop a variable IF frequency which would then be fed to a long wave (140-400kHz) receiver. Therefore coverage of a particular HF band could be tuned over the long waveband. For example, a 6.86MHz crytal would give coverage from 7.000 to 7.260MHz. I would expect the stations to be well spread over the LW band since its range is only 260kHz wide. I assume that coverage would be too cramped if I used an IF which fell into the MW (540-1600kHz) band, with its 1060kHz width. Adding a BFO to the LW receiver would then be a simple task.
I would be interested to hear your comments on my idea. For example, will I get adequate sensitivity and selectivity?

Best wishes from John Cunningham.

87. Higher gain copper cactus???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: Woodsman <woodsman@apexmail.com>
Message-ID: <7j6ovn$46g@newsops.execpc.com>
Source record: 69724
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hi , I am building a dual-band copper cactus tonight:
http://www.geocities.com/Baja/4990/cjpole.htm
Thinking I could build a higher gain version for a base station
by using 1" copper tubing and approximately doubling all
measurements. Anyone ever try this?? Anyone think it will
work? Also, I know you are supposed to be able to adjust SWR
by moving the wire on the long extension, any procedures or
do you just wing it (I have a SWR meter to check)? If I don't get
any real negative feedback I may just try it an report the results.
73 de Eric

88. Re: homebrew qrp hf

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: r_buschner@KNUUT.de
Message-ID: <7I9rhcJIkEB@r_buschner.knuut.de>
Source record: 69725

BUJIAJ8 wrote in <19990602201221.09814.00000904@ng62.aol.com>:

> I am interested in building a 40 meter home brew unit for cw...
> qrp.... can anybody help me out with resources for this first amateur
> homebrew project. please email.

Yes, for example the Norcal 40, a wonderful rig, or his little Brother,
the SST. Both are from Wilderness Radio, constructed by WAyne Burdick,
N6KR. I've built the SST, his size is abt. 86mm x 95mm x 40mm, just a
backpacker rig, hi. Althoug, Wayne said, the Norcal 40 _is_ the better
radio.

Specs of the SST: 2W out, MDS -135 dBm, xtal filter bw abt 300 Hz (!),
current consumption abt 20 mA rx, 250 mA tx.

So i use a pack of 10 AA NiCd cells and have abt. 4 hours of fun.

cu, Ralf

--
Was fuer 'ne Signatur?

89. Re: rec.radio.amateur.homebrew IS NOT a complaint group

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <3756EDFB.2161@pop.removethistomailme.net>
Source record: 69726

Bob Headrick wrote:
>
> It seems like the camels nose (or other end) is in the tent. This groups is
> not a sale group, although some have the opinion that they can post sale
> stuff anywhere they please, and others think that "precedent" means that
> once others post here that it is OK for all. Just a reminder - this is a
> group for discussion, not for selling. Rec.radio.swap is the group for
> selling radio related items.
>

Sorry, Bob, that prohibition is way too general to be reasonable. If an individual is looking to sell parts or test equipment whose attributes and prices make them especially useful for homebrewing, I want to see a notice here. I am not interested in digging through 2,000 "FS:YEASU(sic) FT-6000SUX ***RARE!!!***" posts on rec.radio.swap to see if someone is offering a few diodes or a used scope probe I'd be interested in.

Likewise I'll continue to post notices here on the rare occasions I'm looking to sell something that's likely to be useful to someone who builds stuff. If you really can't deal with that, set your newsreader filter accordingly.

OTOH, maybe you're referring to the latest trend of people posting ads for commercial factory-built ham gear and other off-topic items on the group. If so, I agree 100%. Let's all gang up and flame 'em to a crisp -- but preferably in email. Repeated abuses should be brought to the attention of the user's ISP as well.

>
> Lets keep some sanity in the rec.radio groups lest they all become overrun
> like rec.radio.amateur.equipment has. Alternately I suppose we can look
> forward to 2,189,741 postings per week as pointers to ebay in every group in
> usenet.
>
> - 73 Bob W7OV

I would suggest that threads like this are themselves off-topic and destructive to the group. Go to dejanews and look at any group which has a large population of both ware-hawkers and netcops. (rec.antiques.radio+phono and rec.radio.amateur.boatanchors come to mind, in particular.) On these groups you will find that the number of posts from people bitching about FS: and FA: ads on the group invariably outnumbers -- often by an order of magnitude -- the FS: and FA: ads in question. As a threat to bandwidth on a newsgroup, it's hard to beat a FS:-vs-no-FS: flame war for sheer lack of content.

In your own case, a quick DejaNews search shows that you (bobh@proaxis.com) have made 6 posts to r.r.a.h. contributing useful information to the group, and 13 posts complaining about other people not contributing useful information to the group. Enough said (literally).

Unless the intent of a newsgroup's charter is in serious jeopardy, it is arguably best to say nothing at all, lest one contribute to the same deterioration of useful discourse one is complaining about. Taking my own advice, I'll now shut the hell up. :)

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam
---

90. Re: cheap HF radio idea

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: w4pqwhs@aol.com
Message-ID: <19990603174722.15509.00000155@ng-cc1.aol.com>
Source record: 69727

John, we did that many years ago ,used a xtal controlled converter ahead of aircraft ARC 5 rec (550-1500khz BC band) we then used another ARC 5 (190-550 khz.)for 2nd if ..problem was we had too much gain and had to reduce plate voltage and so on to throttle them back..that was all tube stuff ..with todays solid state gear it's much harder to match everything up and make it come out right..it`s a good thought ,have fun.. Harold W4PQW

91. Re: Problems with 121MHz Crystal Oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <$vkcggA6uuV3Ewon@ifwtech.demon.co.uk>
Source record: 69728

Doug Smith wrote:
>> The problem with the 121MHz crystal oscillator is this.
>> It oscillates at 60.5 MHz! Now, 60.5 is exactly 1/2 of 121 Mhz,
>
>I have seen crystals for VHF equipment marked with the operating
>frequency of the *equipment*, not that of the crystal.

> Is it possible this crystal was out of
>an aircraft radio transmitter and is intended to double to 121mHz?

If the output on 60.5MHz is truly crystal-controled, then it's almost certainly marked as Doug suggests. Normal shear-mode crystals will only oscillate on odd-numbered multiples of the fundamental frequency - they can't oscillate at half-frequency or twice-frequency.

Most likely it's a 5th-overtone xtal with a fundamental on 12.1MHz, but it will only oscillate at 12.1, 36.3 (3rd overtone), 60.5 (5th), or 84.7 (7th). You'd have to try much harder to make it oscillate on higher overtones.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

92. Re: 1.5 GHz Bandpass Filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: la8ak@online.no
Message-ID: <3756f177.613927000@news.online.no>
Source record: 69729

On Mon, 31 May 1999 19:37:25 +0200, "Peter Bolch"
<nc-bolchpe@netcologne.de> wrote:

>Hi,
>
>
>I'm looking for a narrow (20 - 30 MHz) bandpass filter with a center
>frequency arround 1.5 GHz. There seem to be no helix filters with this
>bandwidth available and the coupled resonator ceramic filters (e.g. the
>Siemens types) are hard to get here.
>
>Might a cavity filter be a solution? If so, how are the dimensions of the
>cavity calculated?
>
>Any other ideas? Literature?
>
>
>Peter
>
>
just found some notes for the tube type filter by DL1RQ (DL8RAH?)
presented in M�nchen 1986 for 10GHz transverter, believe it was shown
in DUBUS in 1985 or 86. DC8NV also did some contributions for this
type of filter. Have scanned it, and it is available as 55kb gif file
for a few days.

Jan-Martin LA8AK

93. Re: 75 ohm attenuator

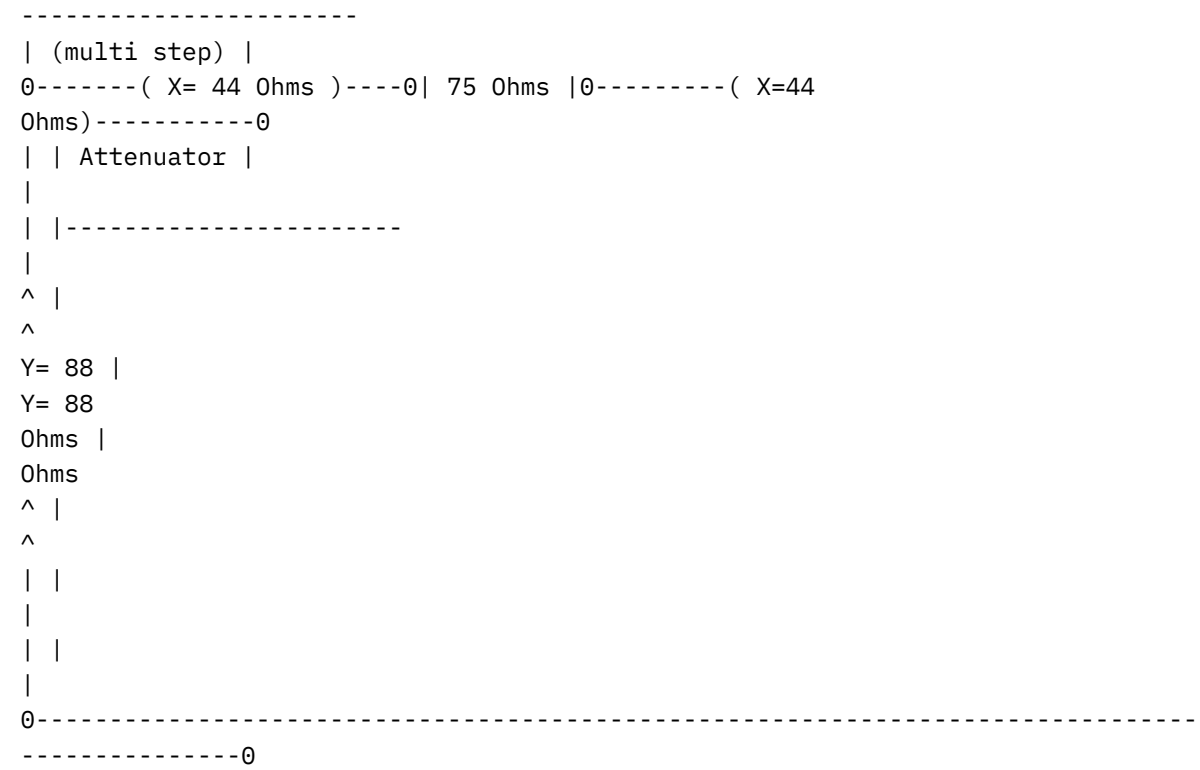
Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19990603231900704 32@zetnet.co.uk>
Source record: 69730

> I have a Heathkit 75 ohm switchable attenuator, up to 80db.
> I want to use it in my 50 ohm applications until
> I can buy a good 50 ohm unit.

> I lost a reference to method where pads
> can be placed at input and output of 75 ohm unit, to
> allow use as a 50ohm unit. Using the pads allowed a rough esitmate of
> the 50 ohm atteunation versus switch settings.

> I believe the pads where 75 to 50 ohms pads.

> Appreciate any hints with the math and needed pads.
> 73, W6MIK
==========
David , To make a 75 Ohms attenuator suitable for 50 Ohms in and out,
you add 44 Ohms in series with both the exisisting in- and output and
bypass the new (50 Ohms) in- and output with 88 Ohms.
However by doing so you add a fixed 12 dB attenuation.



Hope the above ASCI pic gets through OK

You can do the calculations with standard algebra , with the series
resistors each X and the bypass resistors each Y (Input and output

are obviously identical)
Just consider the input only
You now have 2 parallel resistors eg Y and (X+75) .
For 50 Ohms : 1/50 equals 1/ (x+75) + 1/y ----> this provides the
relationship between X and Y but this is moderately complex.
By making a table for different Y/X ratios X & Y can now be easily calculated
In the above example the ratio Y/X = 2 . Try other ratios and
check the resulting added attenuation.
You might get some odd resistor values.

If you have carbon composition resistors in the junkbox you could try
making the odd value resistors yourself.
Take a standard resistor with a value LOWER than the odd value you
need. If you now file or grind a bit off the side ,the resistance
increases (do this very carefully) Frequently test the resistance
with a suitable Ohm meter
When the wanted value has been reached the resistor can be coated
with a suitable varnish (eg polyurethane)
An advantage of carbon composition resistors is their low inductance.
This method is also suitable for making meter current shunts and
series resistors for re-ranging volt meters.

Perhaps you understand why I am a carbon resistor collector . At
Junk Sales and flea markets usually nobody wants them.
If they only knew ....

Good Luck

73 Frank GM0CSZ / KN6WH

Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland UK
e-mail : gm0csz.kn6wh@ukrs.org

94. Re: rec.radio.amateur.homebrew IS NOT a complaint group

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-03 00:00:00 UTC
From: ts950sdx@aol.com
Message-ID: <19990603191905.05987.00000163@ng-fx1.aol.com>
Source record: 69731

WHY DOES IT DRIVE PEOPLE NUTS?????

HOMEBREW TALK OR PARTS SWAP/SELL

ITS ALL THE SAME ??????IF YOU H.B.

THIS NEWSGROUP IS HANDY

REALLY!!!!!!!!!!!!

JOE KANE KF4TOH

95. Hey Old Man! GET OFF THE AIR!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: Old People SUCK <"Old Fart"@geezer.com>
Message-ID: <37587D05.48298F98@geezer.com>
Source record: 69532
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.swap,alt.fan.john.mackey

I used to be interested in amateur radio,

until I relized that ham radio is just for Old men.

I would rather ride a skateboard!

96. Re: Hey Old Man! GET OFF THE AIR!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: BB WOLF <bigbadwolf1@earthlink.net>
Message-ID: <7ja6h8$15m$1@fir.prod.itd.earthlink.net>
Source record: 69533
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.swap,alt.fan.john.mackey

GROW UP!! DUDE!!, Cause you're gonna be old some day too!!!
(If you make
it that long!!!)

From your posting, sounds like you forgot to wear your helmet while "hanging
ten" !!

Old People SUCK <"Old Fart"@geezer.com> wrote in message
news:37587D05.48298F98@geezer.com...
> I used to be interested in amateur radio,
>
> until I relized that ham radio is just for Old men.
>
> I would rather ride a skateboard!

97. Re: Literature about microstrip construction

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: clyde edgar <cedgar@pacificnet.net>
Message-ID: <3758A0BA.B8875812@pacificnet.net>
Source record: 69534

Check out the following web site at Cal Tech. PUFF is a circuit design program used in design classes and available for next to nothing. Clyde WA6DCM
http://www.its.caltech.edu/~mmic/puff.html

"Robert M. Ganter" wrote:

> Hello,
>
> does anybody know of literature about microstrip construction?
>
> All I have found up to now are books like the ARRL microwave
> experimenters/projects manuals one one side (only very basic coverage
> of the topic) and on the other side very abstract textbooks covering
> transmission lines and/or microwave filters in a more theoretical and
> mathematical way.
> What I'm actually looking for is some kind of 'cookbook' dealing with
> the structures used in microstrip circuits.
> In other words, I could simlpy build one of the famous KK7B circuits
> and have fun working with them. What I'm looking for, however, is
> *how* these circuits work, how You calculate and construct these
> structures, etc.
>
> Thanks in advance for any pointer
>
> Robert
>
> --
>
> Robert M. Ganter HB9DNN

98. Microstrip design

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: clyde edgar <cedgar@pacificnet.net>
Message-ID: <3758A14D.4210F1EB@pacificnet.net>
Source record: 69535

Robert, I posted a reply and meant to copy you but didn't. Check out the following web page. http://www.its.caltech.edu/~mmic/puff.html

99. YIG Comb generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: clyde edgar <cedgar@pacificnet.net>
Message-ID: <3758A237.DDDBBEAA@pacificnet.net>
Source record: 69536

I picked up a yig comb generator at the swap meet, I have an FSCM id and part #, the part was made by EIP. It has a sma input and smb output and a 5 pin d-connector. Can anybody provide me with any info on how to bias it ? Or any info on YIG comb generators in general ?

100. Re: 10 meter dipole with 102" whips?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: Bill <whagen@NOREPLY.inreach.com>
Message-ID: <3758A642.1714@NOREPLY.inreach.com>
Source record: 69537
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Randy and Cara Randall wrote:
>
> Hello. I am trying out an idea I had for a rotate able 10
> meter dipole antenna.
> I bought dipole antenna mount from Jetstream model JTDAK
> and thought
> I would use 2 102" 1/4 wave stainless steel CB whips I had
> laying around instead
> of using the 1/2 fiberglass, 1/2 steel whips that Jetstream
> sold to go with the mount. (Save $34.00, I'm CHEAP!)
> The whips droop 2' lower on the ends than the center. Will
> this electrically work? Will the impedance be
> so far out and the radiation pattern so fowled up as to make
> it useless to even bother to put it up? It
> looks somewhat like a inverted lazy U instead of a dipole!
> Inverted V's are good, how about a lazy U ?!
> I will be using a 1:1 balun to feed it. Your input greatly
> appreciated.
>
> Randy KB8ASO
>
> --
> This message comes to you from Milan, IN, USA. Home of no
> traffic lights, lots of fields, clean air and NO antenna
> restrictions!!
cut the lengths to be resonant on frequency, the droop wont change the
impedance that much, I think an inverted vee is still very close to 70
ohms. the pattern of the antenna will probably be a little less
directional than a horizontal dipole, height affecting it also. It will
probably work just great.
I have an inverted vee multiband and it works well on all bands, and on
10 meters, but I use a vertical dipole as it works better on 10 meters.
I have made the vertical dipole from copper pipe, and 11 meter quarter
waves back to back, cut to match, both work well.
73
kc6ufe
--
Please remove the word "NOREPLY" from the email adress. Sorry for the
inconvenience, but it helps keep down the spam.

101. Re: Hey Old Man! GET OFF THE AIR!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: safety2000 <safety2000@earthlink.net>
Message-ID: <7ja9ao$7ht$1@fir.prod.itd.earthlink.net>
Source record: 69538
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.swap,alt.fan.john.mackey

Sorry your not interested, too bad you missed out. It takes both sides of
your brain to be a "good" ham..
Some of us young guys can do both ... Skate Board and be "good" Hams

102. Re: Hey Old Man! GET OFF THE AIR!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: Phil Wheeler <w7ox@mindspring.com>
Message-ID: <3758AF67.AFE7286@mindspring.com>
Source record: 69539
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.swap,alt.fan.john.mackey

BB WOLF wrote:
>
> GROW UP!! DUDE!!, Cause you're gonna be old some day too!!!
>

Not likely he will make it that long.

Maybe we should tell him "Break a leg".

Phil

103. Motorola GM300.MDF out of band ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: "olivier.f4afo" <olivier.f4afo@wanadoo.fr>
Message-ID: <7jea6v$80o$1@wanadoo.fr>
Source record: 69540

Hello,

I possess the interfacing for programmed the Motorola GM 300 and the program that go with.

The problem is himself that the software of want not to descend below 438 Mhzs!!!

How to make to can programs the TX on the HAM band.

That is necessary to you him to modify and how on the file gm300.mdf?

Would someone already have programmed this kind of station on strips hams?, and was one able to give me the file gm300 solely.mdf her would be cool.... :)) I am not very good in the HEX .

104. Re: cheap HF radio idea

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: Puppin <puppin@netpar.com.br>
Message-ID: <7j7650$uc7$1@nnrp1.deja.com>
Source record: 69639

In article <7j6nhd$2ma$1@uranium.btinternet.com>,
"David Cunningham" <D.L.C@btinternet.com> wrote:
> I have tried in the past to make various HF superhets, but have been
unable
> to get good results due to problems getting the oscillator and aeriel
tuned
> circuits aligned and tracking properly. I had the idea of making a
receiver
> based around a crystal controlled converter, perhaps using one or two
tuned
> RF stages, a mixer and crystal controlled local oscillator, followed
by a
> band pass filter, which would develop a variable IF frequency which
would
> then be fed to a long wave (140-400kHz) receiver. Therefore coverage
of a
> particular HF band could be tuned over the long waveband. For
example,
a
> 6.86MHz crytal would give coverage from 7.000 to 7.260MHz. I would
expect
> the stations to be well spread over the LW band since its range is
only
> 260kHz wide. I assume that coverage would be too cramped if I used an
IF
> which fell into the MW (540-1600kHz) band, with its 1060kHz width.
Adding a
> BFO to the LW receiver would then be a simple task.
> I would be interested to hear your comments on my idea. For example,
will I
> get adequate sensitivity and selectivity?
>
> Best wishes from John Cunningham.
>
Hi David

Using this IF (140 to 400KHz) you will need a good filter in the
front end in order to reject the band from 6460 to 6720KHz.
When the receiver is tuned to 7000KHz, if there is a station in 6720KHz
it will be heard too, unless the filter in the input makes it weaker
than the station you intend to hear.

Depending on the signal levels arriving in these two frequencies , even
the front filter will not suffice.
So, try to increase the IF. The front filter will be easier to

construct.

Good luck!
--
Gilson Puppin - PU5MPL

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

105. Re: group sales

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: Larry Asp <larry.asp@sympatico.ca>
Message-ID: <37572CA8.37F8@sympatico.ca>
Source record: 69640

Bob Headrick wrote:
>
> It seems like the camels nose (or other end) is in the tent. This groups is
> not a sale group, although some have the opinion that they can post sale
> stuff anywhere they please, and others think that "precedent" means that
> once others post here that it is OK for all. Just a reminder - this is a
> group for discussion, not for selling. Rec.radio.swap is the group for
> selling radio related items.
>
> Lets keep some sanity in the rec.radio groups lest they all become overrun
> like rec.radio.amateur.equipment has. Alternately I suppose we can look
> forward to 2,189,741 postings per week as pointers to ebay in every group in
> usenet.
>
> - 73 Bob W7OV

Bob - breaking out your old camel routines is going too far. As you know
a camel should never stick his butt in a tent - the last one who tried
that - is still running accross the desert with his backside in great
pain.

I think you owe some apologies,because I dont think anyone who has
posted a FS ad here in the past 3 months hasnt met you or been drawn
into dialogue with you. You must be tired of the free insults by now too
and I think you would like to end this. Instead ask the list owners
(charter group) to monitor the group if you beleive or are bothered
that FS of home brew items is not legitmate use of the newsgroup. I know
others do not share your views, and thier opinion should be weighed as
much as yours. I must say that any FS ads or WTB or FA(very few) have
been for decent home brew stuff that most of us would consider worth
sharing or finding.

106. Re: More work on my sub-miniature tube "AA5" set, mixer stage

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: Mike Monett <add@csolve.net>
Message-ID: <37576B7D.534F@csolve.net>
Source record: 69641
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Robert Casey wrote:

[...]

> See my updated web page on this at http://www.netcom.com/~wa2ise and
> click the link.

Robert,

Thanks for putting up your web site on old AA5 tube radios. I often
browse through and remember the things that happened over the past 40
years just because I started taking them apart.

But I did manage to get some of them back together :)

Best Regards,

Michael R. Monett
mailto:add@csolve.net

107. Radio formulas - web calculators

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: Harry Lythall SM0VPO <harryvpo@hotmail.com>
Message-ID: <01beae50$762add90$8734d693@e0060b0eb282a>
Source record: 69642
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave,uk.radio.amateur,uk.rec.radio.cb

Hi again all,

I have waddled over to the HTML newsgroups and found the users there very helpfull. As a result I have managed to add the promissed radio formulas calculator (under BASIC INFORMATION) at:

http://sm0vpo.8m.com/ Main page
http://www.geocities.com/SiliconValley/3569/ Mirror in the USA
http://hem2.passagen.se/sm0vpo Mirror in Europe
http://members.xoom.com/sm0vpo Mirror in Far-East

So-far I have added calculators for:

Resistors in series /Caps in parallel (bit of a joke here?)
Resistors in parallel / Caps in series
Reactance of Capacitors
Reactance of Inductors
Calculating basic frequency - LC known
Calculating the number of turns on a coil - single layer
Calculating the number of turns on a coil - multi-layer
Evaluating a heatsink (what does this HS in my hand do?)
Calculating heatsinks (how big do I want to have it?)

Soon, I will be adding T/Pi resistive attenuators and VSWR calculators.
I will also be adding calculations involving sugar/SG and potential alcohol content plus boiling point as a measure of alcoholic content.

Best regards from Harry - SM0VPO
==========
PS
Windows is not the answer - it is the question.
The answer is NO!

108. Re: Frequency Multipliers using PIN diodes as SRD's

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <375787F2.25AF@pop.removethistomailme.net>
Source record: 69643

Richard Karlquist wrote:
>
> A few weeks ago there was some discussion about building comb generators
> and frequency multipliers. At that time I stated that step recovery
> diodes (SRD's) were difficult and expensive to get. However, I recently
> learned that cheap and available PIN diodes can be used as SRD's.
> This is described in Hewlett Packard Application Note 1054. It is
> available at their web site at:
>
> <<http://www.hp.com/HP-COMP/rf/app_index.html>>
>
> Click on "AN-1054. Low [Cost] Frequency Multipliers Using Surface Mount PIN
> Diodes". Note that due to a typo, the word "Cost" is missing from
> the link.
>
> Rick Karlquist N6RK
> rick@area.com

Nifty stuff. I just tried a generic NTE555 diode from the junk box as an untuned, unmatched comb generator (placed across 50-ohm coax, hit it with +20 dB at 100 MHz) and it yielded much the same graph as the HSMP-3820 in the .PDF file. Output was +12 dBm at the 100 MHz fundamental, -18 dBm at 800, and -40 dBm at 1400. Probably lucky I didn't smoke the diode with that much power, but it definitely works! Looks like conversion loss on the 8th harmonic is about 7 dB worse than the HP part, dunno if it's the lack of a matching network or just a cheaper PIN diode. Certainly falls off faster at the high end.

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam
---

109. Re: EI9GQ Homebrew Radio Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01beaeaa$2850a640$9ee7abc3@default>
Source record: 69644
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur,uk.radio.amateur

Walt,

Havn't you heard yet ? That minor skirmish known as the
American War of Independence is over. Both sides won. Its
now considered very respectable to be polite to visitors
from two hops away across the pond. ;o)

Reg.

110. Curtis 8044 Chip?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: Duncan Walters <Duncan@g4dfv.freeserve.co.uk>
Message-ID: <7j85md$hn3$1@news6.svr.pol.co.uk>
Source record: 69645

Wanted: Curtis 8044 Keyer I.C.
Does anyone know a source for this
device as I can't seem to track down
any web pages of any stockists.
Any help will be greatly appreciated.
Please reply soon.
Thanks in anticipation.

Duncan G4DFV

111. Re: Hi Power Amp. Parts FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: mmckee6657@aol.com
Message-ID: <19990604070313.24741.00000333@ng-ce1.aol.com>
Source record: 69646

Hi lou,
Interested in parts...Looking for 3-500z,4-100 sockets, tubes, transformers
etc...
kc7cdp
mmckee6657@aol.com

112. Re: Curtis 8044 Chip?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7j8ifj$c3l$1@nnrp1.deja.com>
Source record: 69647

In article <7j85md$hn3$1@news6.svr.pol.co.uk>,
"Duncan Walters" <Duncan@g4dfv.freeserve.co.uk> wrote:
> Wanted: Curtis 8044 Keyer I.C.
> Does anyone know a source for this
> device as I can't seem to track down
> any web pages of any stockists.
> Any help will be greatly appreciated.

Are you looking specifically for an 8044, or are you
looking for an iambic keyer? In the first case, you
have a tough slog ahead of you. In the second, there
are better ways of doing it now.
--
Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

113. Re: use 75 ohm attenuator for 50 ohm mesaurements

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: Ralph Mowery <rmowery@ibm.net>
Message-ID: <3757B950.95088A6E@ibm.net>
Source record: 69648

The total is what you have the 75 ohm set to plus 2 db. That is 1
db for each of the 50 to 75 pads. YOu will have 2 db if the
switches are set to 0.

David Shalita wrote:
>
> Hi,
>
> I have an 80 db max switch selectable 75 ohm Heathkit attenuator unit
> I plan to temporarily use for some 50 ohm measurements.
>
> I am connecting 1 db T pads, 75 ohms in and 50 ohms out, to
> the input and output ports of the 75 ohm unit.
>
> My question is, when I set the 75 ohm unit to 3db, what is the overall
> attenuation? DO the attenuations add? Do I have attenuation set by
> switches plus IN and OUT pads attenuation?
>
> I am not sure how to calculate the overall effective attenuation? Also
> is it advisable to use larger attenuator T Pads at the input and output?
>
> Is this use of T pads a workable scheme?
> Alternate suggestions?
> 73, W6MIK
> --
> David Shalita (Dave)
> af389@lafn.org
> Van Nuys, CA

114. Recycling an analog satellite receiver (900-2050Mhz) ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: "Andrea B." <andrea@logical.it>
Message-ID: <7j8gq3$rt3$1@serv1.iunet.it>
Source record: 69649

I switched to digital and now I have an unused satellite tv receiver.
I'm trying to find a way to use it. Here are a couple of ideas:
- The receiver covers the range 900-2050 Mhz. Meteosat happens to xmit in
the middle of that range (1600 Mhz if I'm not wrong. Could it be done??? How
do I build an antenna for 1600Mhz (is it a dipole ok? Do I need a cavity?)
- I have a couple of those wireless video links. They operate on 2400Mhz.
I'd like to use my sat receiver as a second receiving unit. Of course I
would need a down converter (2.400->1400 Mhz) . Any idea how to do such a
down converter (I think it should need a cavity on these freq.) ?

Have you got any other good ideas
Thanks everybody.

--
Andrea Boriani, software engineer
andrea@logical.it
ICQ# 20445755

115. BUY FOR YAESU FT 736R

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: Nevio <nterre@tim.it>
Message-ID: <7j8fnurjv1@nslave1.tin.it>
Source record: 69650

I'm looking for buy for FT 736R modules for 50 and 1296 Mhz
Nevio
E-mail nterre@tim.it

116. INFO on Mods for Collins 820D-2 for 160 and 75

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: k6rcl@aol.com
Message-ID: <19990604101453.28586.00000354@ng68.aol.com>
Source record: 69651

Needed Mods for Collins Broadcast transmitter to put on 160 and 75 meters.
tnx

Dennis K6RCL
Goleta, Calif 93117
Dennis
Goleta, Calif. 93117

117. Re : Problems with 121MHz osc.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: vk3em@hotmail.COM
Message-ID: <19990604144451.73745.qmail@hotmail.com>
Source record: 69652

Hi People,

> > Is it possible this crystal was out of
> >an aircraft radio transmitter and is intended to double to 121mHz?
>
>If the output on 60.5MHz is truly crystal-controled, then it's almost
>certainly marked as Doug suggests. Normal shear-mode crystals will >only
>oscillate on odd-numbered multiples of the fundamental frequency >they
>can't oscillate at half-frequency or twice-frequency.
>
>Most likely it's a 5th-overtone xtal with a fundamental on 12.1MHz, >but it
>will only oscillate at 12.1, 36.3 (3rd overtone), 60.5 (5th), >or 84.7
>(7th). You'd have to try much harder to make it oscillate on >higher
>overtones.

Thanks for the comments people. I'm going to order another
crystal from Hy-Q and see what it does. First, however, I'm
going to double check that when the crystal is replaced with
56Ohms, the circuit oscillates at close to 121MHz.

Regards,
Luke
VK3EM

_____
Get Your Private, Free Email at http://www.hotmail.com

118. Re: 75 ohm attenuator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01beaec6$fbb12200$LocalHost@default>
Source record: 69653

Depends on what sort and how accurate you wish the
measurements to be made.

When using a 75-ohm attenuator in place of a 50-ohm type
there will be a correction in decibels to be added or
subtracted from the indicated attenuator settings.
Additional hardware in the form of 50 to 75 ohm matching
pads are unnecessary.

It is seldom necessary to know the absolute value of loss
between 50-ohm terminations. It is the difference between
a pair of settings which usually matters. Provided the
smaller of the pair of settings is greater than about 12dB,
the difference will need no correction. The difference in
dB will be near enough the same regardless of the
attenuator impedance.

It is usually possible to arrange an experiment such that
the minimum setting is greater than about 12 dB. This
allows the attenuator, whatever its impedance, to work
between its correct value terminations.

Another way of looking at the problem - if both readings
of a pair are subjected to the same correction then the
arithmetical difference between the pair remains the same
regardless of the magnitude of the correction.

So no real need to purchase an expensive 50-ohm job. In
any case, when it's set to zero there is always a minimum
loss present.
--
Reg, G4FGQ

119. Charging Jell Cells

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: wb5agz@dc.cis.okstate.edu
Message-ID: <7j8t99$l8e$1@lotus.onenet.net>
Source record: 69654

I have a device that uses 17-AH lead-acid jell cells. It has
a charger that appears to switch from a higher-current mode to float
mode after it detects the charging of the battery packs. If I was to
connect a higher-current jell cell of the same voltage output to this
charger, would it just take longer to charge (okay), or would there be
smoke and explosions (not so good.)?

Martin McCormick WB5AGZ Stillwater, OK
OSU Center for Computing and Information Services Data Communications Group

120. Re: Radio formulas - web calculators

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <7j90nqrjv2@lure.pipex.net>
Source record: 69655
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave,uk.radio.amateur,uk.rec.radio.cb

Harry Lythall SM0VPO wrote
> I will also be adding calculations involving sugar/SG and potential alcohol
> content plus boiling point as a measure of alcoholic content.

Suck it and see, I say. ;)

Slainte
Gary7SLL

121. Boatanchor Classifieds

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: Jeff James <jeff@eclipse.net>
Message-ID: <3758026A.DFA242CD@eclipse.net>
Source record: 69656

```
Free Ads dedicated to vintage Amateur Radio..
The Boatanchor Classifieds
http://www.dealamerica.com/deal/cgi-bin/ads/bcads.cgi
Thank you!
```

122. Re: Curtis 8044 Chip?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: Norm Melick <henmel@worldnet.att.net>
Message-ID: <37580959.4877E6C1@worldnet.att.net>
Source record: 69657

I just bought 2 of the Curtis 8044ABM 20 pin IC's from MFJ.
$19.99 ea.

Norm/KQ6SD

123. Data IO 29 Programmer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <1gogvBA+pAW3EwxX@falstaf.demon.co.uk>
Source record: 69658
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Does anybody have a manual for the 29 programmer. An acquaintance has
just obtained one and doesn't know where to start.

Regards

Robin

--
Robin Birch robin@falstaf.demon.co.uk

M1ASU/2E0ARJ Old computers and radios always welcome

124. FT-50RD Review

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: Geneva Humberger <KB9TFH@MichianaToday.com>
Message-ID: <3757FF90.BA2BA749@MichianaToday.com>
Source record: 69659

Does anyone know where i can get a product review on the FT-50RD..Please Reply ASAP...Joe Humberger KB9TFH

125. LSTTL Frequency Doubler 5 MHz to 10 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: John Mortlock <jmort@global.freeserve.co.uk>
Message-ID: <7j93id$l9n$1@news7.svr.pol.co.uk>
Source record: 69660

Does anyone have a schematic for an LS TTL/CMOS frequency doubler ?
I want to double 5 MHz to get 10 MHz from my frequency standard.

John

126. Help w/ ID of General Communication Co. R.F. Coax Switch

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: Dan Levin <danlevin@my-deja.com>
Message-ID: <7j983s$l46$1@nnrp1.deja.com>
Source record: 69661
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

I recently came across a gadget that I can't use because I can't identify it. This thing is about 6 inches tall, and all black metal. On the "bottom" there are 4 numbered "N" connectors. On the side near the "top" there is a male brass Amphenol connector about .75" in diameter with 7 pins and a key. There are mounting flanges to mount this thing vertically, I would guess with the "N" connectors down.

There is a label on the side with the following information:

R.F. Coax Switch
MFR. No. 2831-51
Mod. No. 2LNRP1-1
Ser. No. 15983

28 volts DC
General Communications Co., Boston MA

Naturally, there is no company of that name in Boston any more.

I guess that this thing is either a double pole double throw coax relay with a 28 volt coil, or (more likely given 7 control pins) a 1 input and 3 output remote antenna switch. Perhaps U.S. military type?

Anyone who can give me any information about this beast would be most appreciated!

Thanks,

***dan
Dan Levin, N6BZA

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

127. Help w/ ID of General Communication Co. R.F. Coax Switch

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: Dan Levin <danlevin@my-deja.com>
Message-ID: <7j985g$l4k$1@nnrp1.deja.com>
Source record: 69662
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

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There is a label on the side with the following information:

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Anyone who can give me any information about this beast would be most appreciated!

Thanks,

***dan
Dan Levin, N6BZA

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Share what you know. Learn what you don't.

128. Help w/ ID of General Communication Co. R.F. Coax Switch

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: Dan Levin <danlevin@my-deja.com>
Message-ID: <7j98dd$l81$1@nnrp1.deja.com>
Source record: 69663

I recently came across a gadget that I can't use because I can't identify it. This thing is about 6 inches tall, and all black metal. On the "bottom" there are 4 numbered "N" connectors. On the side near the "top" there is a male brass Amphenol connector about .75" in diameter with 7 pins and a key. There are mounting flanges to mount this thing vertically, I would guess with the "N" connectors down.

There is a label on the side with the following information:

R.F. Coax Switch
MFR. No. 2831-51
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Naturally, there is no company of that name in Boston any more.

I guess that this thing is either a double pole double throw coax relay with a 28 volt coil, or (more likely given 7 control pins) a 1 input and 3 output remote antenna switch. Perhaps U.S. military type?

Anyone who can give me any information about this beast would be most appreciated!

Thanks,

***dan
Dan Levin, N6BZA

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

129. Re: LSTTL Frequency Doubler 5 MHz to 10 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19990604144353.00291.00000457@ng69.aol.com>
Source record: 69664

>
>Does anyone have a schematic for an LS TTL/CMOS frequency doubler ?
>I want to double 5 MHz to get 10 MHz from my frequency standard.
>
>John
>
>Hi John, I just feed my 5 MHz from the Austron to both inputs of a MCL mixer. (An RAY-1 in my case, most will work if you measure your levels.) the sum frequency is extracted from the "IF" output and filtered a smidge with the old 10 MHz hound dog crystal that used to be my time base. About 6 dB conversion loss you can make up with most anything from an MMIC to a 2N2222.

W4ZCB

130. Re: Charging Jell Cells

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <37582A15.C2828301@erols.com>
Source record: 69665

It depends - if the charger has a current limiter you should be okay. If it doesn't, you could smoke the charger if the battery is very low on charge. If it's a two-step charger then it *probably* has a current limiter during the initial step.

Martin McCormick wrote:
>
> I have a device that uses 17-AH lead-acid jell cells. It has
> a charger that appears to switch from a higher-current mode to float
> mode after it detects the charging of the battery packs. If I was to
> connect a higher-current jell cell of the same voltage output to this
> charger, would it just take longer to charge (okay), or would there be
> smoke and explosions (not so good.)?
>
> Martin McCormick WB5AGZ Stillwater, OK
> OSU Center for Computing and Information Services Data Communications Group

131. Re: Problems with 121MHz Crystal Oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: c.c.tqbssz@ProblemsXw.killspam.us.com
Message-ID: <7j9cbgfii1@samba.rahul.net>
Source record: 69666

Ian White, G3SEK (G3SEK@ifwtech.demon.co.uk) wrote:
: Doug Smith wrote:
: >> The problem with the 121MHz crystal oscillator is this.
: >> It oscillates at 60.5 MHz! Now, 60.5 is exactly 1/2 of 121 Mhz,
: >
: >I have seen crystals for VHF equipment marked with the operating
: >frequency of the *equipment*, not that of the crystal.

: > Is it possible this crystal was out of
: >an aircraft radio transmitter and is intended to double to 121mHz?

: If the output on 60.5MHz is truly crystal-controled, then it's almost
: certainly marked as Doug suggests. Normal shear-mode crystals will only
: oscillate on odd-numbered multiples of the fundamental frequency - they
: can't oscillate at half-frequency or twice-frequency.

: Most likely it's a 5th-overtone xtal with a fundamental on 12.1MHz, but
: it will only oscillate at 12.1, 36.3 (3rd overtone), 60.5 (5th), or 84.7
: (7th). You'd have to try much harder to make it oscillate on higher
: overtones.

Jan Crystals used to (may still) have a high frequency overtone schematic
on their price sheet that I've used with success in the 130MHz range. I
think it may have been common base. I could probably find it if anyone is
interested.

Stephen

: 73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
: 'In Practice' columnist for RadCom (RSGB)
: http://www.ifwtech.demon.co.uk/g3sek

132. Re: Pointer to Oscilloscope FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: david@slack.com
Message-ID: <37584185.0@news.spies.com>
Source record: 69667

In article <wd1v-0406990446200001@wdonev.ne.mediaone.net>,
John Seney <wd1v@amsat.org> wrote:
>http://people.ne.mediaone.net/wd1v/

1. Isn't it time you learned how to crosspost instead of spamming your
articles into so many groups?

2. Why do you call it the "Oscilloscope FAQ" when it only covers DSOs?
Most of the readers of this newsgroup who have scopes have analog scopes.

133. Re: LSTTL Frequency Doubler 5 MHz to 10 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: "Thomas C. Sefranek" <tcs@cmcorp.com>
Message-ID: <37583654.133EBD39@cmcorp.com>
Source record: 69668

JohnsonHE wrote:

> >
> >Does anyone have a schematic for an LS TTL/CMOS frequency doubler ?
> >I want to double 5 MHz to get 10 MHz from my frequency standard.
> >
> >John
> >
> >Hi John, I just feed my 5 MHz from the Austron to both inputs of a MCL mixer.
> (An RAY-1 in my case, most will work if you measure your levels.) the sum
> frequency is extracted from the "IF" output and filtered a smidge with the old
> 10 MHz hound dog crystal that used to be my time base. About 6 dB conversion
> loss you can make up with most anything from an MMIC to a 2N2222.
>
> W4ZCB

Well, Hi!

He did ask for a TTL solution.

I use an RC to delay the 5 Mhz about 90 degrees.
then use an excluse OR to sum both the origional and quad signal,
it produes twice the frequency of the origional.

--
Thomas C. Sefranek WA1RHP
ARRL Instructor, Technical Specialist, VE Contact.
http://hamradio.cmcorp.com/41_Repeater/repeater.html
http://hamradio.cmcorp.com/inventory/Inventory.html

134. Re: LSTTL Frequency Doubler 5 MHz to 10 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: Tom McDermott <mcdermot@NOSPAM.aud.alcatel.com>
Message-ID: <3758484A.4AE491EA@NOSPAM.aud.alcatel.com>
Source record: 69669

The simplest way is to use a quad exclusive-or gate. Connect three of the exor
gates as delay elements (i.e. one input tied to +5, then input to output is delay).
Connect the source to one input of the 4th gate and the 1st delay gate.
Connect the output of the 1st delay gate to the 2nd, the second to the 3rd, and the
output of the third to the remaining input of the 4th gate. the output of the 4th
gate will be frequency doubled.

Essentially, the source signal (5 Mhz.) supplies directly one input of an exor gate
(the 4th) and a three-times delayed version of the input supplies the other input
of the 4th exor gate. The exor gate will then produce an output pulse for
every input transition (whether positive or negative). This doubles the frequency.
Ideally, the three-delay chain would have a delay of 1/4 the input period (i.e.
for 5 Mhz., 50 nsec of delay), but the reality is that it is totally non-critical,
and does not need to be set.

I've used this technique to multiply up the output of a frequency standard to
10 Mhz where I can then zero-beat it against WWV, and it works very well.

-- Tom, N5EG

John Mortlock wrote:

> Does anyone have a schematic for an LS TTL/CMOS frequency doubler ?
> I want to double 5 MHz to get 10 MHz from my frequency standard.
>
> John

135. Scott Hall & Panther City - Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: pymalion <pymalion@waymark.net>
Message-ID: <928538131.776.11@news.remarQ.com>
Source record: 69670
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.b

Scott Hall & the Panther City Band - Texas Favorite Country Artist, now has full length MP3's available from their current release "Panther City" for download and real audio previewing at http://www.mp3.com/artists/22/scott_hall__the_panther_city_band.html

You can listen to the mp3.com Radio version of all their songs...

You can also check Scott Hall's Web Site at http://members.tripod.com/~pymalion_2/

136. Re: Radio formulas - web calculators

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: W1PEV <paulvanasse@tp.net>
Message-ID: <tYY53.53$Vd.2813@typ32b.nn.bcandid.com>
Source record: 69671
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave,uk.radio.amateur,uk.rec.radio.cb

Hello Harry:

Im glad to see that your dedication to the amateur hobby hasn't waned. Ive always found the information you've provided very enlightening and informative.

Keep up the great work.

73's

137. Re: rec.radio.amateur.homebrew IS NOT a complaint group

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: qroking@aol.com
Message-ID: <19990604195023.28930.00000501@ng65.aol.com>
Source record: 69672

This is aimed at Mr. Cliffton Sharp....Unfortunetly the ham community has to be part of the "cheap shots" you have taken at me and others. I truly had to go to the dictionary and look up the word
" leenyars" and I didnt find it, I had to call a ham friend for him to tell me what the hell you were tring to say! I suppose the term"leenyars" is a term you got from your old CB days that I wouldnt know about. Funny how you would be fimiliar with the term and I had to ask another ham what that word was. I guess "leenyars" is in your everyday vocabulary. And speaking of Camels, if there were no For Sale listings on this group, the other homebrew discussion posts would be about as alone as being on the dessert with that Camel. I make it a point not to advertise commercial gear on this newsgroup and keep it to "parts" for the homebrewer. I wonder why, if you are opposed to forsale items that you read my listings?? I wish you would go crying someplace else, go look for an oasis to retire to and leave the rest of us alone........Lou

138. Re: rec.radio.amateur.homebrew IS NOT a complaint group

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: dana <dana@randomc.com>
Message-ID: <Pine.GSO.3.96.990604194808.1733E-100000@cluster2>
Source record: 69673

i will post stuff for sale in the rec.antique and old news groups,
rec.radio.swap is a joke for that kind of postings. all they want is the
new stuff and the cb stuff. all the collectors look for the old junk in
theese news groups.

On Thu, 3 Jun 1999, John Miles wrote:

> Date: Thu, 03 Jun 1999 14:04:59 -0700
> From: John Miles <jmiles@pop.removethistomailme.net>
> Newsgroups: rec.radio.amateur.homebrew
> Subject: Re: rec.radio.amateur.homebrew IS NOT a complaint group
>
> Bob Headrick wrote:
> >
> > It seems like the camels nose (or other end) is in the tent. This groups is
> > not a sale group, although some have the opinion that they can post sale
> > stuff anywhere they please, and others think that "precedent" means that
> > once others post here that it is OK for all. Just a reminder - this is a
> > group for discussion, not for selling. Rec.radio.swap is the group for
> > selling radio related items.
> >
>
> Sorry, Bob, that prohibition is way too general to be reasonable. If an
> individual is looking to sell parts or test equipment whose attributes
> and prices make them especially useful for homebrewing, I want to see a
> notice here. I am not interested in digging through 2,000
> "FS:YEASU(sic) FT-6000SUX ***RARE!!!***" posts on rec.radio.swap to see
> if someone is offering a few diodes or a used scope probe I'd be
> interested in.
>
> Likewise I'll continue to post notices here on the rare occasions I'm
> looking to sell something that's likely to be useful to someone who
> builds stuff. If you really can't deal with that, set your newsreader
> filter accordingly.
>
> OTOH, maybe you're referring to the latest trend of people posting ads
> for commercial factory-built ham gear and other off-topic items on the
> group. If so, I agree 100%. Let's all gang up and flame 'em to a crisp
> -- but preferably in email. Repeated abuses should be brought to the
> attention of the user's ISP as well.
>
> >
> > Lets keep some sanity in the rec.radio groups lest they all become overrun
> > like rec.radio.amateur.equipment has. Alternately I suppose we can look
> > forward to 2,189,741 postings per week as pointers to ebay in every group in

> > usenet.
> >
> > - 73 Bob W7OV
>
> I would suggest that threads like this are themselves off-topic and
> destructive to the group. Go to dejanews and look at any group which
> has a large population of both ware-hawkers and netcops.
> (rec.antiques.radio+phono and rec.radio.amateur.boatanchors come to
> mind, in particular.) On these groups you will find that the number of
> posts from people bitching about FS: and FA: ads on the group invariably
> outnumbers -- often by an order of magnitude -- the FS: and FA: ads in
> question. As a threat to bandwidth on a newsgroup, it's hard to beat a
> FS:-vs-no-FS: flame war for sheer lack of content.
>
> In your own case, a quick DejaNews search shows that you
> (bobh@proaxis.com) have made 6 posts to r.r.a.h. contributing useful
> information to the group, and 13 posts complaining about other people
> not contributing useful information to the group. Enough said
> (literally).
>
> Unless the intent of a newsgroup's charter is in serious jeopardy, it is
> arguably best to say nothing at all, lest one contribute to the same
> deterioration of useful discourse one is complaining about. Taking my
> own advice, I'll now shut the hell up. :)
>
> -- jm KE5FX
>
> --
> Note: My E-mail address has been altered to avoid spam
> --
>
>

139. Re: rec.radio.amateur.homebrew IS NOT a complaint group

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <3758727D.13331638@corecomm.net>
Source record: 69674

dana wrote:
> i will post stuff for sale in the rec.antique and old news groups,
> rec.radio.swap is a joke for that kind of postings. all they want is the
> new stuff and the cb stuff. all the collectors look for the old junk in
> theese news groups.

Are you saying that because the proper newsgroup isn't what you want it to
be, you're going to go mess up some other newsgroup for your purposes?

I hope you're just saying that you post a few appropriate things once in
a while in appropriate newsgroups where you also participate in things
other than your own sales.

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+

140. Re: rec.radio.amateur.homebrew IS NOT a complaint group

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <375873D9.2CD3F8B5@corecomm.net>
Source record: 69675

QRO KING wrote:
> This is aimed at Mr. Cliffton Sharp....Unfortunetly the ham community has to be
> part of the "cheap shots" you have taken at me and others. I truly had to go
> to the dictionary and look up the word
> " leenyars" and I didnt find it, I had to call a ham friend for him to tell me
> what the hell you were tring to say! I suppose the term"leenyars" is a term
> you got from your old CB days that I wouldnt know about. Funny how you would
> be fimiliar with the term and I had to ask another ham what that word was. I
> guess "leenyars" is in your everyday vocabulary. And speaking of Camels, if
> there were no For Sale listings on this group, the other homebrew discussion
> posts would be about as alone as being on the dessert with that Camel. I make
> it a point not to advertise commercial gear on this newsgroup and keep it to
> "parts" for the homebrewer. I wonder why, if you are opposed to forsale items
> that you read my listings?? I wish you would go crying someplace else, go look
> for an oasis to retire to and leave the rest of us alone.....Lou

Uh huh. What's "QRO KING", the name of your business?

What's the last discussion you participated in here? Or do you just come
to drop your ploppies and wait for the bucks to roll in?

This is a Usenet DISCUSSION group.

Oh, and as for my "old CB days", I owned a CB once. My employer gave it to
me as a Christmas present. I stole the coiled cord off the microphone and
repaired the mike on my two-meter rig with it, threw the rest away.

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

141. Re: rec.radio.amateur.homebrew IS NOT a sale group

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: Bob Headrick <bobh@proaxis.com>
Message-ID: <7j9vcacoi1@remarQ.com>
Source record: 69676
Cross-posted to: rec.radio.amateur.homebrew,news.groups

If those of you who want rec.radio.maatuer.homebrew to be a sale group are really convinced you are right how about putting your money where your mouth is so to speak? There is a well defined procedure to change the charter of this group (or any other in the rec.* heirarchy). If you want this to be a sale group change the cherter:

1. Post a call for discussion for the proposed change.
2. Afgter a discussion period call for a vote.
3. If at least N people vote, and there are more than M vores for than against the measure passes. I think it is 200 votes total, and more than 100 more yes' than no's.

If you win, post away to your heart's content based on the new charter. Until then abide by the rules of usenet and the charter of this group. If you don't want to play by the rules create an alt.raadio.amateur.homebrew groups where you can do whatever you want. Usenet may appear to be anarchy, but it is controlled anarchy.

BTW, I find it highly amusing that people complain that there are too many sale posts in rec.radio.swap, so they post here instead. Just what do you think this group will look like in a year with the sale postings? If you want a hint just look at rec.radio.amateur.equipment.

- Bob

142. Re: rec.radio.amateur.homebrew IS NOT a sale group

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <37587E18.54BD@pop.removethistomailme.net>
Source record: 69677
Cross-posted to: rec.radio.amateur.homebrew,news.groups

Bob Headrick wrote:
>
> If those of you who want rec.radio.maatuer.homebrew to be a sale group are
> really convinced you are right how about putting your money where your mouth
> is so to speak? There is a well defined procedure to change the charter of
> this group (or any other in the rec.* heirarchy). If you want this to be a
> sale group change the cherter:
>
> 1. Post a call for discussion for the proposed change.
> 2. Afgter a discussion period call for a vote.
> 3. If at least N people vote, and there are more than M vores for than
> against the measure passes. I think it is 200 votes total, and more than
> 100 more yes' than no's.
>
> If you win, post away to your heart's content based on the new charter.
> Until then abide by the rules of usenet and the charter of this group. If
> you don't want to play by the rules create an alt.raadio.amateur.homebrew
> groups where you can do whatever you want. Usenet may appear to be anarchy,
> but it is controlled anarchy.
>
> BTW, I find it highly amusing that people complain that there are too many
> sale posts in rec.radio.swap, so they post here instead. Just what do you
> think this group will look like in a year with the sale postings? If you
> want a hint just look at rec.radio.amateur.equipment.
>
> - Bob

So, Bob, built anything lately?

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam
---

143. Re: Adding shielding to wiring

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37588313.489A3684@teleport.com>
Source record: 69678

Take a look at Zippertubing Co., www.zippertubing.com, (800) 321-8178.
I don't know who might distribute their products, but they should be
able to tell you.

Roy Lewallen, W7EL

BarryG wrote:
>
> Can anyone tell me if I can buy some kind of braid product that can be
> wrapped or zippered around existing unshielded wiring in place and grounded
> to provide shielding, without having to disconnect the unshielded wiring?
>
> Tnx & 73,
> Barry N1EU
>
> to reply via email, please remove "NOSPAM" from my email address
> (bee gee at albany dot net)

144. Re: Adding shielding to wiring

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <37587BB1.4C0D@pop.valley.net>
Source record: 69679

BarryG wrote:
>
> Can anyone tell me if I can buy some kind of braid product that can be
> wrapped or zippered around existing unshielded wiring in place and grounded
> to provide shielding, without having to disconnect the unshielded wiring?
>

Hello--
SUch a product exists-- or existed; it's a metallic-foil lined
jacket that closes via a zipper. IIRC, Spectra Wire and Cable (which
makes SpectraStrip ribbon cable) may have offered this.

73,
Brad AA1IP

145. Re: rec.radio.amateur.homebrew IS NOT a sale group

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7ja0d4bjo1@autumn.news.rcn.net>
Source record: 69680
Cross-posted to: rec.radio.amateur.homebrew,news.groups

Hello Bob

One question.. Isn't anarchy when folks decide
to ignore existing rules and replace them with
their own? Like folks who don't follow charters...

Pete

ps: this debate is raging over on RAR+P. The
Anarchists are gaining.

Bob Headrick wrote in message <7j9vcacoi1@remarQ.com>...
>
>
>If you win, post away to your heart's content based on the new charter.
>Until then abide by the rules of usenet and the charter of this group. If
>you don't want to play by the rules create an alt.raadio.amateur.homebrew
>groups where you can do whatever you want. Usenet may appear to be
anarchy,
>but it is controlled anarchy.
>
>BTW, I find it highly amusing that people complain that there are too many
>sale posts in rec.radio.swap, so they post here instead. Just what do you
>think this group will look like in a year with the sale postings? If you
>want a hint just look at rec.radio.amateur.equipment.
>
> - Bob
>
>
>

146. 10 meter dipole with 102" whips?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-04 00:00:00 UTC
From: Randy and Cara Randall <crrandal@seidata.com>
Message-ID: <375888A7.D6EE89A7@seidata.com>
Source record: 69681
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hello. I am trying out an idea I had for a rotate able 10
meter dipole antenna.
I bought dipole antenna mount from Jetstream model JTDAK
and thought
I would use 2 102" 1/4 wave stainless steel CB whips I had
laying around instead
of using the 1/2 fiberglass, 1/2 steel whips that Jetstream
sold to go with the mount. (Save $34.00, I'm CHEAP!)
The whips droop 2' lower on the ends than the center. Will
this electrically work? Will the impedance be
so far out and the radiation pattern so fowled up as to make
it useless to even bother to put it up? It
looks somewhat like a inverted lazy U instead of a dipole!
Inverted V's are good, how about a lazy U ?!
I will be using a 1:1 balun to feed it. Your input greatly
appreciated.

Randy KB8ASO

--
This message comes to you from Milan, IN, USA. Home of no
traffic lights, lots of fields, clean air and NO antenna
restrictions!!!

147. Re: IC-2800H

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: gfiber@news.cmc.net
Message-ID: <375a8eff.3992208@news.cmc.net>
Source record: 69541
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,tw.bbs.rec.radio.amateur

On Thu, 3 Jun 1999 12:57:40 -0500, "Edward L. Dowdy"
<eldowdy@net66.com> wrotf:

>www.icomamerica.com
>
>
>Bo Chan wrote in message <37543bc0@carrera.intergate.ca>...
>>Anyone know the extra feature (not show in user manual, like U/U, V/V,
>>cross-band repeat, DTMF remote control, mods .....etc) for IC-2800H?
>>
>>
>>
>>Best Regards,
>>Bo

Yes the 2800H will do a cross band repeater operation, the same
remote control operation as the previous dual band radios but it does
not have V/V or U/U capability.
Gary Fiber

Washington State Resident

148. Re: rec.radio.amateur.homebrew IS NOT a complaint group

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: dana <dana@randomc.com>
Message-ID: <Pine.GSO.3.96.990604195553.1733F-100000@cluster2>
Source record: 69542

blind people that use pine would have a hard time for all that.

On Thu, 3 Jun 1999, Clifton T. Sharp Jr. wrote:

> Date: Thu, 03 Jun 1999 23:06:05 -0500
> From: "Clifton T. Sharp Jr." <clifto@megsinet.net>
> Newsgroups: rec.radio.amateur.homebrew
> Subject: Re: rec.radio.amateur.homebrew IS NOT a complaint group
>
> John Miles wrote:
> >
> > Bob Headrick wrote:
> > >
> > > It seems like the camels nose (or other end) is in the tent. This groups is
> > > not a sale group, although some have the opinion that they can post sale
> > > stuff anywhere they please, and others think that "precedent" means that
> > > once others post here that it is OK for all. Just a reminder - this is a
> > > group for discussion, not for selling. Rec.radio.swap is the group for
> > > selling radio related items.
> > >
> >
> > Sorry, Bob, that prohibition is way too general to be reasonable. If an
> > individual is looking to sell parts or test equipment whose attributes
> > and prices make them especially useful for homebrewing, I want to see a
> > notice here. I am not interested in digging through 2,000
> > "FS:YEASU(sic) FT-6000SUX ***RARE!!!***" posts on rec.radio.swap to see
> > if someone is offering a few diodes or a used scope probe I'd be
> > interested in.
>
> At the same time, I don't think many of us are interested in digging through
> 2,000 "FS:YEASU(sic) FT-6000SUX ***RARE!!!***" posts on this newsgroup to
> find a few discussions, either.
>
> > Likewise I'll continue to post notices here on the rare occasions I'm
> > looking to sell something that's likely to be useful to someone who
> > builds stuff. If you really can't deal with that, set your newsreader
> > filter accordingly.
> >
> > OTOH, maybe you're referring to the latest trend of people posting ads
> > for commercial factory-built ham gear and other off-topic items on the
> > group. If so, I agree 100%. Let's all gang up and flame 'em to a crisp
> > -- but preferably in email. Repeated abuses should be brought to the
> > attention of the user's ISP as well.
>
> The newsgroup can survive quite nicely with the regulars occasionally

> jumping in with extras or neat finds. But looking through here right now,
> I see three for-sale posts from K9SQG; I don't recall him ever participating
> in a discussion I've seen. If this is the homebrew newsgroup, then what
> does this little K9SQG item:
>
> > Do not need cabinet, just the insides from a large Johnson Matchbox.
>
> have to do with it? If he wants to buy one, rec.radio.swap is the appropriate
> place; if he wants to make one, this is, but he doesn't seem to want that.
>
> Or "QRO KING", who appears to have a little business going making leenyars
> and doesn't mind retailing parts on the side.
>
> *Most* of the crap that's here is of that kind. People you *never* see here
> *participating* in the newsgroup are using it as their own personal sales
> tool. That dog don't hunt.
>
> --
> +-+
> | Cliff Sharp | "Speech isn't free when it comes postage-due." |
> | WA9PDM | -- Jim Nitchals, founder, FREE |
> +-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+
>
>

149. Adding shielding to wiring

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: BarryG <bgNOSPAM@albany.net>
Message-ID: <7j9rm7$2n2$1@news.monmouth.com>
Source record: 69543

Can anyone tell me if I can buy some kind of braid product that can be
wrapped or zippered around existing unshielded wiring in place and grounded
to provide shielding, without having to disconnect the unshielded wiring?

Tnx & 73,
Barry N1EU

to reply via email, please remove "NOSPAM" from my email address
(bee gee at albany dot net)

150. Re: Adding shielding to wiring

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: "Jeanette D. Walton" <jdwalton@home.com>
Message-ID: <3758C356.D36E5EE6@home.com>
Source record: 69544

Yes

BarryG wrote:

> Can anyone tell me if I can buy some kind of braid product that can be
> wrapped or zippered around existing unshielded wiring in place and grounded
> to provide shielding, without having to disconnect the unshielded wiring?
>
> Tnx & 73,
> Barry N1EU
>
> to reply via email, please remove "NOSPAM" from my email address
> (bee gee at albany dot net)

151. Re: Hey Old Man! GET OFF THE AIR!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: Fred Hambrecht <fhambrecht@alltel.net>
Message-ID: <3758A4DC.BDA3CFA0@alltel.net>
Source record: 69545
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.swap,alt.fan.john.mackey

Old People SUCK wrote:
I would rather ride a skateboard!

Thank God! One less QRMer.....<Grin>

Be sure to wear your kneepads
73's
Fred W4JLE (Rapidly becoming an old fart)

152. Re: 10 meter dipole with 102" whips?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <3791c912.943772894@news.atl.bellsouth.net>
Source record: 69546
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Fri, 04 Jun 1999 21:17:11 -0500, Randy and Cara Randall <crrandal@seidata.com> wrote:
> It
>looks somewhat like a inverted lazy U instead of a dipole!
>Inverted V's are good, how about a lazy U ?!

I'll be fine.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

153. Re: Hey Old Man! GET OFF THE AIR!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: Mike not Mic <w5old@sonetcom.com>
Message-ID: <01beaf36$a3366b60$380231d1@default>
Source record: 69547
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.swap,alt.fan.john.mackey

Heck, what am I to do? My call is W5..OLD !
--
Howdy! I'm "Mike not Mic"!
You are in contact with Tornado Alley
I'm a Storm Spotter here in Lawton Oklahoma.
My call is W5OLD and all my radios smell like smoke!
Send all traffic to w5old@sonetcom.com

safety2000 <safety2000@earthlink.net> wrote in article
<7ja9ao$7ht$1@fir.prod.itd.earthlink.net>...
: Sorry your not interested, too bad you missed out. It takes both sides
of
: your brain to be a "good" ham..
: Some of us young guys can do both ... Skate Board and be "good" Hams
:
:
:
:

154. Re: Hey Old Man! GET OFF THE AIR!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: mike.luther@ziplog.com
Message-ID: <928578873.384.88@news.remarQ.com>
Source record: 69548
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.swap,alt.fan.john.mackey

In <3758AF67.AFE7286@mindspring.com>, Phil Wheeler <w7ox@mindspring.com> writes:
>
>
>BB WOLF wrote:
>>
>> GROW UP!! DUDE!!, Cause you're gonna be old some day too!!!
>>
>
>Not likely he will make it that long.
>
>Maybe we should tell him "Break a leg".
>
>Phil

Well, maybe not, considering where that expression comes from!

So said, in the world of theatre, when you tell some one "Break a leg",
you are wishing that their performance should go so well, they should
have to take a bow!

//----------------------------
Mike.Luther@ziplog.com
Mike.Luther@f3000.n117.z1.fidonet.org

155. Looking for microwave circuits books

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: Peter Bolch <nc-bolchpe@netcologne.de>
Message-ID: <7jauk7apv1@news.netcologne.de>
Source record: 69549

Hi

I'm looking for books about passive microwave circuits, especially filters.
The book should not be overly academic but show how such circuits are
calculated and constructed.

Any suggestions?

Peter

156. Re: Help w/ ID of General Communication Co. R.F. Coax Switch

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01beaf8a$addc5bc0$b4caac3e@default>
Source record: 69550
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Use a multi-range meter on the ohms range, plus pencil and
paper, a little imagination, and a 24 to 28 VDC supply
via a limiting resistor, to find out everything you need to
know including the circuit diagram.

Assume the RF power handling rating to be the same as that
of the coax connectors.
--
Reg, G4FGQ

157. Re: 10 meter dipole with 102" whips?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <37591825.6110BC35@IEEE.org>
Source record: 69551
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Randy and Cara Randall wrote:
>
> Hello. I am trying out an idea I had for a rotate able 10
> meter dipole antenna.
> I will be using a 1:1 balun to feed it. Your input greatly
> appreciated.

It will work just fine. Trim it to resonate on your favorite
10m frequency. 102" whips are resonant on 11m.
--
73, Cecil, W6RCA http://www.bigfoot.com/~w6rca

158. Re: 10 meter dipole with 102" whips?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <37591895.CA6C48F@IEEE.org>
Source record: 69552
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

```
Gary Coffman wrote:
>
> Randy and Cara Randall <crrandal@seidata.com> wrote:
> > It
> >looks somewhat like a inverted lazy U instead of a dipole!
> >Inverted V's are good, how about a lazy U ?!
>
> I'll be fine.

We know you are fine, Gary, but how about the antenna? :-)
--
73, Cecil, W6RCA http://www.bigfoot.com/~w6rca
```

159. For Sale: Yeasu FT-51R handheld 2 Meter/440 transceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: "Jeffery A. Purtle" <jpurtle@home.com>
Message-ID: <37591802.139F71B5@home.com>
Source record: 69553
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.packet

```
For Sale:
Yeasu FT-51R
5 watt dual band handheld transceiver
receives 110-180 Mhz and 420-470 Mhz
transmits 140-174 Mhz and 420-470 Mhz
original box, manual, antenna, additional antenna, adapter, etc.
works fine, in good condition
Asking $300

Call or email Jeff Purtle, AC6IW:
jpurtle@home.com
(864) 292-3532 in Greenville, South Carolina USA
```

160. Need info re type "N" adapter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: Argus <rlong3@ix.netcom.com>
Message-ID: <7jb5r1$cc4@sjx-ixn10.ix.netcom.com>
Source record: 69554

I recently purchased a wattmeter that uses a female "N" fitting at the input and a male "N" fitting at the output. Can anyone direct me to a source of adapters to convert both fitting to "UHF female?

Thanks,

Roy

161. For Sale: Kantronics KamPlus Packet Modem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: "Jeffery A. Purtle" <jpurtle@home.com>
Message-ID: <37591F37.9AB88E3A@home.com>
Source record: 69555
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.packet

```
For Sale:
Kantronics KamPlus Packet Modem
Original Box and Manuals
Cables set-up for a Yeasu handlheld and a Yeasu FT-900 (hf transceiver)

Works great
Asking $300

Call or email Jeff Purtle, AC6IW:
jpurtle@home.com
(864) 292-3532 in Greenville, South Carolina USA
```

162. Re: rec.radio.amateur.homebrew IS NOT a complaint group

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: Bill <wrc@tir.com>
Message-ID: <37591BF0.FC60F5AC@tir.com>
Source record: 69556

Right here in the middle of the nastiest part of this mess is a good place to insert this:

Some people do not seem able to grasp the simple orginzational concept of a filing cabinet.

We file our documents in a filing cabinet in a standard, agreed order. A document labeled "flower discussion" goes in a different folder than a document labeled "bread recipe". By following the simple, standard we can always retrieve the disired documents.

When some people start tossing documents into the wrong place chaos follows. We can't find a misplaced document when we want it. We also have to sort past it when looking for other, appropriately stored documents.

We could just make copies of a document and put a copy in every folder. That way everybody would be able to find it, even when they are looking for other, more appropriately filed documents.

Soon the file cabinet is overloaded. We can't find the documents we want when we want them. We can't find any of those copies, either... the filing system is completely broken down.

I hope the above analogy can be understood. Perhaps some folks will reconsider their spamming strategies. I do have an interest in appliances and an interest in homebrewing. I come here to compare notes from other homebrewers and occasionally offer help. I look at the swap group, too. There are many posts there I am not interested in, but I just skip to the interesting headers.

I even look in on ebay and the boneyard from time to time. I don't even need a link. I found those and can find any others with the handy-dandy search engines.

Please post appropriately and make the newsgroups easy to use.. like the filing cabinet.

Bill KU8H

163. Re: rec.radio.amateur.homebrew IS NOT a complaint group

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: Bill <wrc@tir.com>
Message-ID: <37591BB7.E7C1089A@tir.com>
Source record: 69557

Right here in the middle of the nastiest part of this mess is a good place to insert this:

Some people do not seem able to grasp the simple orginzational concept of a filing cabinet.

We file our documents in a filing cabinet in a standard, agreed order. A document labeled "flower discussion" goes in a different folder than a document labeled "bread recipe". By following the simple, standard we can always retrieve the disired documents.

When some people start tossing documents into the wrong place chaos follows. We can't find a misplaced document when we want it. We also have to sort past it when looking for other, appropriately stored documents.

We could just make copies of a document and put a copy in every folder. That way everybody would be able to find it, even when they are looking for other, more appropriately filed documents.

Soon the file cabinet is overloaded. We can't find the documents we want when we want them. We can't find any of those copies, either... the filing system is completely broken down.

I hope the above analogy can be understood. Perhaps some folks will reconsider their spamming strategies. I do have an interest in appliances and an interest in homebrewing. I come here to compare notes from other homebrewers and occasionally offer help. I look at the swap group, too. There are many posts there I am not interested in, but I just skip to the interesting headers.

I even look in on ebay and the boneyard from time to time. I don't even need a link. I found those and can find any others with the handy-dandy search engines.

Please post appropriately and make the newsgroups easy to use.. like the filing cabinet.

Bill KU8H

164. Re: rec.radio.amateur.homebrew IS NOT a complaint group

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: Bill <wrc@tir.com>
Message-ID: <37591C06.B9CFFBD6@tir.com>
Source record: 69558

Right here in the middle of the nastiest part of this mess is a good place to insert this:

Some people do not seem able to grasp the simple orginzational concept of a filing cabinet.

We file our documents in a filing cabinet in a standard, agreed order. A document labeled "flower discussion" goes in a different folder than a document labeled "bread recipe". By following the simple, standard we can always retrieve the disired documents.

When some people start tossing documents into the wrong place chaos follows. We can't find a misplaced document when we want it. We also have to sort past it when looking for other, appropriately stored documents.

We could just make copies of a document and put a copy in every folder. That way everybody would be able to find it, even when they are looking for other, more appropriately filed documents.

Soon the file cabinet is overloaded. We can't find the documents we want when we want them. We can't find any of those copies, either... the filing system is completely broken down.

I hope the above analogy can be understood. Perhaps some folks will reconsider their spamming strategies. I do have an interest in appliances and an interest in homebrewing. I come here to compare notes from other homebrewers and occasionally offer help. I look at the swap group, too. There are many posts there I am not interested in, but I just skip to the interesting headers.

I even look in on ebay and the boneyard from time to time. I don't even need a link. I found those and can find any others with the handy-dandy search engines.

Please post appropriately and make the newsgroups easy to use.. like the filing cabinet.

Bill KU8H

165. Re: Hey Old Man! GET OFF THE AIR!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: rong@computer.net
Message-ID: <37592d0c.722108@news.computer.net>
Source record: 69559
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.swap,alt.fan.john.mackey

Old People SUCK <"Old Fart"@geezer.com> wrote:

>I used to be interested in amateur radio,
>
>until I relized that ham radio is just for Old men.
>
>I would rather ride a skateboard!

GOOD---One less 10-4 good buddy , my first personal is ...., & my
20 is .... We don't need ANY MORE of them !!!!!!
****
RON GOLDSTEIN--KA2IIA
PUTNAM VALLEY, N.Y.
******
STAY YOUNG---DRIVE A VINTAGE 427 CORVETTE
KEEP YOUR MIND ACTIVE--BECOME AN AMATEUR RADIO OPERATOR
rong@computer.net

166. FT990 DC power cable

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: Francis Mauser <fmauser@wirefire.com>
Message-ID: <fla63.6339$OL.283792@newscene.newscene.com>
Source record: 69560

Am interested in making a DC power cord for a Yaesu FT990AC, cannot seem to find the proper plug for it. Can anyone suggest a source for this plug or any suggestions?

Thank You
Francis

167. Re: Adding shielding to wiring

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: cal25skipper <Skipper3@swbell.net>
Message-ID: <DLb63.195$1Z6.63860@typhoon01.swbell.net>
Source record: 69561

remember, DO NOT ground both ends, or it will not do a thing for you.

Brent
N5CLK

168. Re: Hey Old Man! GET OFF THE AIR!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: Butch Magee <butchkay@netdoor.com>
Message-ID: <37594F75.A36D9DD1@netdoor.com>
Source record: 69562
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.swap,alt.fan.john.mackey

Uhmmmm.... couldn' even pass the no-code. What a bitch, man..

Old People SUCK wrote:

> I used to be interested in amateur radio,
>
> until I relized that ham radio is just for Old men.
>
> I would rather ride a skateboard!

169. Maryland Hamfest - 20 June 99

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: windbrkr@erols.com
Message-ID: <3759508C.10BA5F97@erols.com>
Source record: 69563

Interested in Amateur Radio, Electronics, Computers, etc.?

Come out to the 1999 FATHERS DAY HAMFEST
Sunday, June 20th 1999

In Historic Frederick, Maryland
At the Frederick County Fairgrounds, 797 East Patrick St.

- Easy access from I-70, I-270, US-40, US-15 etc.
- Plenty of Parking

- ARRL VE Testing (courtesy of MADRA VE Team)
- Testing starts promptly at 09:00

- Large Outdoor Flea Market / Tailgating Area
- Indoor Ham Radio, Electronics, Computer Commercial Vendors
- New and used Ham Radio equipment and accessories

- Good Food and Refreshments (no outside food vendors, please)

- Rain or shine, 08:00 to 15:00 EDT

- Admission: $5.00 per person donation
- Tailgating spaces: $5.00 each + one admission
- Indoor vendor tables: $15.00 each

Talk-in: Call K3ERM on 147.060 (+) K3MAD repeater
146.640 (-) K3ERM repeater
146.520 (x) Simplex

Email to me or to n3vok@erols.com with questions, vendor reservations,
etc. Include fax number for map and/or flyer.

73 and see you there,
Bob K9CMR

170. thanks

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: Nicholas M Cooling <ncooling@velocity.net>
Message-ID: <3759573c@news.velocity.net>
Source record: 69564

Thanks for the help!

Nick N3TOZ

171. Racal 9918 / 9921 frequency counter schematic wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: John Mortlock <jmort@global.freeserve.co.uk>
Message-ID: <7jblkh$f24$2@news6.svr.pol.co.uk>
Source record: 69565

If anyone has a Racal 9918 or 9921 frequency counter
schematic they could copy for me I'd appreciate it.
Will gladly pay photo copy and postage cost.

John

172. Re: Hey Old Man! GET OFF THE AIR!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: 1AngryMan@antisocial.com
Message-ID: <7jblfiikm2@dagobah.blueriver.net>
Source record: 69566
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.swap,alt.fan.john.mackey

ï¿½
>
>I used to be interested in amateur radio,
>
>until I relized that ham radio is just for Old men.
>
>I would rather ride a skateboard!

You should use a helmet when you skateboard, that way you won't get the kind of
brain damage your displaying here when you wreck!

Signed one of those ol' fart hams

--
==========
"I would never belong to any group,
that would have me as a member!"
Grocho Marx
==========
Opinions are like armpits, everybody has
at least two, and they usually stink !!!
==========
Send Email to 1AngryMan@antisocial.com

173. Re: 10 meter dipole with 102" whips?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: rjac302069@aol.com
Message-ID: <19990605134644.25733.00000987@ng-fh1.aol.com>
Source record: 69567

It may be resonant already--11 meters uses a 108" whip-the 102" is used when using the 6" long spring at the base. Without the spring, you would use 108" for 11 m. The 102" may be resonant for 10 m, check w/ meter b-4 powering it up--bet it will work fine. -=#Rick#=-.

174. Re: rec.radio.amateur.homebrew IS NOT a complaint group

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: qroking@aol.com
Message-ID: <19990605143241.28515.00000887@ng-ff1.aol.com>
Source record: 69568

Clifton, "QRO KING" is not the name of any "business" of mine. "QRO KING" is my e-mail address for my AOL internet account. I am sure you are aware that many people use such "terminology" for their account ID. The name "QRO KING" was given to me by a friend and it kinda "stuck" like an old high school nickname. So when I was confronted with taking on an ID for my AOL account it seemed fitting to use my "nickname". But I can assure you that I have no such businessas you claim, and futhermore could not understand how you could come to that assumption in the first place???
As far as participating in discussions....I am glad you asked that question!! On MANY MANY occasions I have offered advice on questions posted here by others in regards to rig problems or something, but I prefer to send my responses via "private" e-mail to those people, so you rarely see any of my "helpfulness" in that regard for that reason. Is there anyone out there that can vouch for the fact that I have responded privately to any problems that I have offered assistance on? If so please post here. So anyway,some good did come from this whole dialouge, I learned a new word..".LEENYARS"....It was all worth it!!! 73 Lou

175. ham radio article website

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: DrBingo@compuserve.COM
Message-ID: <199906051533_MC2-7847-6CA6@compuserve.com>
Source record: 69569

I am currently adding my published amateur radio articles to a web site
called

http://website.mciworld.com/~drbingo@mciworld.com

I presently have three articles uploaded, and expect to have about 20 when
I'm done.

Grant Bingeman
KM5KG

176. Re: rec.radio.amateur.homebrew IS NOT a sale group

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: Bob Headrick <bobh@proaxis.com>
Message-ID: <928612748.049.35@news.remarQ.com>
Source record: 69570
Cross-posted to: rec.radio.amateur.homebrew,news.groups

>
> So, Bob, built anything lately?
>
> -- jm KE5FX

I'm in the middle of converting a Mitrek into 2M repeater use, and playing
with Atmel 89c2051 for the controller.

Most of my on the air stuff these days is on a Cascade QRP rig.

- Bob W7OV

177. Eimac 8432

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: Gene Marcus <mmarcus@hiwaay.net>
Message-ID: <375998C1.5B311801@hiwaay.net>
Source record: 69571

Does anyone have the specs for an Eimac 8432. I have done a web search, but came up empty handed.

Thanks,

Gene W3PM

178. Re: Who's the Hammond Dealer?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: Larry Asp <larry.asp@sympatico.ca>
Message-ID: <37598F9D.3EC5@sympatico.ca>
Source record: 69572

Spencer Petri wrote:
>
> Greetings,
>
> Lost my HD. Looking for the address of the person who sells Hammond
> products. I believe he is in one of the Carolinas and the company is STI or
> STF Electronics. Anybody got a clue.
>
> Thanks,
>
> Pete de WA5JCI

Hammond Manufacturings head office is in Guelp Ontario Canada (area
code 519), and they also have a website. They sell some product through
Antique Radio in Tempe.

179. Re: Hey Old Man! GET OFF THE AIR!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: Phil Wheeler <w7ox@mindspring.com>
Message-ID: <37599993.7CB03719@mindspring.com>
Source record: 69573
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.swap,alt.fan.john.mackey

Well, I hope he does improve his level of "performance".

Phil

mike.luther@ziplog.com wrote:
>
> In <3758AF67.AFE7286@mindspring.com>, Phil Wheeler <w7ox@mindspring.com> writes:
> >
> >
> >BB WOLF wrote:
> >>
> >> GROW UP!! DUDE!!, Cause you're gonna be old some day too!!!
> >>
> >
> >Not likely he will make it that long.
> >
> >Maybe we should tell him "Break a leg".
> >
> >Phil
>
> Well, maybe not, considering where that expression comes from!
>
> So said, in the world of theatre, when you tell some one "Break a leg",
> you are wishing that their performance should go so well, they should
> have to take a bow!
>
> //-----------------------------
> Mike.Luther@ziplog.com
> Mike.Luther@f3000.n117.z1.fidonet.org

180. Re: Hey Old Man! GET OFF THE AIR!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: cgmt@hotmail.com
Message-ID: <MPG.11c34665a2375092989881@news.earthlink.net>
Source record: 69574
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.swap,alt.fan.john.mackey

We are contacting his originating ISP for spamming usenet...he's
obviously not very bright.

In article <37587D05.48298F98@geezer.com>, Old People SUCK <"Old
Fart"@geezer.com> says...
> I used to be interested in amateur radio,
>
> until I relized that ham radio is just for Old men.
>
> I would rather ride a skateboard!
>

181. Re: 75 ohm attenuator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01beaff2$d46e56e0$LocalHost@default>
Source record: 69575

When using a 75-ohm attenuator in a 50-ohm transmission
system

OR

When using a 50-ohm attenuator in a 75-ohm transmission
system

as a correction SUBTRACT the following decibels from the
attenuator settings.

Setting dB Correction dB
0 0.00
1 0.02
2 0.05
3 0.09
4 0.13
6 0.20
8 0.25
10 0.29
12 0.31
14 0.33
16 0.34
20 0.35
30 0.35
60 0.35458

The above corrects for the reflection (mismatch) loss at
each end of the attenuator. For many attenuation
measurements the correction is small enough to be ignored.
Above 16 dB, when measurement results depend on the
difference between a pair of attenuator settings, the
attenuator in effect incorporates its own masking pads and
corrections can certainly be ignored.

****
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp

****

David Shalita <af389@lafn.ORG> wrote in article
<3756A5A7.D3967AB2@lafn.org>...
> I have a Heathkit 75 ohm switchable attenuator, up to
80db.
> I want to use it in my 50 ohm applications until
> I can buy a good 50 ohm unit.

>
> I lost a reference to method where pads
> can be placed at input and output of 75 ohm unit, to
> allow use as a 50ohm unit. Using the pads allowed a rough
esitmate of
> the 50 ohm atteunation versus switch settings.
>
> I believe the pads where 75 to 50 ohms pads.
>
> Appreciate any hints with the math and needed pads.
> 73, W6MIK
> --
> David Shalita (Dave)
> af389@lafn.org
> Van Nuys, CA
>

182. Re: rec.radio.amateur.homebrew IS NOT a sale group

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <3759C1DB.763D@pop.removethistomailme.net>
Source record: 69576
Cross-posted to: rec.radio.amateur.homebrew,news.groups

Bob Headrick wrote:
>
> >
> > So, Bob, built anything lately?
> >
> > -- jm KE5FX
>
> I'm in the middle of converting a Mitrek into 2M repeater use, and playing
> with Atmel 89c2051 for the controller.
>
> Most of my on the air stuff these days is on a Cascade QRP rig.
>
> - Bob W7OV

FB on the Atmel. Personally I haven't moved past the BASIC Stamp stage
with respect to microcontrollers, but will probably have to before long
-- gotta build a display/control head for my mobile MP3 player. :) I
understand the 89c parts are the way to go for that sort of thing.

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam
---

183. Re: YIG Comb generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <3759C269.6784@pop.removethistomailme.net>
Source record: 69577

clyde edgar wrote:
>
> I picked up a yig comb generator at the swap meet, I have an FSCM id and
> part #, the part was made by EIP. It has a sma input and smb output and
> a 5 pin d-connector. Can anybody provide me with any info on how to bias
> it ? Or any info on YIG comb generators in general ?

I've never heard of a YIG comb generator -- is it a YIG oscillator
phase-locked to a conventional SRD comb generator? If so it's probably
an LO module from some kind of spectrum or network analyzer or other
type of receiver. Otherwise, beats the heck outta me.

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam
---

184. Re: Need info re type "N" adapter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: Jack Taylor <n7oo@theriver.com>
Message-ID: <bwk63.7844$NE4.335852@news1.giganews.com>
Source record: 69578

Check your local Radio Shack store.

73 de Jack

Argus wrote in message <7jb5r1$cc4@sjx-ixn10.ix.netcom.com>...
>I recently purchased a wattmeter that uses a female "N" fitting at the
input
>and a male "N" fitting at the output. Can anyone direct me to a source of
>adapters to convert both fitting to "UHF female?
>
>Thanks,
>
>Roy
>
>

185. K3IX Estate Sale: We cut ALL of the prices AGAIN!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: Joe Mehaffey <joe@mehaffey.com>
Message-ID: <3759D4AC.1DF22D18@mehaffey.com>
Source record: 69579
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.marketplace,rec.radio.amateur.homebrew

We have <AGAIN> lowered the prices of all of Clay Whiffen's
remaining equipment including tranceivers and test
equipment.

The IC735 HF tranceiver is now $425. (Picture available)
The TriFuel electric start 8KW generator is now $1650.
Check out all of the TEST EQUIPMENT.
Everything else has lower prices too.
Please take a look at: http://celia.mehaffey.com/k3ix.htm

We have now sold about 2/3 of the items originally listed
and we SINCERELY appreciate the reception our efforts to
dispose of Clay Whiffen's ham radio equipment have received!

Thanks
Joe Mehaffey
W2JO
--
--
Got a Question about GPS technology? Looking for a GPS FAQ
site?
See: http://joe.mehaffey.com

186. Need info on "Little Wonder Antanna"

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: jojo.wag@mailexcite.com
Message-ID: <Rjk63.19347$me.8412846@WReNphoon4>
Source record: 69580

Limited space antanna that supposedly appeared in 73 Magazine in 1969.
Verticle made from 3/4" copper pipe with a coil in the center made from 197
turns of #12 wire. Need article. Will pay postage and duplication costs.

Joe Weidner

KA8CEQ

-**** Posted from RemarQ, http://www.remarq.com/?a ****-
Search and Read Usenet Discussions in your Browser - FREE -

187. Re: Adding shielding to wiring

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: Rob Dunn <dunnr@ix.netcom.com>
Message-ID: <7jcmbj$1p@dfw-ixnews5.ix.netcom.com>
Source record: 69581

Hi All,

Correct me if I am wrong, having done EMI/EMC work for a while but the not grounding both ends advice given below only applies to low frequency noise shielding problems. For high frequency noise a continous bond to ground is desirable and compromises are often attempted using bypass capacitors. Right?

Rob

cal25skipper <Skipper3@swbell.net> wrote in message news:DLb63.195$1Z6.63860@typhoon01.swbell.net...
> remember, DO NOT ground both ends, or it will not do a thing for you.
>
> Brent
> N5CLK
>
>
>

188. Re: Adding shielding to wiring

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: Rob Dunn <dunnr@ix.netcom.com>
Message-ID: <7jcr0n$35t@dfw-ixnews5.ix.netcom.com>
Source record: 69582

All,

Second try at writing coherent english. What the Captain MEANT to say was:

Hi All,

Correct me if I am wrong, I haven't done EMI/EMC work for a while. I think
that the advice below to not ground both ends of the shielding applies only
to low frequency noise shielding problems where the objective is to float
the shield and thus not allow noise currents to flow. For high frequency
noise a continuous bond to ground is desirable and where low and high
frequency noise together are a problem then compromises are often attempted
using bypass capacitors from the shield to ground.

Right?

Rob

Rob Dunn <dunnr@ix.netcom.com> wrote in message
news:7jcmbj$1p@dfw-ixnews5.ix.netcom.com...
> Hi All,
>
> Correct me if I am wrong, having done EMI/EMC work for a while but the not
> grounding both ends advice given below only applies to low frequency noise
> shielding problems. For high frequency noise a continous bond to ground
is
> desirable and compromises are often attempted using bypass capacitors.
> Right?
>
> Rob
>
> cal25skipper <Skipper3@swbell.net> wrote in message
> news:DLb63.195$1Z6.63860@typhoon01.swbell.net...
> > remember, DO NOT ground both ends, or it will not do a thing for you.
> >
> > Brent
> > N5CLK
> >
> >
> >
>
>

189. Re: 10 meter dipole with 102" whips?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: AB7RS <tglenn@imt.net>
Message-ID: <3759F98F.D45@imt.net>
Source record: 69583
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Randy and Cara Randall wrote:
>
> Hello. I am trying out an idea I had for a rotate able 10
> meter dipole antenna.
> I bought dipole antenna mount from Jetstream model JTDAK
> and thought
> I would use 2 102" 1/4 wave stainless steel CB whips I had
> laying around instead
> of using the 1/2 fiberglass, 1/2 steel whips that Jetstream
> sold to go with the mount. (Save $34.00, I'm CHEAP!)
> The whips droop 2' lower on the ends than the center. Will
> this electrically work? Will the impedance be
> so far out and the radiation pattern so fowled up as to make
> it useless to even bother to put it up? It
> looks somewhat like a inverted lazy U instead of a dipole!
> Inverted V's are good, how about a lazy U ?!
> I will be using a 1:1 balun to feed it. Your input greatly
> appreciated.
>
> Randy KB8ASO
>This will work just fine,almost all horizontal and inverted V dipoles have droop,why tighten them up with a come-along? Electrically it will be just fine,congrats on having the insight to use a balun,your neighbors will thank you.

190. Re: rec.radio.amateur.homebrew IS NOT a complaint group

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <3759FC1A.2194EF46@corecomm.net>
Source record: 69584

QRO KING wrote:
> Clifton, "QRO KING" is not the name of any "business" of mine. "QRO KING" is
> my e-mail address for my AOL internet account. I am sure you are aware that
> many people use such "terminology" for their account ID. The name "QRO KING"
> was given to me by a friend and it kinda "stuck" like an old high school
> nickname. So when I was confronted with taking on an ID for my AOL account it
> seemed fitting to use my "nickname". But I can assure you that I have no such
> businessas you claim, and futhermore could not understand how you could come to
> that assumption in the first place???

Basically, because (1) all I ever see here from you is advertisement, and
(2) it sounds like a business name.

> As far as participating in discussions....I am glad you asked that question!!
> On MANY MANY occasions I have offered advice on questions posted here by others
> in regards to rig problems or something, but I prefer to send my responses via
> "private" e-mail to those people, so you rarely see any of my "helpfulness" in
> that regard for that reason. Is there anyone out there that can vouch for the
> fact that I have responded privately to any problems that I have offered
> assistance on? If so please post here. So anyway,some good did come from this
> whole dialouge, I learned a new word..".LEENYARS"....It was all worth it!!! 73
> Lou

I'll take your word for it; I see no reason not to do so.

These are Usenet *discussion* newsgroups, Lou. Do you realize that others
who might have benefited from your answers didn't get the chance, because
you didn't post them here? Please consider joining the discussions. If
nothing else, you'll see fewer crazy antispammers complaining about you.:-)

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

191. Re: rec.radio.amateur.homebrew IS NOT a sale group

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-05 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <3759FC7B.7E8AF680@corecomm.net>
Source record: 69585
Cross-posted to: rec.radio.amateur.homebrew,news.groups

```
CommQuart wrote:
> One question.. Isn't anarchy when folks decide
> to ignore existing rules and replace them with
> their own? Like folks who don't follow charters..

Popular misconception. Find one of the anarchy FAQs around the web.

--
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
```

192. FS Coil Forms

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-06 00:00:00 UTC
From: Larry Asp <larry.asp@sympatico.ca>
Message-ID: <3759CDC0.7A71@sympatico.ca>
Source record: 69586

I have a number of coil forms - ideal for old fashion home brewing. Used
but in good shape:

5 pin Hammarlund 1 1/2" x 2 1/2" brown bakelite (4 of them)
4 pin Hammarlund 1 1/2" x 2 1/2" brown bakelite (2 0f them)
5 pin Bud 1 1/2" x 2 1/2" black plastic (1 only)
4 pin Bud 1 1/2" x 2 1/2" black plastic (1 only)
6 pin Inusline Hi Q black plastic 1 1/2" x 2 1/2" (1 only)
4 pin stubbies 1 1/2" diam.

$4.00 each plus postage.

193. Free to Good Home - Test Eqpt, Broadcast, & Stereo manuals

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-06 00:00:00 UTC
From: davencinNO@SPAMtdl.com
Message-ID: <3759ceb3.40816195@news.tdl.com>
Source record: 69587
Cross-posted to:
sci.electronics.repair,rec.radio.swap,rec.radio.amateur.misc,rec.radio.amateur.homebrew,alt.ham-radio.marketplace

I have the following manuals.
Found in garage clean-up, not needed by me.
They're yours for mailing costs, or pick up in
the S.F. Bay Area. Please respond via e-mail or
contact me at 510-790-1034. Remove the
spaces & CAPS for proper e-mail address.

d a v e n c i n DONT@SPAM ME t d l.c o m

Manuals are as follows:

PYE TVT (Phillips) Sound-in-Sync TV transmission
device, model LDM-1801. 1972 vintage.

Amber 3500 Distortion & Noise measuring set
1981 vintage

Harris Corp. MS-15R Stereo generator
1977 vintage

Hewlett Packard 141A Oscilloscope
Serials prefixed 547... 1965 vintage

Hewlett Packard 1424A Sampling Time Base
Serials prefixed 740... 1967 vintage

Hewlett Packard 8551B Spectrum Analyzer RF section
Serials prefixed 905... 1969 vintage

Hewlett Packard 8551B Spectrum Analyzer RF section
Serials prefixed 613... 1966 vintage

Hewlett Packare 851B Spectrum Analyzer Display Section
Serials prefixed 526... 1965 vintage

Heathkit TD-1006 Color Organ

Heathkit TS-1630 Speaker column

Heathkit TA-1620 Sound Control Projection Amplifier

And some vintage stereo stuff:
Dual 1219 turntable
Harmon Kardon CAD4 Cassette deck
Teac A-7010 Stereo tape deck.

Let me know if you can use any of these.

Dave B.

194. Re: rec.radio.amateur.homebrew IS NOT a sale group

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-06 00:00:00 UTC
From: Tim Martin <Tim.Martin@tesco.net>
Message-ID: <3759c468.0@shiva.ukisp.net>
Source record: 69588
Cross-posted to: rec.radio.amateur.homebrew,news.groups

CommQuart <commquart@erols.com> wrote in message
news:7ja0d4bjo1@autumn.news.rcn.net...
> Hello Bob
>
> One question.. Isn't anarchy when folks decide
> to ignore existing rules and replace them with
> their own?

No. Anarchy is the absence of any rules expect those that a person imposes
on themself.

Tim

195. Looking for dielectric filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-06 00:00:00 UTC
From: Peter Bolch <nc-bolchpe@netcologne.de>
Message-ID: <7jdeil$9oi$3@news.netcologne.de>
Source record: 69589

Hi

I'm looking for vendors selling dielectric filters (e.g. Siemens or TOKO types) and dielectric resonators in small quantities to overseas customers.

Peter

196. Re: 10 meter dipole with 102" whips?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-06 00:00:00 UTC
From: Brad Granger <bgranger@one.net.au>
Message-ID: <375a6f29.0@pink.one.net.au>
Source record: 69590
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

W6RCecilA wrote in message <37591825.6110BC35@IEEE.org>...
>Randy and Cara Randall wrote:
>>
>> Hello. I am trying out an idea I had for a rotate able 10
>> meter dipole antenna.
>> I will be using a 1:1 balun to feed it. Your input greatly
>> appreciated.

It will still be basically horizontally polarised as the main radiation is
from the centre of the dipole, the ends don't radiate much.
The same thing was done here about 20 years ago with 5ft helically wound
fibreglass whip antennas. With some fiddling and 6 whips, a shortened 3el
10m beam was made and it worked very nicely indeed.
Brad VK2QQ

197. Re: Need info re type "N" adapter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-06 00:00:00 UTC
From: Harry <WA4OFS@iag.net>
Message-ID: <375A893A.640B3A56@iag.net>
Source record: 69591

TRY RF CONNECTORS IN MARYLAND

Argus wrote:

> I recently purchased a wattmeter that uses a female "N" fitting at the input
> and a male "N" fitting at the output. Can anyone direct me to a source of
> adapters to convert both fitting to "UHF female?
>
> Thanks,
>
> Roy

198. Re: YIG Comb generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-06 00:00:00 UTC
From: clyde edgar <cedgar@pacificnet.net>
Message-ID: <375A8E85.B4C481F@pacificnet.net>
Source record: 69592

John, I don't know how it is configured, the metal foil wrapper was stamped with the FSCM number, part number and Title YIG Comb generator, I was told it was for use in a microwave heterodyne counter.

John Miles wrote:

> clyde edgar wrote:
> >
> > I picked up a yig comb generator at the swap meet, I have an FSCM id and
> > part #, the part was made by EIP. It has a sma input and smb output and
> > a 5 pin d-connector. Can anybody provide me with any info on how to bias
> > it ? Or any info on YIG comb generators in general ?
>
> I've never heard of a YIG comb generator -- is it a YIG oscillator
> phase-locked to a conventional SRD comb generator? If so it's probably
> an LO module from some kind of spectrum or network analyzer or other
> type of receiver. Otherwise, beats the heck outta me.
>
> -- jm KE5FX
>
> ----------
> Note: My E-mail address has been altered to avoid spam
> ----------

199. REC.RADIO.AMATEUR.HOMEBREW is not sa sale group

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-06 00:00:00 UTC
From: Bob Headrick <bobh@proaxis.com>
Message-ID: <928688954.402.51@news.remarQ.com>
Source record: 69593

Larry Asp <larry.asp@sympatico.ca> wrote in message
news:3759CDC0.7A71@sympatico.ca...
> I have a number of coil forms - ideal for old fashion home brewing. Used
> but in good shape:
> $4.00 each plus postage.

Larry -

After a few dozen email exchanges (some funny, some polite, some rude) I
know you know that the charter of rec.radio.amateur.homebrew forbids sale
items here. What I still do not know is why you think the rules of Usenet
and the charter of rec.radio.amateur.homebrew do not apply to you?

- Bob

200. Re: REC.RADIO.AMATEUR.HOMEBREW is not sa sale group

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-06 00:00:00 UTC
From: JerryL <jlockett@lightspeed.net>
Message-ID: <u2y63.4226$D_5.92705@news2.giganews.com>
Source record: 69594

Ah yes! Another Newsgroup Cop crusing the web to see who else he can ticket!

Attention, Newsgroup Cops, you really could just ignore the posting and/or use
your delete key if it really bothers you!

jlockett@lightspeed.net
661-589-4120
>
> Larry -
>
> After a few dozen email exchanges (some funny, some polite, some rude) I
> know you know that the charter of rec.radio.amateur.homebrew forbids sale
> items here. What I still do not know is why you think the rules of Usenet
> and the charter of rec.radio.amateur.homebrew do not apply to you?
>
> - Bob
>
>
>

201. Homebrew power supply pass transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-06 00:00:00 UTC
From: denton sprague <denton@oregontrail.net>
Message-ID: <375AB04F.B06FEDD@oregontrail.net>
Source record: 69595

Hi all, I have a homebrew power supply that I have developed for my stations power supply. I am currently using 2n3055's (6 of them) for pass transistors, but they tend to have a short longivity peroid. I can order a match set from the local electronics emporium, but am wondering if I should invest in something a little more stouter.
Any recommendations? I am using .01 ohm emitter resistors to balance the load.

202. amature robotics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-06 00:00:00 UTC
From: awilson@pacifier.com
Message-ID: <375ab5d4.14773039@news.pacifier.com>
Source record: 69596

I have added some new pictures
http://www.pacifier.com/~awilson/

203. Re: Free to Good Home...Here's what's left

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-06 00:00:00 UTC
From: davencinNO@SPAMtdl.com
Message-ID: <375aa6a0.2053151@news.tdl.com>
Source record: 69597
Cross-posted to:
sci.electronics.repair,rec.radio.swap,rec.radio.amateur.misc,rec.radio.amateur.homebrew,alt.ham-radio.marketplace

On Sun, 06 Jun 1999 01:42:12 GMT, davencinNO@SPAMtdl.com (Dave
Barnett) wrote:

The Spectrum Analyzer & Heathkit manuals are spoken for. These are
MANUALS ONLY - not the equipment. Here's the current list:

>I have the following manuals.
>Found in garage clean-up, not needed by me.
>They're yours for mailing costs, or pick up in
>the S.F. Bay Area. Please respond via e-mail or
>contact me at 510-790-1034. Remove the
>spaces & CAPS for proper e-mail address.
>
>d a v e n c i n DONT@SPAM ME t d l.c o m
>
>Manuals are as follows:
>
>PYE TVT (Phillips) Sound-in-Sync TV transmission
>device, model LDM-1801. 1972 vintage.
>
>Amber 3500 Distortion & Noise measuring set
>1981 vintage
>
>Harris Corp. MS-15R Stereo generator
>1977 vintage
>
>Hewlett Packard 141A Oscilloscope
>Serials prefixed 547... 1965 vintage
>
>Hewlett Packard 1424A Sampling Time Base
>Serials prefixed 740... 1967 vintage
>
>And some vintage stereo stuff:
>Dual 1219 turntable
>Harmon Kardon CAD4 Cassette deck
>Teac A-7010 Stereo tape deck.
>
>Let me know if you can use any of these.
>
>Dave B.
>

204. Re: Adding shielding to wiring

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-06 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <375AC385.B5A8E0D7@teleport.com>
Source record: 69598

At frequencies above the point where the shield is at least several
skin depths thick (this means at least MF and above for most shields),
you definitely want to ground both ends of the shield. Using a pigtail
or other inductive connection can seriously degrade the effectiveness
of the shield; the most effective way to connect it is by making
contact directly to ground all the way around the shield. Using a
shield and then grounding it improperly is probably a waste of time.

I've never dealt with audio-frequency electrostatic shielding, which
is where I believe single-connection grounding is effective.

Roy Lewallen, W7EL

Rob Dunn wrote:
>
> Correct me if I am wrong, I haven't done EMI/EMC work for a while. I think
> that the advice below to not ground both ends of the shielding applies only
> to low frequency noise shielding problems where the objective is to float
> the shield and thus not allow noise currents to flow. For high frequency
> noise a continuous bond to ground is desirable and where low and high
> frequency noise together are a problem then compromises are often attempted
> using bypass capacitors from the shield to ground.
>
> Right?
>
> Rob

205. Re: REC.RADIO.AMATEUR.HOMEBREW is not sa sale group

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-06 00:00:00 UTC
From: Larry Asp <larry.asp@sympatico.ca>
Message-ID: <375AC3E0.155C@sympatico.ca>
Source record: 69599

Bob Headrick wrote:
>
> Larry Asp <larry.asp@sympatico.ca> wrote in message
> news:3759CDC0.7A71@sympatico.ca...
> > I have a number of coil forms - ideal for old fashion home brewing. Used
> > but in good shape:
> > $4.00 each plus postage.
>
> Larry -
>
> After a few dozen email exchanges (some funny, some polite, some rude) I
> know you know that the charter of rec.radio.amateur.homebrew forbids sale
> items here. What I still do not know is why you think the rules of Usenet
> and the charter of rec.radio.amateur.homebrew do not apply to you?
>
> - Bob

Bob Headrick makes it a point to advise every person who posts a for sale of a home brew item on this news group that the post is off topic. Answer him back and you will get lots of maniupulative debate. After a few exchanges with Bob about the meaning of life, etc., he has decided that he will "Call me on the carpet each and every time" !!. Bob is not my schoolteacher, preacher, boss, wife, exwife, neighbor,lawyer , dentist, banker. I havnt crossed his property line, damaged his property, or talked back to his wife or mother, nor have I taken anything from him. I decide how to run my life not Bob. Bob enjoys debating - go ahead and try it. I have lots of snowballs in my freezer for him should he cross the border into Canada, and my aim is good.

206. Re: Homebrew power supply pass transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-06 00:00:00 UTC
From: davem@groucho.cs.ubc.ca
Message-ID: <7jehmn$6vn@groucho.cs.ubc.ca>
Source record: 69600

denton sprague <denton@oregontrail.net> writes:
>Hi all, I have a homebrew power supply that I have developed for my
>stations power supply. I am currently using 2n3055's (6 of them) for
>pass transistors, but they tend to have a short longivity peroid. I can
>order a match set from the local electronics emporium, but am wondering
>if I should invest in something a little more stouter.
>Any recommendations? I am using .01 ohm emitter resistors to balance the
>load.

The pass transistors should last forever, so you're doing something wrong.
It's probably better to figure out how they are failing and fix the
design problem, rather than switching to other transistors that will
probably also blow.

What is the total output of the supply? How many watts does each
transistor have to dissipate? How hot do the transistor cases get?
Does the supply have current limiting, in case the output is shorted?

Are you using it to charge batteries? In that case, what happens if
the AC power fails - some supplies blow their output transistors in
this event because the base-emitter junction gets too high a reverse bias.

Whatever you use, you shouldn't need a matched set of transistors. The
emitter resistors should cause the transistors to automatically share
the load. However, those resistors seem a bit small. I've seen a
suggestion that the emitter resistors should be chosen to drop about
0.5 V at full output. Even if you're running the 2N3055's at 10 A
(you shouldn't be), a 0.01 ohm resistor generates only 0.1 V of voltage
drop - not enough to compensate for transistor differences.
In fact, there might be more voltage drop across the base connections
to the various transistors than there is across the emitter resistors.
Something like 0.1 ohm is probably much better.

Also, although 2N3055's are rated at 10 A collector current, you
generally can't operate them at that current continuously because
they can't dissipate that much power. And that's true in a power
supply where the transformer voltage is chosen to be as *low* as
possible to minimize heat in the pass transistors.

As an example, I have a power supply here rated 15 amps continuous,
20 amps intermittent. It uses four 2N3055's as pass transistors,
so the maximum current for any transistor is 5 A. A fifth 2N3055 is
used to drive the bases of the 4 output transistors. The emitter
resistors are 0.1 ohm, giving 0.5 V drop at max. output. The
emitter resistors will dissipate 2.5 W at peak output (1.4 W at
max continuous rating) so I used 5 W resistors.

There *are* better transistors than 2N3055. You can get ones with more current gain at high collector currents, making it easier to drive a bunch of them in parallel. Some can handle more power. But it's probably easier to handle high power by having many cheap 2N3055's running 5 A each spread out along a big heat sink, than using half as many of some other transistors running at 10 A each.

Dave

207. Re: REC.RADIO.AMATEUR.HOMEBREW is not sa sale group

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-06 00:00:00 UTC
From: terryb@bmts.com
Message-ID: <928697530.737920@cindy.bmts.com>
Source record: 69601

On 1999-06-06 larry.asp@sympatico.ca said:
>Newsgroups: rec.radio.amateur.homebrew
>Bob Headrick wrote:
>> Larry Asp <larry.asp@sympatico.ca> wrote in message
>> news:3759CDC0.7A71@sympatico.ca...
>> > I have a number of coil forms - ideal for old fashion home
>>brewing. Used > but in good shape:
>> > $4.00 each plus postage.

Hi Larry,
I missed the original post, I am always looking for small parts to help me out in my homebrew junk box. What sizes etc, do you have? I am also in Ontario and would like to find other builders who have small parts to swap/sell to aide the homebrewing cause.

73
Terry Bendell
VE3TKB/QRPp

ve3tkb@amsat.org

208. Re: Adding shielding to wiring

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-06 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <7jek2tltm1@autumn.news.rcn.net>
Source record: 69602

> I've never dealt with audio-frequency electrostatic shielding, which
> is where I believe single-connection grounding is effective.
>
> Roy Lewallen, W7EL

Connecting only one end of the shield is a technique often used in commercial sound systems to prevent "ground loops" (AC current flow throught the shield caused by ineffective or improperly connected power system grounds). It *does not* improve shielding effectiveness, it's only a band-aid type fix for other grounding problems. Even at audio frequencies (and especially at RF freqs) both ends of the shield should normally be connected.

209. wanted: Practical Plans for a 2m Base Rig

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-06 00:00:00 UTC
From: "David P (D)" <pickards@SPAMBLOCKzen.co.uk>
Message-ID: <bCy63.38321$pl3.25242@newreader.ukcore.bt.net>
Source record: 69603

Hi people,
I'm soon going to be taking my Novice course (UK). I'd like to make my
self a 2m base rig...any ideas?
It must be synthesized and NOT xtal. It needs to have frequency stabillity
'cos in the UK we have 12.5khz spacing.

Thanks in advance
David P

(from over the sea)

210. Re: Homebrew power supply pass transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-06 00:00:00 UTC
From: "Jeanette D. Walton" <jdwalton@home.com>
Message-ID: <375B11B0.22D67D89@home.com>
Source record: 69604

From Jack:

I'm just wondering - maybe it's time to think of a different power supply configuration - wouldn't it be cheaper to go switched mode, regulated with some of the new designs from Motorola or NatSemi?

denton sprague wrote:

> Hi all, I have a homebrew power supply that I have developed for my
> stations power supply. I am currently using 2n3055's (6 of them) for
> pass transistors, but they tend to have a short longivity peroid. I can
> order a match set from the local electronics emporium, but am wondering
> if I should invest in something a little more stouter.
> Any recommendations? I am using .01 ohm emitter resistors to balance the
> load.

211. Re: REC.RADIO.AMATEUR.HOMEBREW is not sa sale group

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-06 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.SOL.4.10.9906061547500.12909-100000@Stratus.CAM.ORG>
Source record: 69605

On Sun, 6 Jun 1999 terryb@bmts.com wrote:

>
>
> On 1999-06-06 larry.asp@sympatico.ca said:
> >Newsgroups: rec.radio.amateur.homebrew
> >Bob Headrick wrote:
> >> Larry Asp <larry.asp@sympatico.ca> wrote in message
> >> news:3759CDC0.7A71@sympatico.ca...
> >> > I have a number of coil forms - ideal for old fashion home
> >>brewing. Used > but in good shape:
> >> > $4.00 each plus postage.
>
>
> Hi Larry,
> I missed the original post, I am always looking for small parts to help
> me out in my homebrew junk box. What sizes etc, do you have? I am also
> in Ontario and would like to find other builders who have small parts
> to swap/sell to aide the homebrewing cause.
>
> 73
> Terry Bendell
> VE3TKB/QRPp
>
>
> ve3tkb@amsat.org

úe's not a builder, he's a seller. I just checked at dejanews, make that deja.com now, and while I didn't bother wading through all the posts, the ones listed for rec.radio.amateur.homebrew are all forsale ads, except for two recent ones where he takes exception to those who rightfully complain about his ads here. The same with rec.radio.shortwave; reminds me of a time when he was selling 100KC crystals there for $12 each, and I posted a response saying that you could get a higher frequency crystal and build an oscillator and divider chain for less than his cost for the crystal alone, and it would give you closer together markers to boot.

It may not be his primary occupation, but the amount of stuff he's selling puts him in the commercial category, which surely would be an explanation of why he defines the newsgroups as advertising space.

You shouldn't have to rely on Larry Asp for coil forms. When I take things apart these days, I'm less likely to save coil forms because I have so many. There are plenty of them in a tv set, and you can find plenty of those waiting for the garbage. The slugs may not be appropriate for your

frequency range, howeever. You can still find plenty of IF transformers in various items, though the transistorized ones can be rather small. The 10.7MHz ones will probably be useful for much of the HF range. CB sets and cellphones too. It depends on what size you need, and the frequency range that you are building something for, something that Larry Asp's ads say nothing about. If you can get by with capacitor tuned circuits, and you can often find small values in various bits of electronic scrap,you don't have to worry about the slugs and simply remove them, or use any household item of the right size as the form.

Some parts are harder to find, especially in Canada. A place here in Montreal that was selling toroids disappeared sometime in the past few year. I think they would have done mail order. I think Laura mentioned a place in Vacnouver that carried them, though I can't remember if they do mail order.

One of the skills of homebrewing is scrounging. Not the dig it out somewhere and sell it elsewhere that some seem to think of as a service. Getting out there to the hamfests and garage sales and looking for suitable items. The Radio Amateurs of Canada have a website at
http://www.rac.ca
that has a list of upcoming hamfests in Canada. The ARRL keeps a similar list at their website
http://www.arrl.org
The fleamarkets less and less seem to have radio-related parts, but what there is often can be a bargain. I've picked up various circuit boards out of FM equipment that can be a great source of parts. One board I got last year had a couple of FM-bandwidth filters and a odd/even prescaler that might not be hard to buy but might be hard to track down as a hobbyist in Canada. You can often find items with similar crystals for making ladder filters. I've never tried that, but since they need crystals on the same frequency I imagine it's easier than the old type where you needed crystals a few KC apart. Every color tv set will have a 3.58MHz color subcarrier crystal, though they may not be the best choice for a filter.

Building something just like in the book or magazine may make it harder to find the right parts, but once you understand the circuit, you can do things your way using the parts you can scrounge up.

Just yesterday I was at a local Rotary Club garage sale. One year at this event I found a box of odd parts which I got for five dollars. It had a serial eprom programmer, the transformer that came with it was worth the price alone, and some ribbon cable and other items of interest.
Yesterday, I picked up a cordless phone for two dollars. I knew from one I bought last year that there'd be a few interesting parts, and when I got home I realized that it was a Radio Shack ten channle phone. Unlike the one I bought last year, this one is double conversion so has a 10.7Mhz ceramic filter and the 10.240MHz crystal to make the conversion to 455KHz. We know from past posts that people are looking for such crystals. It also used common Motorola FM IF strips in both the handset and the bzse.

These items can be hard to get ahold of, yet they are common in such consumer items.

Last week I picked up a cellphone at a garage sale, five dollars and no story about how much it cost originally. It is the oldest cellphone I've found. It has a crystal filter at 45MHz, unlike the two previous ones I bought that had higher frequency filters. Also a crystal to convert that down to 10.7Mhz, and the rest of the 10.7Mhz IF strip. Another even/odd prescaler. A Motorola PLL that appears to have BCD input. A nifty solid case. An NE571 compander IC. It was old enough that none or virtually none of it is surface mount. The output amplifer used discrete power transistors, instead of a module that might or might not work in other segments of the RF spectrum. All kinds of other parts.

One of the earliest things I learned about electronics was that you can make subsitutions. You have to understand the circuit, but that's always helpful anyway. Early on, I realized that a lot of parts are specified in projects because the builder had them on hand, or because they are common parts, not because a given part has some unique importance.

I'm feeling quite rich right now because I've picked up some parts, locally and cheap, that seemed either expensive or hard to get, requiring at the least an order across the border.

And maybe that's the point. It's one thing for someone who is part of this newsgroup community posting about something they happen to have that's unneeded, or someone needing something to complete a project, though it's a slippery slope since ads lead to more ads, as witnessed in rec.radio.amateur.equipment

But if people were discussing where they got their parts and substitutions they made and things they've scrounged up, some of the reasons this newsgroup exists, there would be less likelihood of people saying they want the ads here because parts are hard to get. This newsgroup is supposed to be about communication, whether it's showing someone that they can find parts in common consumer items, or encouraging them to be less timid when it comes to building. This is one place where the magazines often fail, since others can't put in their say (or at least not so easily). The medium fails if people see it like a magazine space, where you are broadcasting a message; people advertising often are seeing it that way, and the QRO King himself seems to see it that way if he really answers questions by email.

I've never looked in rec.radio.swap because being here in Canada I have no particular desire to order from individuals over the border. That's a good reason why I find ads in discussion groups so annoying, since all of it I have to ignore. I imagine it's true for people in the rest of the world. Here in rec.radio.amateur.homebrew it appears that we have a higher percentage of non-US posters. That may not say much about how few post here, but it says something about hearing different angles from other places. I do wonder if the ads started getting worse here if we'd lose them, since surely ads become even less relevant the further away you get.

There are other resources for advertising, and I don't think we hams take advantage of them. Most regions/municipalities have local newsgroups, and and often there are forsale newsgroups. Intended for ads, and topic-ed on local rather than item. If you're looking for something, try posting there. Nothing will be successful until it starts happening. Specialized items may not do so well, until people realize there is a local interest, but you might sell or find other items with success. At the very least, by reaching out into the community at large you might make ham radio more visible, unlike the rec.radio.amateur.* newsgroups where you have to know about the hobby before you'll look for the newsgroup. Years ago, there was an article in 73 from someone who'd placed an ad in a local free shopper weekly, and he wrote about all that he scrounged up that way. Why not start posting ads in local buy and sell newsgroups saying you're a ham and looking for scrap items that you'll gladly pick up?

And I notice the local ham clubs are horrible about using the local newsgroups to promote an upcoming hamfest or other event. Another chance lost at reaching the general public.

One of the local hams has quite an extensive webpage about amateur radio, and I'm not talking about the cross-post kid. One section is a bulletin board type space for people buying and selling items. I'm not sure how well known it is, but that is another way of reaching fellow hams locally. The times I checked it was only commercial equipment listed, but if someone posts about parts, who knows what will happen?

Michael VE2BVW

212. Re: Need info re type "N" adapter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-06 00:00:00 UTC
From: Al Dolgosh <al.dolgosh@hamradio.org>
Message-ID: <375AEB0C.DB29B84C@hamradio.org>
Source record: 69606

If it is a Bird wattmeter, the connectors are the Bird QC (Quick Change) type that may be replaced with a screwdriver. Bird Electronics in Cleveland, OH sells the UHF QC connectors very inexpensively!

Al - K8EUR

Argus wrote:

> I recently purchased a wattmeter that uses a female "N" fitting at the input
> and a male "N" fitting at the output. Can anyone direct me to a source of
> adapters to convert both fitting to "UHF female?
>
> Thanks,
>
> Roy

213. Re: Homebrew power supply pass transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-06 00:00:00 UTC
From: Ralph Mowery <rmowery@ibm.net>
Message-ID: <375ADE0C.84452B74@ibm.net>
Source record: 69607

You should be using more like a .5 ohm resistor in the emitters.
You did not state the voltage and current of the supply or the
transformer voltage. You may not be aboe to draw but about 5 amps
per transistor. You also might try some 2n3771 transistors (astrom
uses 8 of them for about 50 amps)or there are several in the 2n377x
series that look good.

denton sprague wrote:
>
> Hi all, I have a homebrew power supply that I have developed for my
> stations power supply. I am currently using 2n3055's (6 of them) for
> pass transistors, but they tend to have a short longivity peroid. I can
> order a match set from the local electronics emporium, but am wondering
> if I should invest in something a little more stouter.
> Any recommendations? I am using .01 ohm emitter resistors to balance the
> load.

214. Re: Need info re type "N" adapter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-06 00:00:00 UTC
From: Al Dolgosh <al.dolgosh@hamradio.org>
Message-ID: <375AEB80.4CC68723@hamradio.org>
Source record: 69608

If it is a Bird wattmeter, the connectors are the Bird QC (Quick Change)
type
that may be replaced with a screwdriver. Bird Electronics in Cleveland,
OH
sells the UHF QC connectors very inexpensively!

Al - K8EUR

Argus wrote:

> I recently purchased a wattmeter that uses a female "N" fitting at the input
> and a male "N" fitting at the output. Can anyone direct me to a source of
> adapters to convert both fitting to "UHF female?
>
> Thanks,
>
> Roy

215. AM2825 Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-06 00:00:00 UTC
From: Ron Harshbarger <rnharsh@visi.com>
Message-ID: <CoC63.1550$ZO3.192139@ptah.visi.com>
Source record: 69609
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.equipment,
sci.electronics.misc,sci.electronics.repair

Desperately need an AM2825 1 by 2K shift register.

rnharsh@visi.com

216. Re: Recycling an analog satellite receiver (900-2050Mhz) ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-06 00:00:00 UTC
From: Martin John Hallsworth <Martin@g1gyc.demon.co.uk>
Message-ID: <928709793.9356.0.nnrp-13.9e98acde@news.demon.co.uk>
Source record: 69610

Not an expert with the satellite tv receivers but I guess that it has a 24v
feed to the LNB
on the centre of the coaxial you will need to block or interrupt this before
connecting an
aerial to the socket or you will blow the psu in the satellite tv receiver.

As for an aerial (antenna, sorry I use the ENGLISH words here in the UK. Hi
Hi)
have a look at the ARRL Antenna handbook or have a look in your local
library for
ham radio books that describe antenna projects.

Cheers Martin G1GYC

Andrea B. wrote in message <7j8gq3$rt3$1@serv1.iunet.it>...
>I switched to digital and now I have an unused satellite tv receiver.
>I'm trying to find a way to use it. Here are a couple of ideas:
>- The receiver covers the range 900-2050 Mhz. Meteosat happens to xmit in
>the middle of that range (1600 Mhz if I'm not wrong. Could it be done???
How
>do I build an antenna for 1600Mhz (is it a dipole ok? Do I need a cavity?)
>- I have a couple of those wireless video links. They operate on 2400Mhz.
>I'd like to use my sat receiver as a second receiving unit. Of course I
>would need a down converter (2.400->1400 Mhz) . Any idea how to do such a
>down converter (I think it should need a cavity on these freq.) ?
>
>Have you got any other good ideas
>Thanks everybody.
>
>
>--
>Andrea Boriani, software engineer
>andrea@logical.it
>ICQ# 20445755
>
>

217. Best QRP kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-06 00:00:00 UTC
From: Gail Perkins <maggie98@email.msn.com>
Message-ID: <O75Pf6Hs#GA.300@cpmsnbbsa05>
Source record: 69611

I am Interested in building one of the commercially available qrp xceivers that are available and am soliciting comments on which is the best for the money. Am interested in single-band type with the best receiver possible. Am interested in portability like camping, etc. Any comments welcome. I have info on the following: MFJ, Wilderness Radio, Small Wonder Labs, etc. Any comments or suggestions are most welcome.
email to: ka7gqx@hotmail.com

73,

Kevin
KA7GQX

218. Noise Blankers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-06 00:00:00 UTC
From: Mike Lucas W5CHR <lucascom@email.msn.com>
Message-ID: <uknDiVIs#GA.148@cpmsnbbsa03>
Source record: 69612

I am looking for information on state of the art noise blankers. Anyone using something like the disable input of AD602 ic's???

Thanks and happy homebrewing
Mike Lucas W5CHR
Memphis, Tenn
lucascom@email.msn.com

219. Coaxial noise suppressors FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-06 00:00:00 UTC
From: Willis <nospam@notsonet.org>
Message-ID: <928719462.101.82@news.remarQ.com>
Source record: 69613

Narda Model 562 noise suppressors, coaxial "N" connectors, .01-12.4 GHZ, 100 VDC max. $20 each plus shipping. E-Mail to: shiso@sneplanet.com
Thanks, From Rhode Island. Bruce KD1MW

220. 63Amp, 24V power supplies FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-06 00:00:00 UTC
From: Willis <nospam@notsonet.org>
Message-ID: <928719886.839.80@news.remarQ.com>
Source record: 69614

```
24 volt 63 Amp switching power supplies for sale. Newmic Lambda ESW
1500-24, 120 /240 60HZ. $45 plus shipping. E-mail to : shiso@sneplanet.com
From RI. Thanks. Bruce KD1MW
```

221. Re: Best QRP kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-06 00:00:00 UTC
From: Bob Headrick <bobh@proaxis.com>
Message-ID: <928722914.247.52@news.remarQ.com>
Source record: 69615

Gail Perkins <maggie98@email.msn.com> wrote in message
news:O75Pf6Hs#GA.300@cpmsnbbsa05...
> I am Interested in building one of the commercially available qrp xceivers
> that are available and am soliciting comments on which is the best for the
> money. Am interested in single-band type with the best receiver possible.
Am
> interested in portability like camping, etc. Any comments welcome. I have
> info on the following: MFJ, Wilderness Radio, Small Wonder Labs, etc. Any
> comments or suggestions are most welcome.
> email to: ka7gqx@hotmail.com
>
> 73,
>
> Kevin
> KA7GQX

Kevin -

You don't mention if you are looking for CW or SSB. The Norcal 40, now sold by Wilderness radio is a nice single band CW rig. It is very compact, and has room inside for batteries. The Cascade was a little larger version which covered 160-15M with plug-in modules.

For SSB the Sierra from Norcal works well for 80 and 20M. All these have fine receivers, it is usually easy to hear much more than you can work with the 1-5W outputs these radios have.

- 73 Bob W7OV

222. Re: Best QRP kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-06 00:00:00 UTC
From: Keith Swesey <kaswesey@earthlink.net>
Message-ID: <375B2FB5.8A706BFE@earthlink.net>
Source record: 69616

Kevin,

Send me an email at kaswesey@earthlink.net - I may have some suggestions.

Gail Perkins wrote:

> I am Interested in building one of the commercially available qrp xceivers
> that are available and am soliciting comments on which is the best for the
> money. Am interested in single-band type with the best receiver possible. Am
> interested in portability like camping, etc. Any comments welcome. I have
> info on the following: MFJ, Wilderness Radio, Small Wonder Labs, etc. Any
> comments or suggestions are most welcome.
> email to: ka7gqx@hotmail.com
>
> 73,
>
> Kevin
> KA7GQX

223. Re: Beer?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-07 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <375C1B05.1ED9@pop.removethistomailme.net>
Source record: 69482

No, this is the group for condemning the evils of offering small
quantities of radio components and test equipment for sale to ham
operators on an informal basis. Its counterpart in the brewing world
would be alt.fan.carrie-nation.

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam
---

224. Re: REC.RADIO.AMATEUR.HOMEBREW is not sa sale group

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-07 00:00:00 UTC
From: Will White <wcw@asu.uswest.net>
Message-ID: <375C2752.B5572715@asu.uswest.net>
Source record: 69483

Please point to a URL where I can read the charter. Thanks.

Bob Headrick wrote:

the charter of rec.radio.amateur.homebrew forbids sale
> items here.

--
Will White, KD7BFX

to reply, please click this link mailto:wcw@asu.uswest.net

225. Re: Motorola GM300.MDF out of band ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-07 00:00:00 UTC
From: paul <paul@greenrover.demon.co.uk>
Message-ID: <FNoH1CAGmCX3Ew9E@greenrover.demon.co.uk>
Source record: 69484

>Further up the thread, olivier.f4afo <olivier.f4afo@wanadoo.fr> wrote:

<snip>

To program GP300 below 438Mhz follow the link below. There you will find
instructions.

http://www.morgan2.demon.co.uk

HTH

Regards
--
Paul G8IZR

http://www.greenrover.demon.co.uk

226. Re: 75 ohm attenuator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-07 00:00:00 UTC
From: la8ak@online.no
Message-ID: <37575a4f.640771656@news.online.no>
Source record: 69485

On Thu, 3 Jun 1999 23:19:00 +0100, Frank Dinger
<frank.dinger@zetnet.co.uk> wrote:

>> I have a Heathkit 75 ohm switchable attenuator, up to 80db.
>> I want to use it in my 50 ohm applications until
>> I can buy a good 50 ohm unit.
>
>> I lost a reference to method where pads
>> can be placed at input and output of 75 ohm unit, to
>> allow use as a 50ohm unit. Using the pads allowed a rough esitmate of
>> the 50 ohm atteunation versus switch settings.
>
>> I believe the pads where 75 to 50 ohms pads.
>
>> Appreciate any hints with the math and needed pads.
>> 73, W6MIK
>============================

I used for several years 75 ohm attenuators for extensive measurements
on HF/VHF, usually it is little practical difference between 75 and 50
ohm attenuators, except for low attenuation, - as long as impedance is
not too critical, so just use your tool and forget that it is made for
75 ohm

73 jan-martin LA8AK

>David , To make a 75 Ohms attenuator suitable for 50 Ohms in and out,
>you add 44 Ohms in series with both the exisisting in- and output and
>bypass the new (50 Ohms) in- and output with 88 Ohms.
>However by doing so you add a fixed 12 dB attenuation.
>
> ------------------------
> | (multi step) |
>0-------(X= 44 Ohms)----0| 75 Ohms |0---------(X=44
>Ohms)-----------0
> | | Attenuator |
> |
> | |-----------------------
> |
> ^ |
> ^
> Y= 88 |
> Y= 88
> Ohms |
> Ohms

> ^ |
> ^
> | |
> |
> | |
> |
>0--
>---------------0
>
>
>Hope the above ASCI pic gets through OK
>
>You can do the calculations with standard algebra , with the series
>resistors each X and the bypass resistors each Y (Input and output
>are obviously identical)
>Just consider the input only
>You now have 2 parallel resistors eg Y and (X+75) .
>For 50 Ohms : 1/50 equals 1/ (x+75) + 1/y ----> this provides the
>relationship between X and Y but this is moderately complex.
>By making a table for different Y/X ratios X & Y can now be easily calculated
>In the above example the ratio Y/X = 2 . Try other ratios and
>check the resulting added attenuation.
>You might get some odd resistor values.
>
>If you have carbon composition resistors in the junkbox you could try
>making the odd value resistors yourself.
>Take a standard resistor with a value LOWER than the odd value you
>need. If you now file or grind a bit off the side ,the resistance
>increases (do this very carefully) Frequently test the resistance
>with a suitable Ohm meter
>When the wanted value has been reached the resistor can be coated
>with a suitable varnish (eg polyurethane)
>An advantage of carbon composition resistors is their low inductance.
>This method is also suitable for making meter current shunts and
>series resistors for re-ranging volt meters.
>
>Perhaps you understand why I am a carbon resistor collector . At
>Junk Sales and flea markets usually nobody wants them.
>If they only knew ....
>
>Good Luck
>
>73 Frank GM0CSZ / KN6WH
>
>Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland UK
>e-mail : gm0csz.kn6wh@ukrs.org
>
>
>
>

227. Re: group sales

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-07 00:00:00 UTC
From: la8ak@online.no
Message-ID: <37575b95.641097734@news.online.no>
Source record: 69486

On Fri, 04 Jun 1999 01:36:42 GMT, Larry Asp <larry.asp@sympatico.ca>
wrote:

>Bob Headrick wrote:
>>
>> It seems like the camels nose (or other end) is in the tent. This groups is
>> not a sale group, although some have the opinion that they can post sale
>> stuff anywhere they please, and others think that "precedent" means that
>> once others post here that it is OK for all. Just a reminder - this is a
>> group for discussion, not for selling. Rec.radio.swap is the group for
>> selling radio related items.
>>
>> Lets keep some sanity in the rec.radio groups lest they all become overrun
>> like rec.radio.amateur.equipment has. Alternately I suppose we can look
>> forward to 2,189,741 postings per week as pointers to ebay in every group in
>> usenet.
>>
>> - 73 Bob W7OV
>
>Bob - breaking out your old camel routines is going too far. As you know
>a camel should never stick his butt in a tent - the last one who tried
>that - is still running accross the desert with his backside in great
>pain.
>
>I think you owe some apologies,because I dont think anyone who has
>posted a FS ad here in the past 3 months hasnt met you or been drawn
>into dialogue with you. You must be tired of the free insults by now too
>and I think you would like to end this. Instead ask the list owners
>(charter group) to monitor the group if you beleive or are bothered
>that FS of home brew items is not legitmate use of the newsgroup. I know
>others do not share your views, and thier opinion should be weighed as
>much as yours. I must say that any FS ads or WTB or FA(very few) have
>been for decent home brew stuff that most of us would consider worth
>sharing or finding.
>

pleased to learn that somebody like Bob keeps trying to protest
against the rubbish (mainly from USA on an international newsgroup),
very much of it has no value for homebrewers, it just too often been
posted by some silly persons who don't have the faintest idea of which
newsgroup is the optimum

Jan-Martin LA8AK

228. Technology Demo Day

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-07 00:00:00 UTC
From: kc5goi <kc5goi@hotmail.com>
Message-ID: <928794284.404.43@news.remarQ.com>
Source record: 69487
Cross-posted to: alabama.birmingham.radio.amateur,aus.radio.amateur.digital,aus.radio.amateur.misc,aus.radio.amateur.wicen,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,tamu.amat

Just a reminder about Technology Demo Day. Please visit
http://www.tapr.org/tapr/html/Ftdfd.html for information. If you plan to
operate a station that qualifies for points please email me with the
callsign you operate under. I will have a web page for everyone to view
that has the station list and any comments that station has.

73, KC5GOI

229. Re: Beer?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-07 00:00:00 UTC
From: "Charles H. Reichert" <reichert@cig.mot.com>
Message-ID: <375C3224.82249DAC@cig.mot.com>
Source record: 69488

Jonesy wrote:
>
> spinaldoc@earthlink.net wrote:
> : Hey, I thought this was the newsgroup for home made beer recipes?
> : What happened?
>

Hmmm, maybe Radio Controlled Beer Cans? Now if I could only overcome
the Refrigertors' shielding......

Chuck KD9JQ

> The internet term is "Thread Drift".
>
> Jonesy W3DHJ
> --
> Gunnison, Colorado
> 207 days to go until the Year 2000 -- So what!
> 573 days to go until the 3rd Millennium of the C.E.

230. For Sale:Icom 706 & Ameritron Als 500 amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-07 00:00:00 UTC
From: Hal <wd4mda@gte.net>
Message-ID: <MaY63.558$5V5.32240@dfiatx1-snr1.gtei.net>
Source record: 69489
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

this is my personal rig in my car. The Icom was purchased used from a ham in our repeater club. The Ameritron was purchased brand new in the box. The reason for selling, I need cash to do another deal I am interested in. The $950.00 must be in a US Postal money order. and must be sent to arrive by June 10, 1999. I have a dead line to meet on this deal.
Its a great set up. You can e-mail or call me at (813) 685-9599
I am good in the call book or CD ROM.
thanks
73 Hal
wd4mda@gte.net

--
73 Hal
wd4mda@gte.net

231. Eight-Year-Old Elmers Directory Needs Elmers!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-07 00:00:00 UTC
From: pschleck@novia.net
Message-ID: <AbY63.29982$OL.718144@newscene.newscene.com>
Source record: 69490
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.space

As readers of the rec.radio.amateur.* newsgroups are probably aware, I maintain a periodic information posting known as the Amateur Radio Elmers Resource Directory (aka the "Elmers List") which provides a list of net Elmers, indexed by topic, and their E-mail addresses. (For users of threaded newsreaders, this article is linked to the base article of the Directory itself). You may also access the Directory at:

http://www.novia.net/~pschleck/elmers/

The Amateur Radio Elmers Resource Directory is 8 years old as of March of this year. In order to maintain its value to the net, I have strived to keep it accurate and up-to-date. In addition to reviewing the currency of the entire Directory every 2 years, I am constantly scouring the newsgroups for new Elmers to join the Directory.

There's always been an implicit invitation for any qualified person to join the Directory. However, since I've lost the half of the Elmers listed due to attrition from the last biannual mass-ack (i.e., no response at their last-known E-mail addresses; the 50% attrition rate seems to be fairly predictable based on the last few mass-acks in recent years), I felt the need to send out this explicit invitation. I'd like to replace the lost Elmers with new, motivated, quality Elmers from the net. Areas of expertise that are most desirable for the Directory right now include:

- Any expertise from residents of states, provinces, and foreign countries not currently represented
- Advanced homebrewing techniques (surface-mount, VLSI, DSP, spread-spectrum, etc.)
- TCP/IP Packet Radio and Gateways/Internetworking (particularly local IP coordinators and/or subnet managers/operators/leaders)
- Amateur Satellites/Space Operation (particularly Microsats, SAREX, and ARISS)
- Amateur-related Software for Unix/PC/Mac/Amiga/Psion/HP-95/PalmPilot
- College Clubs and organizational guidance/strategies
- Boy Scout Amateur Radio Merit Badge Counselors
- Unix/Linux/X-Windows programming and configuration
- Amateur Radio Organizational Contacts (I am especially looking for contacts for the ARRL Field Organization, GRAPES, AMSAT, QCWA, QRP Int., NARA(?), QRZ, CSVHFS, LAMBDA, ARES, RACES, FEMA, NACEC, any state OES or EMA, as well as any regional frequency coordinating body)
- Band, Mode or, Brand-specific equipment (actual manufacturer or dealer contacts would be quite welcome, as long as they reveal their affiliation and at least provide *some* free services)

- Maintainers of unique amateur-radio-related anonymous File Transfer Protocol (FTP) sites and World-Wide Web (WWW) Home Pages (as opposed to those that are substantially a rehash of, or pointers to, existing sites).
- Maintainers of unique amateur-radio-related mailing lists
- Editors/contacts for amateur-radio-related publications

Although expertise in any other area would, of course, be welcome also.

I'd like to emphasize that participation is totally voluntary, with very minimal obligations (1 or 2 polite inquiries a month, if feedback from existing Elmers is any indication). If you find that it is too much work, you are welcome to bow out, no questions asked. You don't even need access to netnews, just a reliable E-mail address.

If you'd like to volunteer, please go to the following Web-based registration form:

http://www.novia.net/~pschleck/elmers/register.html

--
73, Paul W. Schleck, K3FU
elmers-request@novia.net

Maintainer, Amateur Radio Elmers Resource Directory
http://www.novia.net/~pschleck/elmers/

232. Re: wanted: Practical Plans for a 2m Base Rig

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-07 00:00:00 UTC
From: Eamon Skelton <NoSpam_ei9gq@qsl.net>
Message-ID: <7jhk54ieh1@scotty.tinet.ie>
Source record: 69491

David P (D) wrote in message ...
>Hi people,
> I'm soon going to be taking my Novice course (UK). I'd like to make my
>self a 2m base rig...any ideas?
>It must be synthesized and NOT xtal. It needs to have frequency stabillity
>'cos in the UK we have 12.5khz spacing.
>
>Thanks in advance
>David P

Most synthesized rigs are xtal controlled. There's a design for a 2M
synthesized FM transceiver in the VHF/UHF Manual, RSGB.

73, Ed.

--
Eamon 'Ed' Skelton EI9GQ, Cork, Ireland

ANTI SPAM RETURN ADDRESS

EI9GQ home brew radio page
http://www.qsl.net/ei9gq

233. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-07 00:00:00 UTC
From: "Barry L. Geipel" <bgeipel@primenet.com>
Message-ID: <01beb13e$c9fad420$5dc9bbc0@mauser>
Source record: 69492
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

> > Considering that I was "surfing the net" before it was even
> > *possible* with MS-Windows, you might want to choose a different
> > analogy. Sigh.
> You must be talking about bulletin boards or usenet.
> >

Many of us were been using the Internet for years before MS-Windows could
even begin
to talk to the Internet using UNIX. Telnet, ftp, NFS, gopher, Archie and
hundreds of Internet apps were
online long before MS-Windows even knew what TCP/IP was! Remember that
Mosaic (Netscape)
was first written as an X-Window app!

Barry - AD6HR

234. Re: News Group Name Change???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-07 00:00:00 UTC
From: Timothy Hynde <ka8ddz@worldnet.att.net>
Message-ID: <7jhl5q$dq5$1@bgtnsc03.worldnet.att.net>
Source record: 69493

Why would we do that?

DDZ

David P (D) wrote in message ...
>Hi,
> I've been thinking, why don't the powers that be,l et us change the
>newsgroup name to> .homebrewED
>
>???
>
>David
>
>

235. Re: Best QRP kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-07 00:00:00 UTC
From: Butch Magee <butchkay@netdoor.com>
Message-ID: <375C5ACC.52F1E6F8@netdoor.com>
Source record: 69494

Please don't overlook Drake. Drake has some kick ass stuff, I built their 40 mtr qrp transceiver. Nice!

Butch KF5DE

Gail Perkins wrote:

> I am Interested in building one of the commercially available qrp xceivers
> that are available and am soliciting comments on which is the best for the
> money. Am interested in single-band type with the best receiver possible. Am
> interested in portability like camping, etc. Any comments welcome. I have
> info on the following: MFJ, Wilderness Radio, Small Wonder Labs, etc. Any
> comments or suggestions are most welcome.
> email to: ka7gqx@hotmail.com
>
> 73,
>
> Kevin
> KA7GQX

236. Re: Need info re type "N" adapter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-07 00:00:00 UTC
From: Dwight Momberg <dmomberg@luckey.net>
Message-ID: <375C5BB0.9233B0D3@luckey.net>
Source record: 69495

If this is a bird watt meter you can obtain the connectors you need from tessco
800-472-7373
73
Dwight

Argus wrote:

> I recently purchased a wattmeter that uses a female "N" fitting at the input
> and a male "N" fitting at the output. Can anyone direct me to a source of
> adapters to convert both fitting to "UHF female?
>
> Thanks,
>
> Roy

237. Re: REQ: Subaudible Tone Retrofit for Older 2m FM Gear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-07 00:00:00 UTC
From: "Paul R. Bennett" <rffox@alltel.net>
Message-ID: <375C6386.6C0A8753@alltel.net>
Source record: 69496

You aren't the only one interested. I need to add one to a Drake TR-22C I have. I know I can buy them, but I would rather build one. I figure with present chip techology, there is probably something out there that would fill the bill quite nicely.

Paul Bennett N4EGO
rffox@alltel.net

Jim Morgan wrote:

> Hi Folks !
>
> Anybody have occasion to brew a subaudible tone generator
> for use with older FM rigs, now that so many repeaters are
> tone (CTCSS) access ?
>
> Thanks for any leads !
>
> 73,
>
> Jim Morgan W4QE
> jvm@inmind.com

238. Re: Transistor Regen

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-07 00:00:00 UTC
From: "Paul R. Bennett" <rffox@alltel.net>
Message-ID: <375C63F7.F55C836B@alltel.net>
Source record: 69497

Also, check QST... It was not a one transistor job, but it was fairly simple.
It was back about 2-3 years ago as I recall.
Paul Bennett N4EGO

Mark Nelson wrote:

> Kurt Arico wrote:
>
> > Does anyone know where I can find some circuits for a 1 transistor regen
> > receiver? I modified a tube circuit that used a 30 and was dissapointed in
> > the results.
>
> I remember an article in 73 some years ago by someone who had followed that
> path, with similar results, and so set out to come up with a good design. I
> think he ended up concluding that a FET was a better choice for the
> "traditional" regen designs, but offered some workable circuits for BJTs.
> Substituting a 2N3819 for almost any early triode has often worked for me.
>
> --
> Mark Nelson
>
> A collector of TV signal boosters and UHF converters -- God help me!
> http://www.geocities.com/TelevisionCity/Set/6312/

239. Re: YIG Comb generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-07 00:00:00 UTC
From: clyde edgar <cedgar@pacificnet.net>
Message-ID: <375C6D92.F376DBE3@pacificnet.net>
Source record: 69498

I think your're right regarding what it is. I found a reference during a web search that describes the function. the web site is http://www.micro-lambda.com/multipli.htm if your're interested.

Rex Allers wrote:

> Don't know for sure but its probably part of a counter. Its probably an
> SRD comb generator followed by a YIG filter. Would work something like
> this. Input would be maybe around 1 GHz. First would be an SRD
> multiplier to generate harmonics at 2, 3, 4, ... GHz. Following that
> would be a YIG filter. Current to the YIG coil allows only one of the
> frequencies to pass. By adjusting the current you can select which one.
>
> This is probably what it is. Output would be use to mix with input
> frequencies in a microwave counter. Can create lots of accurate refrence
> frequencies if the input is accurate.
>
> Sorry, I don't know about connections or frequencies for the one you have.
>
> - Rex, KK6MK
>
> On Sat, 05 Jun 1999 17:35:53 -0700, John Miles
> <jmiles@pop.removethistomailme.net> wrote:
>
> >clyde edgar wrote:
> >>
> >> I picked up a yig comb generator at the swap meet, I have an FSCM id and
> >> part #, the part was made by EIP. It has a sma input and smb output and
> >> a 5 pin d-connector. Can anybody provide me with any info on how to bias
> >> it ? Or any info on YIG comb generators in general ?
> > >
> > >I've never heard of a YIG comb generator -- is it a YIG oscillator
> > >phase-locked to a conventional SRD comb generator? If so it's probably
> > >an LO module from some kind of spectrum or network analyzer or other
> > >type of receiver. Otherwise, beats the heck outta me.
> > >
> > >-- jm KE5FX
> > >
> > >---
> > >Note: My E-mail address has been altered to avoid spam
> > >---

240. Re: ? registration of double sided boards

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-07 00:00:00 UTC
From: Tom Bruhns <tomb@lsid.hp.com>
Message-ID: <375C6FC1.8B0F1CDA@lsid.hp.com>
Source record: 69499

I've only made boards using photoresist, and my method only applies to that. I make transparencies with pads in the corners just for registration. I tend to use full 8.5*11 inch sheets, even for small boards. I trim one transparency to be a bit smaller than the other on each edge, align them, then tape opposite edges with "Scotch" tape. Then I slip a board into the middle of the sandwich, and tape it to one of the transparencies. That sandwich goes into my print frame, which is just a piece of 1/8" plate glass over a piece of foam over a piece of plywood; the weight of the glass (15*15 inches) is all that's needed to hold things together. I get registration consistently good enough to do "vias" with 0.040" pads, drilled 0.0135" (for 30-gauge wirewrap wire).

By the way, I'm presently pretty happy printing overhead transparency material on an HP "PhotoSmart" printer, which puts down multiple dots to get a dense ink coating. A previous inkjet printer didn't print densly enough, and I had better luck laser printing on very thin vellum or tracing paper, and just using that; the paper is translucent enough to work OK. Also, do print as you would with the p-n-p, I guess, so the printed pattern goes against the board with no transparency material between to let light leak around the edges.

(For p-n-p, I might try a similar sandwich thing, if it seemed practical, or else drill registration holes. I'd make a jig to drill the holes so I could get them "exactly" the same spacing as some registration pads I put on the p-n-p.)

Hope this helps...

Cheers,
Tom

Don wrote:
>
> Hi
>
> I'm getting ready to make my first dbl sided board using toner transfer
> (press n peel). Does anyone have any tried and true methods for getting
> the two sides to be alligned with each other? Anything I SHOULDNT try?
> And I'm also interested in the same thing as applicable to positive
> pre-sensitized boards, as I may try them when my pnp stuff runs out.
>
> Thanks,
>
> Don

241. Re: REC.RADIO.AMATEUR.HOMEBREW is not a sale group

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-07 00:00:00 UTC
From: Bob Headrick <bobh@proaxis.com>
Message-ID: <928812057.929.59@news.remarQ.com>
Source record: 69500

Will White <wcw@asu.uswest.net> wrote in message
news:375C2752.B5572715@asu.uswest.net...
> Please point to a URL where I can read the charter. Thanks.
>

Try
ftp://ftp.uu.net/usenet/news.announce.newgroups/rec/rec.radio.amateur-reorg
http://www.faqs.org/faqs/radio/personal-intro/index.html and
http://www.landfield.com/faqs/usenet/advertising/how-to/part1/
for relevant documents.

- Bob W7OV

242. Turn your PC into a DSP!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-07 00:00:00 UTC
From: "Thomas F. Swezey" <swezeyt@winternet.com>
Message-ID: <375C7189.90320ACA@winternet.com>
Source record: 69501

I am a professional software engineer and a long time short-wave
listener.

I have developed a Windows program that allows you to filter audio in
real-time.

Connect the "Line Out" on your short-wave radio to the "Line In" on your
PC's sound card.

Use the Windows "Volume Control" program to assign inputs and outputs
and set levels.

The program takes the digitized audio, filters it and plays it out
through your PC's speakers!

No special hardware or modifications needed.

It does require a fast PC - 200 Mhz or better.

For more information and a free Shareware copy of the program visit my
web site:

http://www.winternet.com/~swezeyt/dsp.htm

Thanks a lot,
Tom Swezey

--
**** Signature **** (KISS: Keep It Simple, STUPID!) ****
Check out my Web Site: http://www.winternet.com/~swezeyt
E-mail me at swezeyt@winternet.com (o o)
oOO( )**OOo****

243. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-07 00:00:00 UTC
From: David <kb9lpk-3@foxvalley.net>
Message-ID: <375CA124.5E91C826@foxvalley.net>
Source record: 69502
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Greg Baker wrote:
>
> What about Tech Plus license holders?
>
> Sir wrote in message <373B7360.5E20@sir.com>...
> >Michael Young wrote:
> >>
> >> I have great news for you! You CAN become a ham without learning Morse
> >> code. Looking at FCC Part 97, you can qualify for a Technician's license
> >> with only a written procedure and absolutely minimal theory test. No
> >> Morse code test!
> >>
> >> It seems your wish has been granted, and quite some time ago at that.
> >
> >The technician license does NOT allow you to use ANY of the Ham bands
> >below 6 meters. Thus you DO have to pass a Morse Code test if you want
> >to be a HAM without restrictions. A technician license is like a
> >fishing license that only allows you to fish in a small fraction of
> >small lakes. Only you don't have to know Morse Code for the fishing
> >license with no restricions on lakes.

Who cares about what the military uses we are not the military
and by the way a few special forces still are taught it guess who?

Some people still collect and use old HF gear older than most of
us. Still sounds good on the bands so are they obsolete beyond
use? Get real and quit beating a dead horse issue. Remember and
respect your roots! After all without amateur radio opertors/developers
where would communications be today,so let us all enjoy the NOS... ok!
--
The Box said" Win95,Win98,NT 4.0 or better"
So I installed Linux ! #;)
73 de David kb9lpk <><

e-mail:kb9lpk-3@foxvalley.net
homepage:http://users.foxvalley.net/~kb9lpk-3

Remember: You have the right to remain silent.
Anything you say will be misquoted, and then used againts you!

----------== Posted via Newsfeeds.Com, Uncensored Usenet News ==----------
http://www.newsfeeds.com The Largest Usenet Servers in the World!
------== Over 73,000 Newsgroups - Including Dedicated Binaries Servers ==-----

244. Re: FT990 DC power cable

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-07 00:00:00 UTC
From: qroking@aol.com
Message-ID: <19990606224342.24122.00001373@ng-cs1.aol.com>
Source record: 69617

Hi Francis, I am pretty sure that Mouser Electronics sells the Molex plug to homebrew your own power cord...Lou

245. Re: YIG Comb generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-07 00:00:00 UTC
From: rexa*nospam*@dnai.com
Message-ID: <375b3a41.173062488@news.dnai.com>
Source record: 69618

Don't know for sure but its probably part of a counter. Its probably an SRD comb generator followed by a YIG filter. Would work something like this. Input would be maybe around 1 GHz. First would be an SRD multiplier to generate harmonics at 2, 3, 4, ... GHz. Following that would be a YIG filter. Current to the YIG coil allows only one of the frequencies to pass. By adjusting the current you can select which one.

This is probably what it is. Output would be use to mix with input frequencies in a microwave counter. Can create lots of accurate refrence frequencies if the input is accurate.

Sorry, I don't know about connections or frequencies for the one you have.

- Rex, KK6MK

On Sat, 05 Jun 1999 17:35:53 -0700, John Miles
<jmiles@pop.removethistomailme.net> wrote:

>clyde edgar wrote:
>>
>> I picked up a yig comb generator at the swap meet, I have an FSCM id and
>> part #, the part was made by EIP. It has a sma input and smb output and
>> a 5 pin d-connector. Can anybody provide me with any info on how to bias
>> it ? Or any info on YIG comb generators in general ?
>
>I've never heard of a YIG comb generator -- is it a YIG oscillator
>phase-locked to a conventional SRD comb generator? If so it's probably
>an LO module from some kind of spectrum or network analyzer or other
>type of receiver. Otherwise, beats the heck outta me.
>
>-- jm KE5FX
>
>---
>Note: My E-mail address has been altered to avoid spam
>---

246. Re: Best QRP kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-07 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <375B86DA.107D2C15@bellsouth.net>
Source record: 69619

Gail Perkins wrote:
>
> I am Interested in building one of the commercially available qrp xceivers
> that are available and am soliciting comments on which is the best for the
> money. Am interested in single-band type with the best receiver possible. Am
> interested in portability like camping, etc. Any comments welcome. I have
> info on the following: MFJ, Wilderness Radio, Small Wonder Labs, etc. Any
> comments or suggestions are most welcome.
> email to: ka7gqx@hotmail.com

If a CW-only radio is OK with you, consider the Ten-Tec units.

I don't have any real experience with any of the competing units, but I
just finished a 1320 for 20 meters. The receiver is more
intermod-immune than my TS-940. I did hear a bit of breakthrough from a
shortwave broadcast station last night, but only one. IF bandwidth is
about 1kHz (may be a bit wide for some tastes). VFO stability is good,
and the unit is fairly easy to build.

There isn't much room for anything inside the case though. (anyone know
how big a Tick keyer is? I have a Ten-Tec keyer using a couple of CMOS
chips but it's too big..)

Price is $95.
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

247. Re: ? registration of double sided boards

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-07 00:00:00 UTC
From: cooperjim@aol.com
Message-ID: <19990607022818.24054.00001196@ng-fq1.aol.com>
Source record: 69620

Try drilling the board first, then aligning each side of the board with the holes. Then etch the board. This was you can see any "runout" and get the best fit.

I havent tried this with the press n peel, but see no reason it should not work. Make sure the holes have no burrs using a carbide drill.

73
Jim Cooper NE6O
CooperJim@aol.com>
>Hi
>
>I'm getting ready to make my first dbl sided board using toner transfer
>(press n peel). Does anyone have any tried and true methods for getting
>the two sides to be alligned with each other? Anything I SHOULDNT try?
>And I'm also interested in the same thing as applicable to positive
>pre-sensitized boards, as I may try them when my pnp stuff runs out.
>
>Thanks,
>
>Don

248. FS: new old stock Cornell-Dubilier paper-in-oil capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-07 00:00:00 UTC
From: dmwilliams@tande.com
Message-ID: <7jg15hiqh1@nnrp1.deja.com>
Source record: 69621
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hi Everyone,

I have a box of new old stock Cornell-Dubilier paper-in-oil capacitors
for sale.
These are type DYR 6011G
(2) x .1 MFD 600VDC - 7NKO +/- 10%
Use as two .1 mfd's, one .05 mfd, or one .2 mfd.
They are the rectangular hermetically sealed metal case variety with 3
solder lugs.
They measure 1.75" by 1" by .75", not counting the lugs and mounting
ears. The
following addresses lead to photos:

http://www.geocities.com/Paris/1665/doug/cd1mfd1.jpg
http://www.geocities.com/Paris/1665/doug/cd1mfd2.jpg

The paperwork with the box gives a manufacturing date of November 1944,
and
states that the test voltage was 1000VDC. I have taken capacity
measurements on
the entire box, and they all measure within specification.
I am selling these for $4 apiece, or $6 apiece if you want exact
matching.
Please write if you have any questions or interest.

Thanks, Doug Williams

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

249. Help Please re Kenwood R-5000

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-07 00:00:00 UTC
From: David and Lisa Chambers <ljkc@massed.net>
Message-ID: <7jgbbahlg1@autumn.news.rcn.net>
Source record: 69622

Does anyone know if a keypad (connected via the ACC jack) is available for this radio? The requisite IC-10 chipset kit is installed. If not, can someone offer assistance re making one? I would be very grateful.

DSC

250. Beer?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-07 00:00:00 UTC
From: spinaldoc@earthlink.net
Message-ID: <375BAE3C.2C5060B8@earthlink.net>
Source record: 69623

Hey, I thought this was the newsgroup for home made beer recipes?
What happened?

251. Re: Beer?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-07 00:00:00 UTC
From: tubecntral@aol.com
Message-ID: <19990607080212.15303.00001526@ng-cq1.aol.com>
Source record: 69624

>
>Hey, I thought this was the newsgroup for home made beer recipes?
>What happened?

It is... all us drunks play with radio's too!

;o) Joe
Thank you,
Joe Pratt, Tubecntral@aol.com

252. HELP!!! I need to build a transmitter...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-07 00:00:00 UTC
From: Jonathan Lazarus Savage <madjon@rucus.ru.ac.za>
Message-ID: <928760342.460064@turtle.ru.ac.za>
Source record: 69625

If anyone can possible help me...

I live in South Africa where amateur radio is completely unheard of but have been working on a community radio station now for almost five years.

I want to start up the first amateur radio station, or even my own community radio station ... but all in good time!

I have a fair amount of technical skills but am COMPLETELY in the dark about this subject. I have been to numerous websites even but have barely understood one word.

I want to build my own FM (or MW) transmitter!!!!!!!!!! Does anyone have a clue how or if it is possible to do such a thing??????? Transmitters cost up to R1000 000 here. NO way!!!

PLEEEEEASE help. Send mail to madjon@rmr.ru.ac.za

byeeeee

--
ANSI standard disclaimer.

253. Re: HELP!!! I need to build a transmitter...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-07 00:00:00 UTC
From: Marv Luse <mwluse@dimensional.com>
Message-ID: <375BD7A7.EF8D0FE2@dimensional.com>
Source record: 69626

I think you need to do some more checking-- there are plenty of hams in South Africa.

73,

Marv
AB0IO

Jonathan Lazarus Savage wrote:

> If anyone can possible help me...
>
> I live in South Africa where amateur radio is completely unheard of but have
> been working on a community radio station now for almost five years.
>
> I want to start up the first amateur radio station, or even my own
> community radio station ... but all in good time!
>
> I have a fair amount of technical skills but am COMPLETELY in the dark about
> this subject. I have been to numerous websites even but have barely
> understood one word.
>
> I want to build my own FM (or MW) transmitter!!!!!!!!!!! Does anyone have a clue how or
> if it is possible to do such a thing??????? Transmitters cost up to R1000
> 000 here. NO way!!!
>
> PLEEEEEASE help. Send mail to madjon@rmr.ru.ac.za
>
> byeeeee
>
> --
> ANSI standard disclaimer.

254. Re: Beer?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-07 00:00:00 UTC
From: Jonesy <jonz@rmi.nospam.net>
Message-ID: <7jgrbm$35d$1@news1.rmi.net>
Source record: 69627

spinaldoc@earthlink.net wrote:
: Hey, I thought this was the newsgroup for home made beer recipes?
: What happened?

The internet term is "Thread Drift".

Jonesy W3DHJ
--
Gunnison, Colorado
207 days to go until the Year 2000 -- So what!
573 days to go until the 3rd Millennium of the C.E.

255. News Group Name Change???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-07 00:00:00 UTC
From: "David P (D)" <pickards@SPAMBLOCKzen.co.uk>
Message-ID: <YfT63.38637$pl3.33026@newreader.ukcore.bt.net>
Source record: 69628

Hi,
I've been thinking, why don't the powers that be,l et us change the
newsgroup name to> .homebrewED

???

David

256. Need info or manual for Tubetester LTC-906A

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-07 00:00:00 UTC
From: kurt.brandstetter@teleweb.at
Message-ID: <MPG.11c61d10d37e810c989686@news.teleweb.at>
Source record: 69629
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I am looking for a copy of operating instructions and (or) a copy of a
manual of the LTC-906A Transistor Checker. Any info about this one ?
Manufacturer seems to be Leader. Please reply to my email address at
kurt.brandstetter@teleweb.at

Thanks. Kurt.
OE1002419
--
end

73's de OE 1002419
Kurt from Vienna Austria
HomePage updated with new Pics (Eddystone, 75S-2)
****
Bye for now.
****
Email to kurt.brandstetter@teleweb.at
If this adress is blocked use: oe1002419@mail.yahoo.com
HomePage: http://members.teleweb.at/kurt.brandstetter/
Please visit my page!

257. REQ: Subaudible Tone Retrofit for Older 2m FM Gear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-07 00:00:00 UTC
From: jvm@inmind.com
Message-ID: <375c07b1.22286044@news.inmind.net>
Source record: 69630

Hi Folks !

Anybody have occasion to brew a subaudible tone generator
for use with older FM rigs, now that so many repeaters are
tone (CTCSS) access ?

Thanks for any leads !

73,

Jim Morgan W4QE
jvm@inmind.com

258. Re: Transistor Regen

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-07 00:00:00 UTC
From: Mark Nelson <mnelson@pedinc.com>
Message-ID: <375C1248.9DB963BB@pedinc.com>
Source record: 69631

Kurt Arico wrote:

> Does anyone know where I can find some circuits for a 1 transistor regen
> receiver? I modified a tube circuit that used a 30 and was dissapointed in
> the results.

I remember an article in 73 some years ago by someone who had followed that path, with similar results, and so set out to come up with a good design. I think he ended up concluding that a FET was a better choice for the "traditional" regen designs, but offered some workable circuits for BJTs. Substituting a 2N3819 for almost any early triode has often worked for me.

--
Mark Nelson

A collector of TV signal boosters and UHF converters -- God help me!
http://www.geocities.com/TelevisionCity/Set/6312/

259. WTB Collins 455khz mechanical filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-08 00:00:00 UTC
From: leroy Ritta <nextgen@nextcentury.com.au>
Message-ID: <m1S63.6$cN6.143@news.syd.ip.net.au>
Source record: 69503

I am looking for the square Collins mechanical filter 455KHZ 2.1khz NOT
the round type
and these bandwidths 4 6 8 16khz also USB and LSB filters if you have one
for sale or know
where I can get on please Hollar! or email nextgen@nextcentury.com.au
Leroy.

260. FS VHF ANTENNAS! CHEAP!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-08 00:00:00 UTC
From: n8wwm@aol.com
Message-ID: <19990607203219.26257.00001304@ng-fm1.aol.com>
Source record: 69504

I custom build <1 at a time> some darn nice 2 meter antennas!

3 EL Yagi-30.00 These are all aluminum, gamma fed, nice looking and
working
yagis...The Jpole is all aluminum, goes together
in 2 shakes,
4 EL Yagi-37.00 and is 3/4 wavelength long. These are excellent antennas,

and have sold out at local fests and club
meetings each
5 EL Yagi- 43.00 time I bring 'em.

Jpole<3/4 wave length>-23.00

Each antenna comes with an instruction sheet and all hardware to have it up and running in minutes. The yagis have gamma rod assembled and attached to the driven element. The Jpoles come with pre-drilled set points for tuning at 3 points in the band.

I am not some web scammer, I just like building antennas. You can reach me by this email address, by my call book address, or by sending a note to my call sign at PO Box 2189 Schiller Park, Il 60176.
Chicago area hams may arrange for local pickup.
SHIPPING IS $8.50, regardless of antenna. I will ship 2 of any one for $11.00.

INCLUDE YOUR EMAIL ADDRESS IF YOU ORDER BY MAIL...Checks or Money order payable to Doug Adair only...this is not a big business...I am just having fun and helping new hams not GET RIPPED OFF!

Thanks guys...73 and CU on 6 METERS!!!!!!!!!!!!

261. CD Servicing Convention Reminder.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-08 00:00:00 UTC
From: Max Harding <mgh@eisa.net.au>
Message-ID: <7jhomaqhq1@news.eisa.net.au>
Source record: 69505
Cross-posted to: aus.electronics,aus.radio.amateur.digital,aus.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,sci.electronics.basics,sci.electronics.equipment,sci.electronics.misc,sci.electronics.repair

G'day all Australian Tv / Video techs.Are you not as sharp on servicing
CD's and DVD's and ROM drives as you would like to be. Then come along to
the 1st CD convention and polish your skills.
We will be instructed by Mr Max Pisano [ex R.M.I.T Lecturer]

The date is Wednesday July 7th 1999.and bookings close 11th June 1999 this
coming Friday.

For further information have a look at Max's Web site.
http://cdservicing.find.com
or call him on 613-9384-1951 or email him at maxp@primus.com.au

THIS SEMINAR IS INVALUABLE TRAINING FOR ANY SERVICE PERSON.

262. Re: wanted: Practical Plans for a 2m Base Rig

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-08 00:00:00 UTC
From: "David P (D)" <pickards@SPAMBLOCKzen.co.uk>
Message-ID: <LRZ63.38868$pl3.38208@newreader.ukcore.bt.net>
Source record: 69506

Yeah thanks.
Urm, can someone scan that for me?

I don't have the dough to buy that book, and my local library doesn't have
it...
Please post here before, so I don't get, like 3 emails with attachments!!!
73s in advance ;o)
David P
Eamon Skelton wrote in message <7jhk54ieh1@scotty.tinet.ie>...
>
>David P (D) wrote in message ...
>>Hi people,
>> I'm soon going to be taking my Novice course (UK). I'd like to make
my
>>self a 2m base rig...any ideas?
>>It must be synthesized and NOT xtal. It needs to have frequency
stabillity
>>'cos in the UK we have 12.5khz spacing.
>>
>>Thanks in advance
>>David P
>
>
>Most synthesized rigs are xtal controlled. There's a design for a 2M
>synthesized FM transceiver in the VHF/UHF Manual, RSGB.
>
>73, Ed.
>
>
>--
> Eamon 'Ed' Skelton EI9GQ, Cork, Ireland
>
> ANTI SPAM RETURN ADDRESS
>
> EI9GQ home brew radio page
> http://www.qsl.net/ei9gq
>
>
>

263. Re: REQ: Subaudible Tone Retrofit for Older 2m FM Gear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-08 00:00:00 UTC
From: Jonesy <jonz@rmi.nospam.net>
Message-ID: <7jhqvb$m04$1@news1.rmi.net>
Source record: 69507

Jim Morgan <jvm@inmind.com> wrote:

: Anybody have occasion to brew a subaudible tone generator
: for use with older FM rigs, now that so many repeaters are
: tone (CTCSS) access ?

I feel your pain! :-)

Check out the wee-little tone encoder that Communication Specialists
sells. It goes for about $29 or so. I've stuck these in an ol'
Azden PCS-4000, an ancient IC-22A, and others.

gl es 73
Jonesy W3DHJ

--
Marvin L. Jones jonz<AT>rmi.net
Gunnison, Colorado
207 days to go until the Year 2000 -- So what!
573 days to go until the 3rd Millennium of the C.E.

264. Re: Transistor Regen

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-08 00:00:00 UTC
From: Jonesy <jonz@rmi.nospam.net>
Message-ID: <7jhr4r$m04$2@news1.rmi.net>
Source record: 69508

Mark Nelson <mnelson@pedinc.com> wrote:
: Kurt Arico wrote:

:> Does anyone know where I can find some circuits for a 1 transistor regen
:> receiver? I modified a tube circuit that used a 30 and was dissapointed in
:> the results.

: I remember an article in 73 some years ago by someone who had followed that
: path, with similar results, and so set out to come up with a good design. I
: think he ended up concluding that a FET was a better choice for the
: "traditional" regen designs, but offered some workable circuits for BJTs.
: Substituting a 2N3819 for almost any early triode has often worked for me.

There was an article about a New And Improved transistor/FET regen
rcvr in "RF Magazine" within the last year or so. I think I tore
out the article to save for a rainy day project -- but I have
NO IDEA where it is at this moment.

73
Jonesy W3DHJ

--
SK

--
Marvin L. Jones jonz<AT>rmi.net
Gunnison, Colorado
207 days to go until the Year 2000 -- So what!
573 days to go until the 3rd Millennium of the C.E.

265. HELP WITH A QUESTION ABOUT OIL FILLED CAPS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-08 00:00:00 UTC
From: ts950sdx@aol.com
Message-ID: <19990608002052.24743.00002155@ng-ce1.aol.com>
Source record: 69509

hello
im wanting to put a oil filled cap in a HB amp and the caps are to tall to
stand up and mount

can you run a oil filled cap on its side

these are brand new caps 32 at 4000 volts want to run two for 16 at 8000

but just not sure if they will run side ways????????

thanks for any replys
joe

266. Re: HELP WITH A QUESTION ABOUT OIL FILLED CAPS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-08 00:00:00 UTC
From: qroking@aol.com
Message-ID: <19990608011831.28533.00001884@ng-ff1.aol.com>
Source record: 69510

This ones for you Clifton too......Hi Joe, dont see any problem with running them sideways, they should be sealed like a drum so I think it will be fine to run them that way. Lou

267. Re: ? registration of double sided boards

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-08 00:00:00 UTC
From: Don <bjmcpher@usit.net>
Message-ID: <375CAC2E.98C4CB12@usit.net>
Source record: 69511

Thanks, Jim

One of the problems with this presnpeel is that its pretty much opaque, so you cant really see through the film to see where a pad hole is alligned with a drilled hole in the board. I think what i may try is to iron on one side of the board, and pick a few pads and drill some tiny holes (about the size of a straight pin or needle maybe. Then poke some holes in the film to be used on the other side and use the pins to allign it. Maybe I can use a cardboard box or something to pin the whole mess on, then iron it just enough so that the stuff is sticking in at least a few places, then remove the pins and iron as per usual. I dont know how it will turn out. I may move to photoresist when my pnp runs out if it doesnt do well.

Don

CooperJim wrote:
>
> Try drilling the board first, then aligning each side of the board with the
> holes. Then etch the board. This was you can see any "runout" and get the
> best fit.
>
> I havent tried this with the press n peel, but see no reason it should not
> work. Make sure the holes have no burrs using a carbide drill.
>
> 73
> Jim Cooper NE6O
> CooperJim@aol.com>
> >Hi
> >
> >I'm getting ready to make my first dbl sided board using toner transfer
> >(press n peel). Does anyone have any tried and true methods for getting
> >the two sides to be alligned with each other? Anything I SHOULDNT try?
> >And I'm also interested in the same thing as applicable to positive
> >pre-sensitized boards, as I may try them when my pnp stuff runs out.
> >
> >Thanks,
> >
> >Don

268. Re: Radio formulas - web calculators

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-08 00:00:00 UTC
From: Harry Lythall SM0VPO <harryvpo@hotmail.com>
Message-ID: <01beb179$f8ebba70$8734d693@e0060b0eb282a>
Source record: 69512
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave,uk.radio.amateur,uk.rec.radio.cb

W1PEV <paulvanasse@tp.net> wrote>
> Im glad to see that your dedication to the amateur hobby hasn't waned.

God No!! It is my job and my hobby. I love radio construction. Funny thing, I design and build a project, make a couple of prototypes to get it 100%, then it goes in a drawer with the rest and I start on the next project. I never seem to have the time to actualy get around to using my radio equipment, I am too hapy building it!

Harry

269. Mic pre-amp/EQ schematics wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-08 00:00:00 UTC
From: tim@timwellman.com
Message-ID: <375dba27.56535983@news.zoomnet.net>
Source record: 69513

Have looked all over the net and various books and can't find a decent mic pre-amp with a built in EQ (even 2 band OK). Does anyone have schematic for this? (Should be relatively easy... I can built a preamp with a 741 op-amp, though this might be too noisy, and I don't know how to add the EQ sections.. I saw schematics for this once, but the local library recently took all the larger ham radio books out of circulation... said they were taking up too much shelf space)

Anyway, if you can help, please email me:
tim@timwellman.com

Thanks in advance!
73 de KG8RJ

270. Re: CD Servicing Convention Reminder.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-08 00:00:00 UTC
From: Allan <allan01@optusnet.com.au>
Message-ID: <7jimd4$2ju$1@news1.mpx.com.au>
Source record: 69514
Cross-posted to: aus.electronics,aus.radio.amateur.digital,aus.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,sci.electronics.basics,sci.electronics.equipment,sci.electronics.misc,sci.electronics.repair

Hi. The link does not work.. and as this is a AUSTRALIAN Newsgroup, what
STATE are you in??

Max Harding <mgh@eisa.net.au> wrote in message
news:7jhomaqhq1@news.eisa.net.au...
> G'day all Australian Tv / Video techs.Are you not as sharp on servicing
> CD's and DVD's and ROM drives as you would like to be. Then come along to
> the 1st CD convention and polish your skills.
> We will be instructed by Mr Max Pisano [ex R.M.I.T Lecturer]
>
> The date is Wednesday July 7th 1999.and bookings close 11th June 1999 this
> coming Friday.
>
> For further information have a look at Max's Web site.
> http://cdservicing.find.com
> or call him on 613-9384-1951 or email him at maxp@primus.com.au
>
>
> THIS SEMINAR IS INVALUABLE TRAINING FOR ANY SERVICE PERSON.
>
>

271. Re: CD Servicing Convention Reminder.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-08 00:00:00 UTC
From: Ross <nross@vic.bigpond.net.au>
Message-ID: <7jinm1$58o$1@m2.c2.telstra-mm.net.au>
Source record: 69515
Cross-posted to: aus.electronics,aus.radio.amateur.digital,aus.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,sci.electronics.basics,sci.electronics.equipment,sci.electronics.misc,sci.electronics.repair

Allan wrote in message <7jimd4$2ju$1@news1.mpx.com.au>...
>Hi. The link does not work.. and as this is a AUSTRALIAN Newsgroup, what
>STATE are you in??
>
>>> For further information have a look at Max's Web site.
>> http://cdservicing.find.com
>> or call him on 613-9384-1951 or email him at maxp@primus.com.au
>>

Just a rough idea, Id reckon the fact that he is ex RMIT, has an aussie email address and a Melbourne area code phone number would possibly locate him in Melbourne Australia.

Of course Ive been wrong before.

272. Re: Best QRP kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-08 00:00:00 UTC
From: Steve Ellington N4LQ <n4lq@iglou.com>
Message-ID: <375cf0dc.0@news.iglou.com>
Source record: 69516

Drake QRP Kits????? Must be one of the best kept secrets!

--
Steve N4LQ
Butch Magee <butchkay@netdoor.com> wrote in message
news:375C5ACC.52F1E6F8@netdoor.com...
> Please don't overlook Drake. Drake has some kick ass stuff, I built
their 40
> mtr qrp transceiver. Nice!
>
> Butch KF5DE
>
> Gail Perkins wrote:
>
> > I am Interested in building one of the commercially available qrp
xceivers
> > that are available and am soliciting comments on which is the best for
the
> > money. Am interested in single-band type with the best receiver
possible. Am
> > interested in portability like camping, etc. Any comments welcome. I
have
> > info on the following: MFJ, Wilderness Radio, Small Wonder Labs, etc.
Any
> > comments or suggestions are most welcome.
> > email to: ka7gqx@hotmail.com
> >
> > 73,
> >
> > Kevin
> > KA7GQX
>

273. Re: For Sale:Icom 706 & Ameritron Als 500 amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-08 00:00:00 UTC
From: cashieu@my-deja.com
Message-ID: <7jjcvmnti1@nnrp1.deja.com>
Source record: 69517
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Has this equipment been sold?

Thanks.

In article <MaY63.558$5V5.32240@dfiatx1-
snr1.gtei.net>,
"Hal" <wd4mda@gte.net> wrote:
> this is my personal rig in my car. The Icom was
purchased used from a
> ham in our repeater club. The Ameritron was
purchased brand new in the
> box. The reason for selling, I need cash to
do another deal I am
> interested in. The $950.00 must be in a US
Postal money order. and must
> be sent to arrive by June 10, 1999. I have a
dead line to meet on this
> deal.
> Its a great set up. You can e-mail or call me
at (813) 685-9599
> I am good in the call book or CD ROM.
> thanks
> 73 Hal
> wd4mda@gte.net
>
> --
> 73 Hal
> wd4mda@gte.net
>
>

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

274. Help! RCA WV-98B calibration.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-08 00:00:00 UTC
From: Pinky & The Brain <odin@webspan.net>
Message-ID: <928853383.510.55@news.remarQ.com>
Source record: 69518
Cross-posted to:
rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hi All,
Looking for instruction/users manual (copy?) for an RCA WV-98B
Senior Voltohmyst VTVM. Unit needs calibration and while procedure seems
pretty straightforward, I am a bit unclear on the setting for a pot marked
"AC-Z". Any help greatly appreciated & I will gladly pay any resonable price
for the manual or a copy.

Thanks!

Steve

275. Re: Beer?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-08 00:00:00 UTC
From: trum@NOSPAMlysator.liu.se
Message-ID: <375D4956.6555@NOSPAMlysator.liu.se>
Source record: 69519

Try rec.crafts.brewing
/Tom

TUBECNTRAL wrote:
>
> >
> >Hey, I thought this was the newsgroup for home made beer recipes?
> >What happened?
>
> It is... all us drunks play with radio's too!
>
> ;o) Joe
> Thank you,
> Joe Pratt, Tubecntral@aol.com
>

276. Parts & tubes for sale.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-08 00:00:00 UTC
From: sabbatai_zvi@hotmail.com
Message-ID: <375d434e.6486804@news.earthlink.net>
Source record: 69520
Cross-posted to:
rec.antiques.radio+phono,rec.radio.swap,rec.audio.tubes,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

For sale (plus shipping)

Heavy Duty Footswitch, with AC power cord and H.D.
connectors. Rated 20 Amps. Clipper 632D. Very good condition.
Will sell for $15.00

= = = = =

TUBES LOT #5 (New and used-tested mix)

807 G.E. NOS, no box $8.00
5933/807W Ruggedized 807 New in box (QTY 4) $9.50 each
807 Sylvania Used, no box (QTY 3) $ 5.00 each
807 RCA (newer logo) Used, no box (QTY 2) $4.00 each
807 RCA (older logo) Used, no box $3.00
807 Unmarked (Same style as older RCA), used, no box $3.00
(Total $75.00)
Or take all 12 of the above tubes for $59 plus shipping

= = = = =

TUBES LOT #4
4-125 Eimac Used No box $25.00
828 Power Pentode RCA Used (I have 1; and may have 2) No box $12.00
ea.
12SN7GT Sylvania New in Box $2.00
6BG6B RCA Used, no box $1.00
25L6 G.E .Used in box $3.00
5Y3GT G.E. Used in box $4.00
6W4 Tung-sol used in box $2.00
6W4 Arcturus Used in box $2.00
6W4GT Mullard Used in box $3.00
6SN7GT CBS/Hytron New in box $5.00
6JZ6 Sylvania Used in box $8.00
6SN7GT Tung solUsed in box $2.00
6SN7GT Crosley Used in box $2.00
6SN7GT RCA Used in box QTY 6 $3.00 ea.
6SL7GT RCA Used in box $3.00
6AC7 RCA used in box $2.00
6AC7 G.E. used in box (QTY 2) $2.00 ea.
6H6 Ken-Rad used in box $1.00
6DE4 Philco Used in box $1.00
6H6 RCA used no box (QTY 2) $1.00 ea.
6X5 RCA used in box $0.50

37 RCA used in box $4.00
6AX4 Sylvania New in box $2.00
OC3 / VR-105 RCA NOS in Box QTY 7 $3.00 each
OA3 / VR-75 RCA NOS in box QTY 5 $3.00 each
OA3 / VR-75 G.E. NOS in box QTY 3 $3.00 each
OA3 / VR-75 Marshall Electronics in box $4.00
3AW2 Philco Used in G.E. box $0.50

(Total over $170.00)

Take all 47 of the above tubes for only $79.00 plus shipping

= = = = =

Bud Box, diecast, 4.5" X 3.5" X 2", new, no cover plate $4.00

= = = = =

ARRL Handbooks:
1973, 1975, 1978 at $10.00 each
All in excellent shape

= = = = =

Plate variable transmitting capacitors:

0-250 pF Hammarlund transmitter plate variable, 1200V
Marvellously constructed. This is a beauty!
New in Box - $18.00

50 pF 500V Variable capacitor assembly, with link-coupled
tank circuit. 12 turns on a ceramic 1/2" form. 6" Coax link to Type N
connector. Capacitor has 3/8" bushing or screw mounted on base.
Includes
antique knob and small bakelite panel. $2.00

Automatic Brand type C6T air variable capacitor. Mounts with two
screws.
30 pF at 200V. WIth screw slot adjust. Has silver-plated 3.5 turn coil
for
2m attached and porcelain standoff. $1.50

80 pF air variable trimmer capacitor, two screw panel mounting.
Screw-slot adjustment. Used $1.50

= = = = =

Headphones with boom microphone.
Jensen Model JMP-41
Headset Response is 20 Hz - 20 kHz
6' Cord with mini stereo plug.
Microphone is Low-Z Condenser type with 2.2 k-ohm impedance.
Response 30 Hz - 16 kHz

Durable and comfortable design with padded ear-pieces, ideal for
communications applications.

Brand new in box. White color.
Great for mobile HF or VHF operating. Think SAFETY!
Also great for extended rag-chews, contesting etc.
No PTT, but has standard connectors - 1/8" mini-style.
Will also work well with computers. Normally $29.95
New in box $20.00 plus shipping

= = = = =

Add shipping cost to all prices.

277. Crystals For Sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-08 00:00:00 UTC
From: sabbatai_zvi@hotmail.com
Message-ID: <375d4550.7000382@news.earthlink.net>
Source record: 69521
Cross-posted to:
rec.antiques.radio+phono,rec.radio.swap,rec.audio.tubes,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Crystals For sale:

1.921 MC Philco FT-241/A $5.00
7010.47 CR-1/A $4.00
7011.9 kHz CR-1/A $4.00
7119.5 kHz M-9A (3-pin) holder McCoy $5.00
7270 kHz CR-1/A $4.00

HC-6/U style
1000 kc. CR-18/U = HC-6/U $5.00
1947.8 kHz. CR-18/U $5.00
1952.22 kHz. CR-18/U $5.00
3520.83 CR-18/U $4.00
3525 CR-18/U $4.00
3528.12 CR-18/U $4.00
3529.17 CR-18/U $4.00
3530.21 CR-18/U $4.00
3531.25 CR-18/u $4.00
3579.545 CR-18/U (QTY 2) $1.00 each
3526 CR-18/U $4.00
3865.83 CR-18/U $3.00
3867.50 CR-18/U $3.00

3571 TCXO short leads $1.00
3640 HC-17/U wire leads $4.00

29100 CR-18/U $5.00 (10m AM Frequency!!!!!)

4.194 MHz HC-49/U(?) mini w/ wire leads $2.00
7.15909 MHz HC-49/U(?) mini w/ wire leads (QTY 7) $1.00 each

Add shipping cost to all orders.

More crystals for sale at:
http://home.earthlink.net/~af4k/trade.htm

278. Crystal controlled super-regen RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-08 00:00:00 UTC
From: 7g4 <7g4@iname.com>
Message-ID: <7jjhjt$hr8$1@mail.nursat.net>
Source record: 69522
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hi folks,
I need a help! During many years I try to find a circuit of crystal controlled super-regenerative transistor RX. Author of this amazing design is Nat Bradley ZL3VN. My source of information was "Electronics & Wireless World" December 1987 p.1275. I would be obliged for any information concerning this type of receivers, including URLs etc. Many times I try to send a letter to ZL3VN, but without any success...
My best wishes,
Igor UN7GM@QSL.NET

279. wireless comm theory

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-08 00:00:00 UTC
From: jcheah@my-deja.com
Message-ID: <7jjpg3tec1@nnrp1.deja.com>
Source record: 69523

Please visit www.jcheahtechtalk.com

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

280. ARRL JUNE VHF CONTEST

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-08 00:00:00 UTC
From: Jim <unique1@epix.net>
Message-ID: <375D97DC.2003B77B@epix.net>
Source record: 69524
Cross-posted to: rec.ham-radio,rec.ham-radio.misc,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Contest period is Jun 12-13(2PM east Sat through 11PM east Sun)

The Murgas ARC will be operating limited multi(6m, 2m, 220, 440) during the ARRL June VHF contest using the callsign K3YTL. We will be running all 4 bands on FM, SSB, and CW from our FN11uh location(northeast PA.) The exchange is a simple call and grid square(see http://www.arrl.org/locate/gridinfo.html to find your square if uncertain.)

2 meter FM will start at 5PM Sat on 146.49 MHz and146.55. Both freqs will be operated on at the top of every hour. Dial around since we might be forced to move if band is crowded. We hear lots of people even though you may not. All other FM should be continuous. CALL US ON 52.525, 223.5 AND 446!

SSB/CW activity should be audible all of the time. Just work us. Answer our CQ's.

All of our stations will be connected, so when you work us on one band simply ask for a schedule on a different band and you can score another contact immediately. Simple!

We thank everyone who participates in this wonderful event. Good luck and happy hunting. CQ contest!

281. Re: For Sale:Icom 706 & Ameritron Als 500 amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-08 00:00:00 UTC
From: w4pqwhs@aol.com
Message-ID: <19990608182112.29267.00001829@ng-fl1.aol.com>
Source record: 69525

I doubt if you hear from him ,I know I didn,t..good luck W4PQW

282. Re: Mic pre-amp/EQ schematics wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-08 00:00:00 UTC
From: Tom Bruhns <tomb@lsid.hp.com>
Message-ID: <375D9BBE.F2B1E76F@lsid.hp.com>
Source record: 69526

I'm not sure if Analog Devices has put older issues of Analog Dialogue online (yet), but they have started distributing it that way. It's a good place to look, for sure. They've had preamps and equalizer circuits discussed before there. I really think you don't want to try to use an LM741 in this application. At least use an NE5532, which is reasonably low noise and good audio quality. If you are using a low impedance mic, then an Analog Devices AD797 would be a good choice: very low voltage noise (good for low impedance, low level sources), very low distortion. I think some of the National Semiconductor op amp data sheets have diagrams for adjustable multi-band equalizers.

Cheers,
Tom

Tim Wellman wrote:
>
> Have looked all over the net and various books and can't find a decent
> mic pre-amp with a built in EQ (even 2 band OK). Does anyone have
> schematic for this? (Should be relatively easy... I can built a
> preamp with a 741 op-amp, though this might be too noisy, and I don't
> know how to add the EQ sections.. I saw schematics for this once, but
> the local library recently took all the larger ham radio books out of
> circulation... said they were taking up too much shelf space)
>
> Anyway, if you can help, please email me:
> tim@timwellman.com
>
> Thanks in advance!
> 73 de KG8RJ

283. Re: Homebrew power supply pass transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-08 00:00:00 UTC
From: Tom Bruhns <tomb@lsid.hp.com>
Message-ID: <375D9F33.D4364BEC@lsid.hp.com>
Source record: 69527

I thought Dave Martindale's reply was right on. 0.1 ohm emitter ballast resistors are going to do a lot better than 0.01 ohms. Even 0.05 ohms could work, with some care. I'd say that 0.5 ohms for 2N3055's is _probably_ overkill and would waste quite a bit of power at 5 amps, which is a reasonable max for the 2N3055. -- A good way to pick the emitter ballast resistor is to get about 0.6 volts drop at peak current. Then you can easily implement current limiting by just using that ballast resistor drop to turn on a transistor which sucks base drive away from the transistor that drives the output stage. You can also modify that to get foldback limiting if you wish. Look at some typical designs to be sure you get things right...you need a resistor to limit the base current on that sensing transistor, for example.

An issue that I didn't notice Dave or the others addressing is "second breakdown" in bipolar power transistors. If the devices have much voltage drop, they are subject to catastrophic failure at well below their maximum power dissipation. "Much" can be as little as ten or fifteen volts, though the problem is much worse at higher voltages. See the data sheets for the type of device you are using, and be sure they are operating within each and every spec: power dissipation versus case temperature, max current, max voltage, the second-breakdown curves. Even then, eventually thermal cycling will kill them: for maximum life, keep the number of thermal cycles and the delta-temp for a cycle low.

Cheers,
Tom

denton sprague wrote:
>
> Hi all, I have a homebrew power supply that I have developed for my
> stations power supply. I am currently using 2n3055's (6 of them) for
> pass transistors, but they tend to have a short longivity peroid. I can
> order a match set from the local electronics emporium, but am wondering
> if I should invest in something a little more stouter.
> Any recommendations? I am using .01 ohm emitter resistors to balance the
> load.

284. Re: WTB Collins 455khz mechanical filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-08 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.990608180138.28332D-100000@oso.slonet.org>
Source record: 69528

Have you found the required filters? I have a few. Cliff K7RR

On Tue, 8 Jun 1999, leroy Ritta wrote:

> I am looking for the square Collins mechanical filter 455KHZ 2.1khz NOT
> the round type
> and these bandwidths 4 6 8 16khz also USB and LSB filters if you have one
> for sale or know
> where I can get on please Hollar! or email nextgen@nextcentury.com.au
> Leroy.
>
>
>
>
>
>

285. Transistor Regen

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-08 00:00:00 UTC
From: Kurt Arico <karico@jps.net>
Message-ID: <375e512b@news1.jps.net>
Source record: 69529

I want to thank everyone for their response. I may be getting into a dx contest that is limited to a 1 transistor regen circuit. The FET looks like the best bet, now I have to work on a very sensitive tuner.

286. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-08 00:00:00 UTC
From: Trevor Harris <wb6sub@earthlink.net>
Message-ID: <375DF874.E8A6BB3@earthlink.net>
Source record: 69530
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

the military still teaches it. The reason that they still want to teach it is that in a nuclear wasteland, it is theorized that CW will be the only method that will work. If you don't hear the dih you will hear the static "beat" silent. I hope this make sense. 73's brother
Trevor Harris, Former SUB Radioman

OBI-WAN PEROGI wrote:

> Woofle wrote:
> >
> > On Mon, 26 Apr 1999 18:22:42 -0400, "The Conqueror"
> > <joetheripper@hotmail.com> wrote:
> >
> > >I was just wondering why they still keep the Morse code testing requirements
> > >if the military doesn't use it anymore and telegraphs are not that common. I
> > >think because they stopped it for the marines, there's no point in using it
> > >in ham radio either. And if you want to say it is for security, you are not
> > >allowed to use codes when intended to obscure meaning.
> > >
> > >-Dan K3DRQ
> > >
> > >k3drq@qsl.net
> > >
> > >
> >
> > Now, LOOK. Haven't you watched the movie Independence Day?
> > It was Morse Code that saved the world! :-)
>
> WWhere in the movie is this???? It is becasue the yfigured out the
> code; and it wasn't Morse Code either.
> >
> > >
> > >
>
> --
> REMEMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
> ESPECIALLY WHEN YOU'RE ON A DATE. BURP!!!!

287. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-08 00:00:00 UTC
From: Wooka <hass@aznet.net>
Message-ID: <375E0B07.12C8DDD3@aznet.net>
Source record: 69531
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Trevor Harris wrote:

> the military still teaches it. The reason that they still want to teach it is that
> in a nuclear wasteland, it is theorized that CW will be the only method that will
> work. If you don't hear the dih you will hear the static "beat" silent. I hope
> this make sense. 73's brother
> Trevor Harris, Former SUB Radioman
>

Do you know any studies that point to radiation hindering radio communications?

> OBI-WAN PEROGI wrote:
>
> > Woofle wrote:
> > >
> > > On Mon, 26 Apr 1999 18:22:42 -0400, "The Conqueror"
> > > <joetheripper@hotmail.com> wrote:
> > >
> > > >I was just wondering why they still keep the Morse code testing requirements
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> > > >think because they stopped it for the marines, there's no point in using it
> > > >in ham radio either. And if you want to say it is for security, you are not
> > > >allowed to use codes when intended to obscure meaning.
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> > > >-Dan K3DRQ
> > > >
> > > >k3drq@qsl.net
> > > >
> > > >
> > > >
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> > code; and it wasn't Morse Code either.
> > >
> > > >
> > > >
> > >
> > --
> > REMEMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
> > ESPECIALLY WHEN YOU'RE ON A DATE. BURP!!!!

288. Sold: Icom 706 & Ameritron Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-09 00:00:00 UTC
From: Hal <wd4mda@gte.net>
Message-ID: <oOj73.29$E66.3370@paloalto-snr1.gtei.net>
Source record: 69432

Thanks for all the interest units are sold

--
73 Hal
wd4mda@gte.net

289. FS Coil forms

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-09 00:00:00 UTC
From: Larry Asp <larry.asp@sympatico.ca>
Message-ID: <375DD330.7878@sympatico.ca>
Source record: 69433

Coil forms are sold. My thanks to all.

290. Online Diode and Transistor Characteristics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-09 00:00:00 UTC
From: Xjshillw6ivw@earthlink.net
Message-ID: <375e0f31.3721435@news.earthlink.net>
Source record: 69434

Are there any sites that provide common diode and transistor
characteristics (1N914, 2N2222)?
thanks, Jim, jshillw6ivw@earthlink.net
Delete the X before using my e-mail address.
The X was added to stop spam.

291. Re: CD Servicing Convention Reminder.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-09 00:00:00 UTC
From: Allan <allan01@optusnet.com.au>
Message-ID: <7jlba3krk1@news1.mpx.com.au>
Source record: 69435
Cross-posted to: aus.electronics,aus.radio.amateur.digital,aus.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,sci.electronics.basics,sci.electronics.equipment,sci.electronics.misc,sci.electronics.repair

Well Ross Iam STUPID because I dont see any 03 in the Phone number! Also 613 means nothing to anyone other than someone who lives in that Area, or knows all the Prefix numbers.

Also just because he is Ex rmit, does that mean he will always live in VIC!

Its a typical "I know where I live and so should everyone else!"
Realize its the WORLD and not your Backyard you are Broadcasting to, Use an Area Code and a Location.
As I said he has posted this to all newsgroups WORLDWIDE he should have included a bit more INFO.

Allan

Ross <nross@vic.bigpond.net.au> wrote in message news:7jinm1$58o$1@m2.c2.telstra-mm.net.au...
>
> Allan wrote in message <7jimd4$2ju$1@news1.mpx.com.au>...
> >Hi. The link does not work.. and as this is a AUSTRALIAN Newsgroup, what
> >STATE are you in??
> >
> >>> For further information have a look at Max's Web site.
> >> http://cdservicing.find.com
> >> or call him on 613-9384-1951 or email him at maxp@primus.com.au
> >>
> >
> > Just a rough idea, Id reckon the fact that he is ex RMIT, has an aussie
> > email address and a Melbourne area code phone number would possibly locate
> > him in Melbourne Australia.
> >
> > Of course Ive been wrong before.
> >
> >
> >
> >

292. Re: Online Diode and Transistor Characteristics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-09 00:00:00 UTC
From: Wm Kresl <kresl@elknet.net>
Message-ID: <8DE024DEEkreslelknetnet@news.elknet.net>
Source record: 69436

[posted and mailed]

Here's a link to some common bipolar and FET
data sheets online:

http://www.ee.upenn.edu/rca/components/active/transistors.html

73,
Bill-WB9BBC

Jim Hill <Xjshillw6ivw@earthlink.net> wrote in
<375e0f31.3721435@news.earthlink.net>:

> Are there any sites that provide common diode and transistor
> characteristics (1N914, 2N2222)?
> thanks, Jim, jshillw6ivw@earthlink.net
> Delete the X before using my e-mail address.
> The X was added to stop spam.
>
>

293. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-09 00:00:00 UTC
From: Michael Young <nobody@all.org>
Message-ID: <928921845.692.49@news.remarQ.com>
Source record: 69437
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Wooka <hass@aznet.net> wrote in message
news:375E0B07.12C8DDD3@aznet.net...
>
>
> Trevor Harris wrote:
>
> > the military still teaches it. The reason that they still want to
teach it is that
> > in a nuclear wasteland, it is theorized that CW will be the only
method that will
> > work. If you don't hear the dih you will hear the static "beat"
silent. I hope
> > this make sense. 73's brother
> > Trevor Harris, Former SUB Radioman
> >
>
> Do you know any studies that point to radiation hindering radio
communications?

You're trolling, right? You're really one of the know-code crowd in
disguise, trying to discredit the movement to dummify.

Michael.

294. Re: Homebrew pwr-sup transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-09 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <375E6943.16C4@pop.valley.net>
Source record: 69438

denton sprague wrote:
>
> Hi all, I have a homebrew power supply that I have developed for my
> stations power supply. I am currently using 2n3055's (6 of them) for
> pass transistors, but they tend to have a short longivity peroid. I can
> order a match set from the local electronics emporium, but am wondering
> if I should invest in something a little more stouter.
> Any recommendations? I am using .01 ohm emitter resistors to balance the
> load.

Hello--
Tom Bruhns offers some excellent advice in another post, but be
aware that not all 2N3055s are created equal. The specs are relatively
relaxed, and some transistor manufacturers branded their "fallout"
power transistors as 2N3055s-- even though the devices featured
different
internal technologies.

For example, a triple-diffused "2N3055" would exhibit much better
HF performance (and different breakdown characteristics) than an alloy
2N3055 version.

If you can, locate some Motorola-branded 2N3715s/2N3716s, or RCA-
branded 2N3055s. Sometimes, it's useful to dissect the failed
transistors and compare the duds with a dissected known-good
device.

73,
Brad AA1IP

295. National HRO50 Manual online on The TubeBug

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-09 00:00:00 UTC
From: Erwin Cremers <cremers@antispam.knoware.nl>
Message-ID: <928937797.757571@news2.knoware.nl>
Source record: 69439
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,uk.radio.amateur

Hello group,

Please check the latest version of The TubeBug.

Now you'll find the complete manual of the National HRO 50 receiver online
for you to download in the boatanchor section of The TubeBug.
Within the next few weeks you'll also find the manuals of the Sommerkamp
FRdx
500, FTdx 500 , Siemens E 309b and several other online for you to download.

http://Come.to/TheTubeBug
http://www.knoware.nl/users/ecremers

Come and have fun,

Erwin Cremers
PE1MGR - webmaster of The Tubebug

296. Re: Transistor Regen

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-09 00:00:00 UTC
From: Jonesy <jonz@rmi.nospam.net>
Message-ID: <7jlrou$c7v$1@news1.rmi.net>
Source record: 69440

Jonesy <jonz@rmi.nospam.net> wrote:

: There was an article about a New And Improved transistor/FET regen
: rcvr in "RF Magazine" within the last year or so. I think I tore
: out the article to save for a rainy day project -- but I have
: NO IDEA where it is at this moment.

Brain burp: It was "RF Design" magazine. sri.

73
Jonesy W3DHJ

--
SK

Marvin L. Jones jonz<AT>rmi.net
Gunnison, Colorado
205 days to go until the Year 2000 -- So what!
571 days to go until the 3rd Millennium of the C.E.

297. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-09 00:00:00 UTC
From: WebMonkey <click@below.com>
Message-ID: <375E77A6.7F29@below.com>
Source record: 69441
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Michael Young wrote:
>
> Wooka <hass@aznet.net> wrote in message
> news:375E0B07.12C8DDD3@aznet.net...
> >
> >
> > Trevor Harris wrote:
> >
> > > the military still teaches it. The reason that they still want to
> teach it is that
> > > in a nuclear wasteland, it is theorized that CW will be the only
> method that will
> > > work. If you don't hear the dih you will hear the static "beat"
> silent. I hope
> > > this make sense. 73's brother
> > > Trevor Harris, Former SUB Radioman
> > >
> >
> > Do you know any studies that point to radiation hindering radio
> communications?
>
> You're trolling, right? You're really one of the know-code crowd in
> disguise, trying to discredit the movement to dummify.
>
> Michael.

anyone see the adam-12 episode where malloy got shot? his radio mic
was smashed and the only way he could communicate was to 'key' the
radio on and off. he sent a bit of morse code, was cool.

morse code is pretty cool, you don't need a radio to use it.
a mirror and sunlight works too.

anyway, i thought i might throw this in. my repeater is
voice id heavy, i was asked to add more morse code id
in the mix by my friend. after this suggestion,
i made a few rotating bulletins with morse code followed
by a voice counterpart to assist a tech ham in getting some
copy practice right from my repeater. it appears to have
helped alot. upgrade in sight =]
--
A.C. Curtis
KBï¿½WLF

53.45 and 442.45, 77.0Hz enc/dec [multi-cast repeater system]
mailto:demoman@rollanet.org
http://www.rollanet.org/~demoman

298. Re: NEWBIE - Seeking Advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-09 00:00:00 UTC
From: Tony Hirsch <thirsch@netwalk.com>
Message-ID: <375E6672.286C2D81@netwalk.com>
Source record: 69442
Cross-posted to:
rec.radio.amateur.misc,alt.tv.tech.plain-tv,rec.radio.amateur.equipment,alt.radio.digital,rec.radio.amateur.homebrew

Guys -
Would dual thread software and dual processors allow
processing and real-time collection? de W8RSH tony

Jim wrote:

> Leland C. Scott wrote in message <7hdqok$lf6@nnrp1.farm.idt.net>...
> >Alex,
> >
> >Interesting idea, however I doubt a desktop PC has the computing horsepower
> >to keep up with anything above audio frequency. Most of the DAC/ADC cards I
> >have seen only support conversion rates up to the low 10's of Khz, which
> >again limits you to audio frequency work. The fastest cards (conversion
> >rates around 100 to 500 Khz) I have seen use a buffered type of design and
> >are very expensive.
> >
>
> Here at work we are currently using a 450 MHz pentium running NT for
> developement work. This is in a VXI chassis which is designed for such
> things, unlike a PC. We also have a 20 bit 20 MHz A/D with internal DSP
> (for filtering and I/Q conversion) for collecting the data.
>
> Even with all of this we can't do real time processing, of course we are
> doing some pretty hairy stuff!!! (I programmed the DSP routines, by the
> way.)
>
> >If your needs are only in the audio range then check out Texas Instruments,
> >Motorola, Bur Brown etc. for info on their DSP evaluation boards. These
> >boards are normally complete systems with analog I/O, memory and a fast DSP
> >chip. Some of these boards can be had with a floating point DSP chip for
> >under $200 USD. You would most likely spend just as much for a PC DAC/ADC
> >card alone. In addition these evaluation boards come with manuals,
> >programming software (assembler and linker), and a RS232 port so you can
> use
> >your PC to develop/write the software on for down load to the board.
> >
>
> We are looking at using a DSP VXI board, but some of us doubt that it would
> be any faster than doing it in the main processor with software, and
> probably would be slower (clock rates are slower and you still have to
> shovel the data back and forth). Of course we are digitizing a 5 MHz
> signal, so audio on a DSP may be ok.
>

> Have you looked into using the good ol' soundblaster card?
>
> Jim
> N8EE
> DSP software engineer

299. Re: Help w/ ID of General Communication Co. R.F. Coax Switch

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-09 00:00:00 UTC
From: Pete Rimmel <k8unp@shadow.net>
Message-ID: <375E8677.8C80D81E@shadow.net>
Source record: 69443
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

My guess is that it is a device for switching in and out a phasing leg of coax for switching phasing (directions) of a pair of phased verticals. Check and see if there is continuity only between two center conductors with no power on. Then put power on and see if each of the two that were continuous are now switched to the two other connectors.

73, Pete N8PR

Dan Levin wrote:

> I recently came across a gadget that I can't use because I can't
> identify it. This thing is about 6 inches tall, and all black metal.
> On the "bottom" there are 4 numbered "N" connectors. On the side near
> the "top" there is a male brass Amphenol connector about .75" in
> diameter with 7 pins and a key. There are mounting flanges to mount
> this thing vertically, I would guess with the "N" connectors down.
>
> There is a label on the side with the following information:
>
> R.F. Coax Switch
> MFR. No. 2831-51
> Mod. No. 2LNRP1-1
> Ser. No. 15983
>
> 28 volts DC
> General Communications Co., Boston MA
>
> Naturally, there is no company of that name in Boston any more.
>
> I guess that this thing is either a double pole double throw coax relay
> with a 28 volt coil, or (more likely given 7 control pins) a 1 input
> and 3 output remote antenna switch. Perhaps U.S. military type?
>
> Anyone who can give me any information about this beast would be most
> appreciated!
>
> Thanks,
>
> ***dan
> Dan Levin, N6BZA
>
> Sent via Deja.com http://www.deja.com/
> Share what you know. Learn what you don't.

300. Prescaler Info Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-09 00:00:00 UTC
From: VINCENT COPPOLA <vcoppola@snet.net>
Message-ID: <375E8B10.70B9@snet.net>
Source record: 69444

Can anyone recommend a source of prescalers for coverage of 3 to 12 ghz?
I have seen a few NEC products like the UPB502, UPB506 but I am told
they are being obsoleted.

Thanks beforehand,
Vince

301. Re: Transistor Regen

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-09 00:00:00 UTC
From: bkizerian@my-deja.com
Message-ID: <7jm7paphj1@nnrp1.deja.com>
Source record: 69445

I can e-mail you a .pdf file of my latest effort called the ElmeRadio.
It is the simplest high performance regen circuit of which I am aware.

If you prefer, you can also view .gif files of this project at
http://www.ccm.net/~kf9li/elme/

Bruce kk7zz

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

302. Re: Homebrew power supply pass transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-09 00:00:00 UTC
From: msix@nmia.com
Message-ID: <7jmclvsfo1@hume.nmia.com>
Source record: 69446

FWIW, had pretty good luck with equalized PNP/NPNs at up
to 30A controlled by a 3-term regulator, LM317K/350K.
Seems the rules are...
1. most any 3055 and up work OK
2. about 5A per pass transistor
3. heavy pass heatsinks and fan
4. lightly heatsink regulator so will auto-shutdown before
pass transistors go. this is cut and try...
5. keep Vin to a minimum

73 - John W7ZFB
1400 Catron SE Albq, NM 87123
****
* Homebrewer since 1947 CW BoatAnchors Norcal #930 *
* BA CW freqs - 3578, 7050, 7147, 14050, 21050, 28050 *
****

303. Re: REQ: Subaudible Tone Retrofit for Older 2m FM Gear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-09 00:00:00 UTC
From: msix@nmia.com
Message-ID: <7jmcvisfo2@hume.nmia.com>
Source record: 69447

MXCOM makes a PL chip MX-315 that only needs few parts
and dip switch to program...
Don't know their web site...

73 - John W7ZFB
1400 Catron SE Albq, NM 87123
****
* Homebrewer since 1947 CW BoatAnchors Norcal #930 *
* BA CW freqs - 3578, 7050, 7147, 14050, 21050, 28050 *
****

304. uk.radio.amateur car battery as power source

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-09 00:00:00 UTC
From: Mark Barker <mark.ba@far-out.demon.co.uk>
Message-ID: <DrB2FGB18tX3EwOT@far-out.demon.co.uk>
Source record: 69448

Although a car starting battery is is not originally designed for any depth of discharge it can be economical initial purchase and possibly last as long as a deepcycle battery if treated well.

Apparantly it's the time it spends in discharged state that kills it, not the depth of discharge. Sulphation crystals and shedding whatever that is.

Anyone have practical experience of using sucessfully a car battery to run 12V powered transceivers while in a temporary location?

Is it really true a car battery never recovers from a deep (say 50%) discharge?

305. Re: Transistor Regen

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-09 00:00:00 UTC
From: Xjshillw6ivw@earthlink.net
Message-ID: <375ede0d.2783000@news.earthlink.net>
Source record: 69449

There was an excellent article published in the March, 1994 issue of Electronics Now, page 66 called The Lost Art of Regeneration by Charles Kitchin, N1TEV. He says Look again at the classic regenerative receivers and their importance in radio history, and build these modernized, transistorized versions. Check your local library for back issues of this magazine.

The same article with some revisions/additions was published in the Fall, 1995 issue of Communications Quarterly, page 7. If you are not familiar with this magazine, I consider it to be the current version of Ham Radio magazine, with more emphasis on high powered technical articles than QST, CQ, etc. Let me know if you don't have access to this article.

Good operating regenerative receivers are tricky to build. Many people, including myself, have not built one scratch that we were completely happy with. I had a noisy pot in my SW-3, and after replacing it, the receiver "blipped" into regeneration instead of occurring smoothly. Since I used an Allen Bradley pot and the receiver worked fine before, I moved some of the wires. It worked fine again, but I couldn't see why the slight change in position of one of the wires did the job.

There's a reflector where the subject of regenerative receivers (usually tube type) occurs frequently. It is "Glowbugs". Copied from the list:
To SUBSCRIBE to the list, post a message to this email address:

majordomo@piobaire.mines.uidaho.edu

In the BODY of the message, put ONLY these words:

subscribe glowbugs

73's Jim jshillw6ivw@earthlink.net

On Mon, 07 Jun 1999 20:29:43 -0400, "Paul R. Bennett"
<rffox@alltel.net> wrote:

>Also, check QST... It was not a one transistor job, but it was fairly simple.
>It was back about 2-3 years ago as I recall.
>Paul Bennett N4EGO
>
>Mark Nelson wrote:
>
>> Kurt Arico wrote:
>>

>> > Does anyone know where I can find some circuits for a 1 transistor regen
>> > receiver? I modified a tube circuit that used a 30 and was dissapointed in
>> > the results.
>>
>> I remember an article in 73 some years ago by someone who had followed that
>> path, with similar results, and so set out to come up with a good design. I
>> think he ended up concluding that a FET was a better choice for the
>> "traditional" regen designs, but offered some workable circuits for BJTs.
>> Substituting a 2N3819 for almost any early triode has often worked for me.
>>
>> --
>> Mark Nelson
>>
>> A collector of TV signal boosters and UHF converters -- God help me!
>> http://www.geocities.com/TelevisionCity/Set/6312/
>

Delete the X before using my e-mail address.
The X was added to stop spam.

306. Painting Aluminum

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-09 00:00:00 UTC
From: Henry Knoll <knoll003@tc.umn.edu>
Message-ID: <375EF2DA.6269@tc.umn.edu>
Source record: 69450

Anyone have any good suggestions on painting anodized aluminum.

Thanks

Henry WA0GOZ

307. Using a CB as a 10m reciever

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-09 00:00:00 UTC
From: tatasadasayago <Jcrosley@mocc.com>
Message-ID: <375EF74A.2368ECFF@mocc.com>
Source record: 69451

Hello all. I have a pile of CB radios that I have collected over the
years and while looking at them today I had an idea:
I like to run SSB on 10m and usually don't monitor the band too often.
I am thinking of modifying my Hygain VII to recieve in the 28Mhz area to
use as a monitor. Any ideas?
I fiddled with adding a varcap but was only able to drag the thing off a
few hz.
I assume I need to change the IF crystal to something lower.....
Any help would be appreciated by this wanna-be
Jim
KY7DX

308. Re: Mic pre-amp/EQ schematics wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-09 00:00:00 UTC
From: Tom Bruhns <tomb@lsid.hp.com>
Message-ID: <375EFBE6.FAD8FE8E@lsid.hp.com>
Source record: 69452

Yesterday I wrote:
>

> I think some of the National Semiconductor op amp data
> sheets have diagrams for adjustable multi-band equalizers.

Well, it's not as common as I thought. But there's a three-band tone control in the TL082 and LF353 data sheets, and an active tone control (bass and trebel) in the LM148/149/248/348/349 data sheet.

309. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-09 00:00:00 UTC
From: Wooka <hass@aznet.net>
Message-ID: <375EFD8B.935BB704@aznet.net>
Source record: 69453
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Michael Young wrote:

> Wooka <hass@aznet.net> wrote in message
> news:375E0B07.12C8DDD3@aznet.net...
> >
> >
> > Trevor Harris wrote:
> >
> > > the military still teaches it. The reason that they still want to
> teach it is that
> > > in a nuclear wasteland, it is theorized that CW will be the only
> method that will
> > > work. If you don't hear the dih you will hear the static "beat"
> silent. I hope
> > > this make sense. 73's brother
> > > Trevor Harris, Former SUB Radioman
> > >
> >
> > Do you know any studies that point to radiation hindering radio
> communications?
>
> You're trolling, right? You're really one of the know-code crowd in
> disguise, trying to discredit the movement to dummify.
>
> Michael.

Actually Mr. Young, I'm opposed to internationally mandated code testing. Just go look up that
statement that the FCC made that says the treaty does not specify what speed you need to learn
the code at. You need to know the code, but not the speed at which it is sent. I gathered this information from http://www.arrl.org/news/restructuring/98-143/nprm.html.

310. P.O.W. "tap" code compared to Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-09 00:00:00 UTC
From: Thorvaldt <Thorvaldt@apexmail.com>
Message-ID: <7jndp3$hsu@newsops.execpc.com>
Source record: 69454

Out of curiosity, when P.O.W.'s use tap signals
how do you tell a dit from a dah??

Thor

311. Yaesu FT-50 MODS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-09 00:00:00 UTC
From: JoeP <jcpope@hotmail.com>
Message-ID: <7jnaec$4lu@enews1.newsguy.com>
Source record: 69455
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I was wondering if anyone has successfully performed the extended receive (and/or freeband/mars/cap) mod on an ft50rd that has a serial number beginning with 8H? I'm assuming that it still works for later models. Most of the information I've read on the subject is a little dated. Please let me know, if anyone has had problems, I'd hate to ruin a perfectly good radio.
Thanks,
Joe

312. 2M Bandpass filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-09 00:00:00 UTC
From: JoeP <jcpope@hotmail.com>
Message-ID: <7jnagr$4nf@enews1.newsguy.com>
Source record: 69456

Does anyone have a good (and cheap) bandpass filter design for the 2 meter band?

Thanks,
Joe

313. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-09 00:00:00 UTC
From: kh2d@my-deja.com
Message-ID: <7jngic$u9d$1@brokaw.wa.com>
Source record: 69457
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Wooka <hass@aznet.net> wrote:

> Actually Mr. Young, I'm opposed to internationally mandated code testing.

Actually, Mr. Wookie, I'm opposed to reading your oppositions to Morse code testing in the DX newsgroup and a half dozen other unrealated newsgroups. If you can't respect Usenet's structure, don't expect everybody else to respect your opinions......

REC.RADIO.AMATEUR.POLICY was created specifically for your oppositions. Go use it.

73, Jim KH2D

314. 11 Meter Direction Finding Loop Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-10 00:00:00 UTC
From: TLNixon@revealed.net
Message-ID: <3760023f.22603909@news.revealed.net>
Source record: 69382

Does anyone have an old aluminum 11 meter (CB) Direction finding Loop Antenna, or the plans of how to build one? I would like to be able to make one. Although I've seen several of them, and remember that there is a trimmer capacitor at the top of the loop which can be adjusted, I cannot forthe life of me remember whether one or both sides of the coax was connected to the ends of the loop. I also need the loop diameter.

Terry-WB0VQP

315. Re: Homebrew power supply pass transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-10 00:00:00 UTC
From: davem@groucho.cs.ubc.ca
Message-ID: <7jp4co$132@groucho.cs.ubc.ca>
Source record: 69383

mcdermot@NOSPAM.aud.alcatel.com writes:
>I'm more familiar with a term "secondary breakdown" in power transistors.
>It's an effect when the collector voltage is too high, and the collector
>leakage avalanches
>into the base, thus turning the transistor fully on in the absence of
>significant
>base bias. To a first order, it's not a termally-induced event.

I looked in Horowitz and Hill, which I should have done in the first place.
They explain second breakdown and safe operating area quite well.

Briefly, bipolar transistors have a positive temperature coefficient
for collector current at a fixed base-emitter voltage. When you
parallel several transistors in high-current applications, this can
result in one transistor "hogging" most of the current and destroying
itself. One transistor starts out taking a bit more current, so it gets
hotter, which causes it to draw an even larger portion of the current,
so it gets hotter yet, and so on. The fix with multiple transistors
is to use emitter resistors, so increased current reduces the base-emitter
voltage and all transistors share almost equally.

The same current hogging can happen *within* a single transistor - one
area gets hotter than others, draws more than its share of current, and
destroys itself. The problem is reduced with pulse loads, since there
isn't enough time for the thermal effects to occur. To avoid second
breakdown, the transistor voltage and current have to be limited
to values where there isn't enough power available to create this
localized thermal feedback problem.

Note that this can happen even when the current is below the maximum
rated current and the voltage is below the maximum rated voltage (so no
avalanche leakage) and the power dissipation is below the rated limit.

FETs have a negative temperature coefficient, and so they automatically
share current evenly - hot spots cause *reduced* current, which reduces
heat. So no emitter resistors are needed when paralleling multiple
transistors, and there are no "second breakdown" effects to worry about
within a single transistor. The operating limits are set solely by
maximum current, maximum voltage, and maximum power dissipation.

Dave

316. 6 meter 1 watt PA help needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-10 00:00:00 UTC
From: milo17@aol.com
Message-ID: <19990610163645.00941.00000224@ng-ff1.aol.com>
Source record: 69384

I am in the process of converting a CB to six meters, and have run into a roadblock. I cannot get the PA stage to amplify on SSB. It works fine on AM. I am only looking for aprrox. 1 watt of output. Is there a simple ciruit, or better yet,module, that will take signal from the pre-driver and amplify it to the 1 watt level ? I seem to have good, clean signal from the pre-driver. Its downhill after that. Any ideas or comments are greatly appreciated. Thanks to the group in advance - MIke

317. Re: 407 NHz radiosonde questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-10 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.990610141121.10143A-100000@oso.slonet.org>
Source record: 69385

Any VHF or higher signal can easily use LORAN C signals on 100KHz. All
one has to do is receive 100 KHz and impress that signal as a subcarrier
on the VHF signal. The receiver simply demodulates the VHF signal,
impresses the "audio" into a LORAN C receiver, and the radiosond position
is known. Cliff K7RR

On Thu, 10 Jun 1999, Paul Keinanen wrote:

> On Thu, 10 Jun 1999 07:24:33 -0400, EC Therapy <docshok@sunlink.net>
> wrote:
>
> : I just obtained a radiosonde unit that is solid state and is labeled
> : "407 MHz VLF/Omega." Can anyone give me info on why it is labeled "VLF"
>
> In order to track the radiosonde accurately to accurately calculate
> wind speed and direction, some radiosondes contain a radio
> navigational receiver. The received signal or calculated position is
> multiplexed on the UHF downlink with all the temperature and pressure
> measurements. The ground system then calculates the position from this
> information.
>
> I have heard of radiosondes carrying a GPS receiver, but apparently it
> is much simpler to use the Omega signal, which is/was transmitted on
> VLF and the signal is simply relayed down to the ground station and do
> all process on the ground.
>
> : I want to tinker with this, but have no info on the voltages, etc. I
> : have a battery, but is dead and not marked as to the voltage.
>
> At least the Vaisala radiosondes use a battery, which is activated by
> adding water to it, so the battery looks dead when dry.
>
>
> Paul OH3LWR
>
>
>

318. Re: car battery as power source?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-10 00:00:00 UTC
From: Mark Barker <mark.ba@far-out.demon.co.uk>
Message-ID: <T+ApUoAd8CY3EwFT@far-out.demon.co.uk>
Source record: 69386
Cross-posted to: uk.radio.amateur,alt.radio.amateur,alt.ham-radio.vhf-uhf,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I notice from the hunderd or so responses, it boils down to 2 types of reply:

1. "You can't use them like this, that's not what they are for, it says in blah-blah that...."

and 2. "I've been using one to power trolling boat motor/ radio transmitter equipment/ lawn mower/ elctric lighting for years with same battery."

Debate continues...

319. Re: Painting Aluminum

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-10 00:00:00 UTC
From: dialcover@webtv.net
Message-ID: <29099-37602FEA-133@newsd-123.bryant.webtv.net>
Source record: 69387

A COAT OF ZINC CHROMATE, FOLLOWED BY THE PAINT OF YOUR CHOICE.

disregard caps, visual problem
Bill Turner WA0ABI
1117 Pike Street
Saint Charles, MO 63301
314-949-2210

320. FS: Headphones

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-10 00:00:00 UTC
From: Bob - W7AVK <rsrolfne@atnet.net>
Message-ID: <37603D12.82C75763@atnet.net>
Source record: 69388
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew

For Sale - New In Box, HS-16A military headphones. In original never opened packaging. These are based on the late 1930s design and look like the old "cans" we all know. Except the headband is covered in an OD colored fabric. 600 ohms AC impedance I'm told [maybe 500], measures 105 ohms DC with an ohm meter.
The cord is of the tensile type and ends in pin tip jacks like of old. There is a FSN of 5965-160-1055.

The manufacture date code on the packing is 12/65. I'm told the military had a large stock of this old reliable design made for Viet Nam which were never used.

Price $10.00 - includes postage by priority mail.

73's Bob W7AVK

321. Re: EI9GQ Homebrew Radio Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-10 00:00:00 UTC
From: sabbatai_zvi@hotmail.com
Message-ID: <37604f2a.10944553@news.earthlink.net>
Source record: 69389
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur,uk.radio.amateur

On Wed, 02 Jun 1999 10:33:30 -0700, Roy Lewallen <w7el@teleport.com>
wrote:

>Walt Davidson wrote:
>> Reg,
>>
>> If you had a *proper* newsreader (like mine, Forte Agent), you would
>> not encounter any such difficulties.
>>
>> I mouse-clicked on the address exactly as Eamon gave it in his posting
>> and Netscape opened and took me straight to his Web Page. No probs.
>>
>> 73 de G3NYY
>>
>> --
>> Walt Davidson Email: walt@ surf-zone.co.uk
>
>The newsreader bundled with Wordperfect and Netscape v. 4 in the
>several-hundred-dollar Corel Suite 8 doesn't qualify as a "proper"
>newsreader by your standard. (I purchased Agent but found it to be too
>complex for my simple needs so don't use it.)
>
>Communication of all kinds, including postings on the web, would be
>much more effective if written for the convenience and understanding
>of the reader rather than the convenience and ego of the writer.
>
>Roy Lewallen, W7EL

Hilarious!

322. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-10 00:00:00 UTC
From: Sir <sir@sir.com>
Message-ID: <37605514.6426@sir.com>
Source record: 69390
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

Jeffrey Herman wrote:
>
> >> Sir wrote in message <373B7360.5E20@sir.com>...
> >> >The technician license does NOT allow you to use ANY of the Ham bands
> >> >below 6 meters.
>
> Which only amounts to 3.75 MHz, less than 1% of all amateur spectrum.

A quick look at the US AMATEUR BANDS chart in the ARRL HANDBOOK shows
technicians can use only 6 out of 15 bands.

> >> >Thus you DO have to pass a Morse Code test if you want
> >> >to be a HAM without restrictions. A technician license is like a
> >> >fishing license that only allows you to fish in a small fraction of
> >> >small lakes.
>
> Those "small lakes" are over 99% of our total alloted spectrum.

If your going to use drugs, you MUST SHARE!

323. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-10 00:00:00 UTC
From: Dave Shrader <dshrader@earthlink.net>
Message-ID: <376070A4.36F87296@earthlink.net>
Source record: 69391
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner

Yes!!!

Nuclear X-rays and Prompt Gamma pulses create a very broadband Electromagnetic Pulse (EMP) that easily exceeds 50,000 volts per meter (50,000 times 80meters/2 (half wave) equals 4,000,000 million volts across your 80 meter dipole). By the way, that is 42 billion watts in 377 ohm atmosphere across your antenna!!!!

During the 50's when Above Ground Nuclear testing was being performed, the STARFISH event, 700 miles from Hawaii, turned off the power grid in Hawaii. That was in the days of Vacuum Tubes...what happens today in the solid state world?

Extensive studies and tests have been performed in this area...nuclear weapons x-ray and gamma radiation will kill your radio and most everything else.

>
> >
>
> Do you know any studies that point to radiation hindering radio communications?
>

324. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-10 00:00:00 UTC
From: Sir <sir@sir.com>
Message-ID: <37607058.AA2@sir.com>
Source record: 69392
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

David P (D) wrote:
>
> just quickly.
> morse code is a very corse mode!
>
> only joking. I myself like CW

Who knows, I might have liked it too, if it hadn't been shoved down my throat. I had such a bad taste in my mouth from having to learn it for no good or logical reason, that I never used it on the air and now don't even remember anything other than SOS.

Kind of like how something as enjoyable as sex can be disliked and even hated when you are raped and it is forced opon you.

325. Re: HELP! Notch filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-10 00:00:00 UTC
From: Charles Wenzel <wenzel@wenzel.com>
Message-ID: <37608823.6577@wenzel.com>
Source record: 69393

A "bridged-T" notch should do the trick. Connect a 47 pF in parallel
with about 47 nH and place this tank in series with your cable. Now
add a variable resistor from the center of the coil to ground. Adjust
the resistor and the tuning of the tank for max dip. You can also
use two 100 pF caps in series and use the center connection for the
resistor tap. (But either the cap or inductor needs to be an
adjustable type. The resistor will be in the low hundreds of ohms. If
you are transmitting power through this arrangement then you might
first try a simple series trap to ground made from a .33 uH coil and
a 0-10 pF trimmer. Both tanks are intended to resonate at 105 MHz -
in case I made a math error!

David P (D) wrote:
>
> Hi,
> I'm after a plan on how to make a non tunable notch filter.
> I need to filter out 105.400wbfm. It's my local Radio Station and I don't
> want it comeing through when I'm QSOing (which it does)
>
> Please help!!!
>
> David P

326. Re: CD Servicing Convention Reminder.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-10 00:00:00 UTC
From: Max Harding <mgh@eisa.net.au>
Message-ID: <7jn4j7$ai6$1@news.eisa.net.au>
Source record: 69458
Cross-posted to: aus.electronics,aus.radio.amateur.digital,aus.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,sci.electronics.basics,sci.electronics.equipment,sci.electronics.misc,sci.electronics.repair

Allan wrote in message <7jlba3krk1@news1.mpx.com.au>...
>Well Ross Iam STUPID because I dont see any 03 in the Phone number! Also
613
>means nothing to anyone other than someone who lives in that Area, or knows
>all the Prefix numbers.
>61 is the Aust prefix' 3 is victoria prefix the rest is the number so if
you are in victoria DIAL 9384-1951
inany other state dial 03-9384-1951
No you are not STUPID as that is the way it was given to me to send.
>Also just because he is Ex rmit, does that mean he will always live in
VIC!
>
>Its a typical "I know where I live and so should everyone else!"
>Realize its the WORLD and not your Backyard you are Broadcasting to, Use an
>Area Code and a Location.
>As I said he has posted this to all newsgroups WORLDWIDE he should have
>included a bit more INFO.
>
>Allan
>
>Ross <nross@vic.bigpond.net.au> wrote in message
>news:7jinm1$58o$1@m2.c2.telstra-mm.net.au...
>>
>> Allan wrote in message <7jimd4$2ju$1@news1.mpx.com.au>...
>> >Hi. The link does not work.. and as this is a AUSTRALIAN Newsgroup, what
>> >STATE are you in??
>> >
>> >>> For further information have a look at Max's Web site.
>> >> http://cdservicing.find.com
>> >> or call him on 613-9384-1951 or email him at maxp@primus.com.au
>> >>
>>
>>
>> Just a rough idea, Id reckon the fact that he is ex RMIT, has an aussie
>> email address and a Melbourne area code phone number would possibly
locate
>> him in Melbourne Australia.
>>
>> Of course Ive been wrong before.
>>
>>
>>

>>
>
>

327. Re: Online Diode and Transistor Characteristics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-10 00:00:00 UTC
From: Puppin <puppin@netpar.com.br>
Message-ID: <7jn9u9$69f$1@nnrp1.deja.com>
Source record: 69459

In article <375e0f31.3721435@news.earthlink.net>,
Xjshillw6ivw@earthlink.net (Jim Hill) wrote:
> Are there any sites that provide common diode and transistor
> characteristics (1N914, 2N2222)?
> thanks, Jim, jshillw6ivw@earthlink.net
> Delete the X before using my e-mail address.
> The X was added to stop spam.
>
>
Hi Jim,

Try these: http://www-us3.semiconductors.com/pip/1N914
http://www-us3.semiconductors.com/pip/2N2222_CNV_2

Download the PDF files and enjoy !

--
Gilson Puppin - PU5MPL

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

328. Re: P.O.W. "tap" code compared to Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-10 00:00:00 UTC
From: tatasadasayago <Jcrosley@mocc.com>
Message-ID: <375F6DF0.86226F6E@mocc.com>
Source record: 69460

The Air Force types used a hierarchy based system of dits to count groups of letters starting with ABCDE then FGHIJ etc. so 5 taps or DITS annotated the 5th group, after a pause, the next dits designated the particular letter in that group. In comparison, Morse is simpler to use, but many have trouble differentiating between the dits and dahs. Those of us in the Army used normal CW, and if a masonry wall was the medium, the knuckle was always a dit and the bottom of a closed fist was a dah.
In one particular incident I thumped the dirt with my boot and smacked small sticks together to form copyable Morse that could be heard well out to 30 feet from my position. My spotter and I used tactile morse to communicate in very dangerous circumstances where even a whipser may cover the sound of an approaching enemy.
Thumb was dah and tip of forefinger was dit.
JimC

Thorvaldt wrote:

> Out of curiosity, when P.O.W.'s use tap signals
> how do you tell a dit from a dah??
>
> Thor

329. Re: FS VHF ANTENNAS! CHEAP!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-10 00:00:00 UTC
From: stan <stan2@sprint.ca>
Message-ID: <8mK73.47569$r_1.25255095@newscontent-02.sprint.ca>
Source record: 69461

Liked your story we build antennas too. PS Dont worry abouthe Web scammer stuff. This is the internet it better become usefull Have a nice Summer good luck on your sales. We need people like you.
N8wwm <n8wwm@aol.com> wrote in message news:19990607203219.26257.00001304@ng-fm1.aol.com...
> I custom build <1 at a time> some darn nice 2 meter antennas!
>
> 3 EL Yagi-30.00 These are all aluminum, gamma fed, nice looking and
> working
> yagis...The Jpole is all aluminum, goes
together
> in 2 shakes,
> 4 EL Yagi-37.00 and is 3/4 wavelength long. These are excellent
antennas,
>
> and have sold out at local fests and club
> meetings each
> 5 EL Yagi- 43.00 time I bring 'em.
>
> Jpole<3/4 wave length>-23.00
>
> Each antenna comes with an instruction sheet and all hardware to have it
up and
> running in minutes. The yagis have gamma rod assembled and attached to the
> driven element. The Jpoles come with pre-drilled set points for tuning at
3
> points in the band.
>
> I am not some web scammer, I just like building antennas. You can reach me
by
> this email address, by my call book address, or by sending a note to my
call
> sign at PO Box 2189 Schiller Park, Il 60176.
> Chicago area hams may arrange for local pickup.
> SHIPPING IS $8.50, regardless of antenna. I will ship 2 of any one for
$11.00.
>
> INCLUDE YOUR EMAIL ADDRESS IF YOU ORDER BY MAIL...Checks or Money order
payable
> to Doug Adair only...this is not a big business...I am just having fun and
> helping new hams not GET RIPPED OFF!
>
> Thanks guys...73 and CU on 6 METERS!!!!!!!!!!!
>

>
>

330. Re: Homebrew power supply pass transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-10 00:00:00 UTC
From: davem@groucho.cs.ubc.ca
Message-ID: <7jnsk4$ds3@groucho.cs.ubc.ca>
Source record: 69462

Tom Bruhns <tomb@lsid.hp.com> writes:

>An issue that I didn't notice Dave or the others addressing is "second
>breakdown" in bipolar power transistors. If the devices have much
>voltage drop, they are subject to catastrophic failure at well below
>their maximum power dissipation. "Much" can be as little as ten or
>fifteen volts, though the problem is much worse at higher voltages.

What's the mechanism of second breakdown?

When designing a linear supply, it's generally a good idea to keep the transformer secondary voltage as *low* as possible - just enough so that the troughs of the ripple waveform are still a couple of volts above the output voltage at maximum output current. This provides enough voltage to deal with the drop across the emitter resistors while keeping the collector-emitter voltage as low as possible to minimize power dissipation in the transistors. (Of course, with less load, the unregulated voltage rises, but the current drops, so net power should go down).

It sounds like this would also automatically reduce the chances of second breakdown.

Dave

331. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-10 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <7jnv9i$c2h@news.Hawaii.Edu>
Source record: 69463
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

>> Sir wrote in message <373B7360.5E20@sir.com>...
>> >The technician license does NOT allow you to use ANY of the Ham bands
>> >below 6 meters.

Which only amounts to 3.75 MHz, less than 1% of all amateur spectrum.

>> >Thus you DO have to pass a Morse Code test if you want
>> >to be a HAM without restrictions. A technician license is like a
>> >fishing license that only allows you to fish in a small fraction of
>> >small lakes.

Those "small lakes" are over 99% of our total alloted spectrum.

Jeff KH6O

332. 407 NHz radiosonde questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-10 00:00:00 UTC
From: EC Therapy <docshok@sunlink.net>
Message-ID: <375FA070.C73FA1FC@sunlink.net>
Source record: 69464

I just obtained a radiosonde unit that is solid state and is labeled "407 MHz VLF/Omega." Can anyone give me info on why it is labeled "VLF" ? I want to tinker with this, but have no info on the voltages, etc. I have a battery, but is dead and not marked as to the voltage. Any info would be appreciated. Thanks for looking!

333. Re: 2M Bandpass filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-10 00:00:00 UTC
From: ac5mv <klluit00@fht-esslingen.de>
Message-ID: <Pine.GSO.3.96.990610132127.1971F-100000@rssx10.rz.fht-esslingen.de>
Source record: 69465

On Wed, 9 Jun 1999, JoeP wrote:

> Does anyone have a good (and cheap) bandpass filter design for the 2 meter
> band?
>
> Thanks,
> Joe
>

depends on what you consider cheap. One could build a filter
out of a quaterwave length of cable with a T-connector
Just insert the connector in the line (between TRX and ANT)
and connect the
short pice to the third port. Prune the the cable until you
get to the desired frequency. Much better would be to build a
cavity filter.. but that would take some skill and the material
ofcourse.

Here is one for broadcasting applications:
http://www.electrolink.com/uk-frame.htm

73s de Klaus

334. Re: CD Servicing Convention Reminder.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-10 00:00:00 UTC
From: Mark Toogood <toogs@bigpond.com>
Message-ID: <4CN73.8220$PN5.21843@newsfeeds.bigpond.com>
Source record: 69466
Cross-posted to: aus.electronics,aus.radio.amateur.digital,aus.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,sci.electronics.basics,sci.electronics.equipment,sci.electronics.misc,sci.electronics.repair

Please check your dosage.

335. Re: P.O.W. "tap" code compared to Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-10 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <Y3QVmJAiD2X3Ewcr@ifwtech.demon.co.uk>
Source record: 69467

Thorvaldt wrote:
>Out of curiosity, when P.O.W.'s use tap signals
>how do you tell a dit from a dah??

Reminds me of an old advert for some computer networking company -
picture of a rough-looking guy in prison uniform, tapping on the pipes
with a tin mug.

Somebody added the caption: CQ CONTEST...

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

336. lots of UPS Computer power supplys for sale (melb)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-10 00:00:00 UTC
From: rgormley@netspace.net.au
Message-ID: <7joa0e$85d$2@otis.netspace.net.au>
Source record: 69468
Cross-posted to: aus.electronics,aus.radio.amateur.digital,aus.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,sci.electronics.basics,sci.electronics.components,sci.electronics.design,sci.electronics.equipment,sci.electronics.misc

Hi,

I have a number of UPS power supplies of varying output for sale:

Ideal for PC power backup / electronics fiddlers. run a 240volt light bulb when the power goes out....whatever.. (Aimed at the PC user)

They range in size from a unit that sits nicely under you monitor and will keep your PC running during a blackout / power failure for about 6-8 minutes

Software available: PC interface for batt diags/ and autonomy checking etc etc.

Small sized one PC for 8 mins

Medium sized units approx 20 minutes (or two PC`s for 8 minutes)

Large capacity (suit server backup) 1-3 hours.

prices are roughly $50 for the small
$200 for the med
$500-$1000 for the large units (call to discuss)
(The large units are large in size and rating. they are for multiple server backup applications during a blackout.

They are "ex stock" that our company does not want to support any more and have "written them off" there is i roughly $64,000 worth of units that i have been given to sell.

for the Tec's out there... they are a "on demand" type where is they can just be switched on and they will run a 240v device from the batt pack (like a inverter) or stay plugged in live and when the power fails keep running for period X (rating dependant)

(i have limited specification sheets for most units)

Please phone Richard Gormley onM0414 970 489 or H: 9255 5294

They come as is "NO claims if it goes bung" they have all been tested working all units can be seen working any test welcome.

PS if some one is interested in BULK dealing for resale (scrap lead from the batteries perhaps??) whatever... please call and i will do a really cheap deal...

Regards,
Richard

337. Re: P.O.W. "tap" code compared to Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-10 00:00:00 UTC
From: Michael Young <nobody@all.org>
Message-ID: <7joedd$3l6$1@remarQ.com>
Source record: 69469

tatasadasayago <Jcrosley@mocc.com> wrote in message
news:375F6DF0.86226F6E@mocc.com...
> The Air Force types used a hierarchy based system of dits to count
> groups of letters starting with ABCDE then FGHIJ etc. so 5 taps or
> DITS annotated the 5th group, after a pause, the next dits designated
> the particular letter in that group. In comparison, Morse is simpler
to
> use, but many have trouble differentiating between the dits and dahs.

This allowed a total of 25 letters. The letter C is sent instead of the
missing K.

Michael.

338. Re: Yaesu FT-50 MODS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-10 00:00:00 UTC
From: Brad Kellison KA8TOK <KA8TOK@four-way.net>
Message-ID: <375FC617.BE96E0D6@four-way.net>
Source record: 69470
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.equipment,rec.radio.amateur.homebrew
Body handling: Binary attachment payload not displayed: KA8TOK.vcf

if you have bought it recently as NEW not USED then no it won't work.. from April 1, 1999 there not made to modifiable. if you have one of the ones usedn before this date(above). then your fine.. the mods will work.

JoeP wrote:

> I was wondering if anyone has successfully performed the extended receive
> (and/or freeband/mars/cap) mod on an ft50rd that has a serial number
> beginning with 8H? I'm assuming that it still works for later models. Most
> of the information I've read on the subject is a little dated. Please let me
> know, if anyone has had problems, I'd hate to ruin a perfectly good radio.
> Thanks,
> Joe

[One or more binary attachments are retained only in the source text.]

339. Re: Yaesu FT-50 MODS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-10 00:00:00 UTC
From: treynolds@my-deja.com
Message-ID: <7jom3o$l0a$1@nnrp1.deja.com>
Source record: 69471
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <375FC617.BE96E0D6@four-way.net>,
Brad Kellison KA8TOK <KA8TOK@four-way.net> wrote:
> if you have bought it recently as NEW not USED then no it won't work.. from
> April 1, 1999 there not made to modifiable. if you have one of the ones usedn
> before this date(above). then your fine.. the mods will work.
>
> JoeP wrote:
>
> > I was wondering if anyone has successfully performed the extended receive
> > (and/or freeband/mars/cap) mod on an ft50rd that has a serial number
> > beginning with 8H? I'm assuming that it still works for later models. Most
> > of the information I've read on the subject is a little dated. Please let me
> > know, if anyone has had problems, I'd hate to ruin a perfectly good radio.
> > Thanks,
> > Joe
>

I have never made a mod to my FT-50 but the PTT button broke off. I got one
from Yaesu right away but can anyone tell me how to take the darn radio
apart?

Tom
treynolds@email.exide.com

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

340. Re: 407 NHz radiosonde questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-10 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <375fcf38.15012927@news.sci.fi>
Source record: 69472

On Thu, 10 Jun 1999 07:24:33 -0400, EC Therapy <docshok@sunlink.net>
wrote:

: I just obtained a radiosonde unit that is solid state and is labeled
: "407 MHz VLF/Omega." Can anyone give me info on why it is labeled "VLF"

In order to track the radiosonde accurately to accurately calculate
wind speed and direction, some radiosondes contain a radio
navigational receiver. The received signal or calculated position is
multiplexed on the UHF downlink with all the temperature and pressure
measurements. The ground system then calculates the position from this
information.

I have heard of radiosondes carrying a GPS receiver, but apparently it
is much simpler to use the Omega signal, which is/was transmitted on
VLF and the signal is simply relayed down to the ground station and do
all process on the ground.

: I want to tinker with this, but have no info on the voltages, etc. I
: have a battery, but is dead and not marked as to the voltage.

At least the Vaisala radiosondes use a battery, which is activated by
adding water to it, so the battery looks dead when dry.

Paul OH3LWR

341. Re: P.O.W. "tap" code compared to Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-10 00:00:00 UTC
From: srh@iname.killspam.com
Message-ID: <srh-1006992342530001@user-2ivehcl.dialup.mindspring.com>
Source record: 69473

In article <375F6DF0.86226F6E@mocc.com>, tatasadasayago
<Jcrosley@mocc.com> greatly enlightened me:

> The Air Force types used a hierarchy based system of dits to count
> groups of letters starting with ABCDE then FGHIJ etc. so 5 taps or
> DITS annotated the 5th group, after a pause, the next dits designated
> the particular letter in that group. In comparison, Morse is simpler to
> use, but many have trouble differentiating between the dits and dahs.
> Those of us in the Army used normal CW, and if a masonry wall was the
> medium, the knuckle was always a dit and the bottom of a closed fist was
> a dah.
> In one particular incident I thumped the dirt with my boot and smacked
> small sticks together to form copyable Morse that could be heard well
> out to 30 feet from my position. My spotter and I used tactile morse to
> communicate in very dangerous circumstances where even a whipser may
> cover the sound of an approaching enemy.
> Thumb was dah and tip of forefinger was dit.
> JimC

Thank you, Jim, for a very interesting post. I had always mistakenly
assumed that a variation of "Continental Morse" (the old clicking
telegraphy mode) was used, and have always been frustrated that despite
reasonable skills in conventional Morse, I've never been able to train my
ear to "hear" telegraphy. Your explanation makes it clear -- and helps
to reduce my frustration level! :-)

/s.holmes
--
Stephen R. Holmes | srh@iname.killspam.com
TNS, Inc. | (remove the middle part of the domain name
Reston, VA USA | to form my actual e-mail address)

342. Re: Using a CB as a 10m reciever

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-10 00:00:00 UTC
From: gene@eagle.csl.uiuc.edu
Message-ID: <7jopqn$lu7$1@vixen.cso.uiuc.edu>
Source record: 69474

tatasadasayago <Jcrosley@mocc.com> writes:

CB-band to 10M band....I was pleasantly surprised at how simple it can be.
I was especially interested in SSB for 10M since my son just got his
Tech-Plus license and can operate on 28.300 MHz to 28.500 MHz SSB (apparently
AM is illegal). His "wife's budget" only permitted something "cheap".
I bought a couple of "working" SSB CB's for $20 each at a recent Hamfest...
Midland model 79-892, and a Cobra 138. The Midland uses a PLL-02A phase-
locked loop synthesizer to control the 40 channels, and the older Cobra uses
10 quartz crystal oscillators to control its 23 channels.
I suspect there are dozens of other brands that have almost identical design.
I remember converting a 23-chan Kraco (AM) many years ago which used a PLL.
I was fortunate enough to get service-info (SAMS PHOTOFACTS) thru our local
library....CB-180 (April 78) for the Midland, and CB-57 (Sept 74) for the
Cobra.It's a good feeling in our throw-away society, to be able to re-cycle some
of this great equipment of yester-year.
Converting the Midland is quite simple..its PLL has nine control lines
capable of divide-by-n (1 to 512). The Midland only needs to divide by 255 thru
211 for Chan-1 thru Chan-40 respectively, so that the 256 line (pin 7) is
disabled permanently (grounded). Since a division of at least 211 is needed,
the 128 and 64 lines are always enabled (tied to +5), and the remaining six
lines (pins 10 thru 15) are switched by the Channel Selector dial to progress-
ively lower the count from 255 thru 211.
These values may only apply to this model, or perhaps other Midland models....
they depend on choice of VFO and I.F. frequencies, and the down-shifted fre-
quencie offered to the PLL, which always divides-by-n to reach 10 KHz which
provides phase-locked-loop control, to force the VFO to move in 10 KHz steps.
In this particular model for example, on Chan-30 the VFO runs at 38.000 MHz
mixed with an I.F. frequency of 10.695 MHz to provide the Chan 30 frequency of
27.305 MHz. (This is a good example because for converting to the Novice band,
we will want to start at exactly 1 MHz higher...at 28.305 MHz). In addition,
to down-shift the VFO for manageable frequencies for the PLL, it mixes it with
a fixed 40.210 MHz for a difference of 2.210 MHz (on chan 30). Dividing this
down to 10 KHz requires a divide-by-n of 221....of which div-by-192 is perm-
anently wired as described above (pin 7 LO, pins 8 & 9 HI), so that only an
additional div-by-29 is needed and the Channel selector knob supplys this (on
chan 30) by grounding pins 10 and 14, and enabling (to +5) pins 11, 12,13 and
15. Pins 7 thru 15 represent div-by: 256, 128, 64, 32, 16, 8, 4, 2 and 1, res-
pectively.
As a side note, many people do not realize that below Chan 20, there are
five places that adjacent Channels actually jump 20 KHz, instead of 10KHz:
...i.e. between 3 & 4, 7 & 8, 11 & 12, 15 & 16, 19 & 20 ....all are separ-
ated by 20 kHz. The remaining channels thru Chan 40 all have 10KHz separation.
I hope all this expanded theory will be helpful in analyzing some of the

various models on the market.
GETTING BACK TO HOW SIMPLE IT WAS TO MODIFY MY Midland 79-892, all I had to do was cut the PC-board foil to pin 8, then connect pin 8 to pin 7 (which was already grounded). Then tweak the slug on the VFO counter-clockwise to raise its frequency to 39.000MHz which raises the operating frequency to 28.305 MHz as mentioned above....but if you are expecting to receive or transmit on 28.305 MHz, the Chan selector needs to be on Chan-6. The VFO can is the largest shielded-can about 5/8" x 1 1/8"...much larger than any others...with the ferrite slug on top. Operation will not "pop in" until you tweak the VFO near enough for the dc control voltage to capture contol of the VFO. Until then, an out-of-lock signal will disable the system. You can measure the dc control voltage coming out of the PLL (IC-1, pin 5), and tweak the VFO until this control-voltage centers at about 3.5v on Chan-12 (about the middle of the Novice band) although it's not critical. If you plan to operate higher than 28.500 MHz, you might want to center it on a higher channel.
To summarize the theory of this example on the low end of the Novice band: VFO is at 39.000 MHz (1 MHz above CB-chan 30) and mixes with I.F. freq. of 10.695 MHz for a difference of 28.305. For phase control, the 39.000 is also mixed with a 40.210 MHz reference for a difference of 1.210 MHz which requires a div-by-121 to reach 10 KHz. We had to ground pin 8 to avoid a minimum count of 128 (we need 121 or less). We still have fixed divisor of 64 (pin 9 tied HI), so the selector channel needs to supply an additional 57 which it does in Chan-6 position by switching pins 10, 11, 12, 15 HI, and grounding 13 & 14. After these two simple changes, the radio came to life immediately. However since I had the SAMS book with all the pictures to identify components, I went thru and tweaked up the circuits that now operate at higher frequencies. It did as you would expect improve considerably. Those without documentation will need to proceed carefully. The inductors near the RF Power out and its driver should be easy to identify without docs.
Finally, I also mentioned an older 23-Chan Cobra model 135. I have not changed it over yet, but in analyzing the documentation, I feel certain it would be easy to convert by simply replacing quartz crystal X10 (8.409 MHz) with one 9.5 to 9.67 MHz ...a single crystal would provide four operating frequencies. Each new crystal in that range would offer four more operating frequencies. In this model, the sum of two crytals (one from each group) combined with the 7.8 MHz I.F. yields the operating frequency.
Both models have the "clarifier" function in Receive, which shifts operating frequency plus or minus....perhaps filling in most of the gaps in the channels separated by only 10 KHz. If desired, it should be an easy task to modify this same circuit to include shifting the Xmit frequency also.

I FORGOT TO MENTION that on the Midland modification, Chan-21 on the selector yields the High end of the Novice band at 28.495 MHz. The dial limits should be marked clearly, or perhaps a physical-stop on the older dials if only the Novice band is intended.
ka8ddz/qrp Rochester, MI) writes:
>
>
>There is a guy in AZ somewhere that advertises a book called CB to 10
>mtrs, I see the ad alot. I wrote for a catalog of his offerings about

a
>year ago and he seemed to have alot of conversion information. Check
>the ham mags for his ad.
>
>73, Tim

His Email is LOU@CBCINTL.COM

This will append the previous entry called EASY CB to 10M SSB: This offers another nice option if it is to be used on Novice band only (This applies to the Midland 79-892 model). The PLL-02A IC offers the option of moving in 5 KHz steps, by simply grounding pin #4. In this case, pin #8 does not get changed (stays high as it is originally). We need the higher divide-count to reach the 5 KHz phase reference (double the count required on 10KHz).
The same instructions changing the VFO still apply. In this case, the 28.305 frequency is not available because of the glitch in selector switch which was necessary to accomodate those "20 KHz step" exceptions. The lowest frequency will now be 28.310 which corresponds to Chan-12. (Technically, 28.300 USB on Chan-11 might be permitted, but I would not advise it). The operating frequency moves in 5 KHz steps as the Channel selector is advanced (except for the 2 or 3 glitches where it advances 10 KHz). But there are not enough switch positions to reach the high end of the Novice band so that Chan-40 corresponds to 28.460 MHz. With the smaller 5 KHZ steps, it is almost certain that the clarifier will fill in the gaps with possible exception of the 10 KHz "glitch" channels.
From looking at the schematic it appears to be a simple matter to add a "Delta-Xmit" pot to shift the Xmitting frequency during Xmit only. Replace R-26 (10K) with a 100K pot...using two of its terminals and locate the pot in a convenient location. Run a shielded line to replace R-26. Be sure to verify which end of R-26 is ground. Add a 0.01 ufd across this location. This should work well, because an almost identical circuit is used to place the "receive clarifier" pot remotely in the Hand-mike.
...One small correction in the original article....at one place in the text I mistakenly referred to a Cobra-135. It is model Cobra-138.

Someone ask about a schematic for a Kraco 4060 CB-unit. I don't have info on that model, but I have some notes on Kraco KCB-4020 (AM 40-chan), and KCB-2320B (AM 23-chan). Both use the same PLL-02A IC in the synthesizer system..... i.e. divide-by-n (1 to 512). Exactly the same theory applies as was mentioned in the earlier post (EASY CB-to 10M SSB). The same 10.695 MHz I.F. frequency is used.. the main difference is that the Midland used a reference of 40.210 MHz, while the Kraco's use 40.960 MHz to down-mix the VCO frequency to the 2 or 3 MHz range, suitable for div-by-n (512 to 1) to reach the phase-det ref of 10 KHz.
Again, on the PLL-02A, pins 7 thru 15 (activated when HI) yield divide-by: 512,256,128,64,32,16,8,2,1 in the same respective order. Dividing factor is the sum of all the pin-values which are held HI (+5v).
The 23-chan Kraco only switches 5 lines. The 40-chan Kraco switches 7 lines,

while the Midland 40-chan switches 6 lines.
Incidentally, if you have schematics, you may not see those higher (40.210 or 40.960) indicated...they get their final "doubling" covertly in the VCO-Mixer I.C. The 40.960 is four-times the 10.240 MHz Xtal, which conveniently mixes with the upper I.F. freq of 10.695, to yield 455 KHz which is the 2nd I.F. (used on RECEIVE ONLY). If you want to review the theory that was posted in the earlier "EASY CB-to-10M SSB" post, I can E-mail you the files:
gene@eagle.csl.uiuc.edu

About a year ago I posted some rather detailed instructions and concepts for modifying CB-SSB transceivers for use in the 28.300-28.500 MHz Novice band. (I still have the old files and could e-mail them to anyone interested).
I did not investigate, but one reply also suggested that LOU@CBCINTL.COM sells a book with conversion information.
I took the model I converted (Midland Model 79-892) camping last summer and managed a couple of QSO's on a mobile whip, although conditions were not great. I had converted it so that the XMIT changed in 5 KHz steps (except 2 or 3 places jumped 10 KHz due to the unique allotment in the original CB-channels). BUT with such a weak signal, I found that being able to shift frequency either side of the 5 KHz steps was necessary, so as to get exactly on the frequency of the station being heard. I therefore further modified the trans-ceiver so that the so-called "clarifier" that several models use on "receive only" was connected so as to change BOTH Xmit & Rcv identically. This turned out to be quite simple, at least on my unit. Of course with a little more complication, one could add an additional pot and switch so as to zero a station, while Xmit & Rcv are identical, then throw a toggle-switch to provide RIT (Receive-Incremental-Tune) on receive-only but Iconsidered this over-kill for such a low-power transceiver unit.
I did this by cutting the control-voltage wire to the Xmit-diode/resistor (D-5, R-25 on my model). I transferred the control-voltage wire to the Rcv-diode/resistor (D-4, R-24) to a constant +9v (regulated). This was about 1 volt higher than the original control-voltage, and gave me a little more frequency-deviation, which is accomplished by "pulling" an Xtal-oscillator, (i.e. VXO) which of course has limits. The result, was a frequency shift of 3.5 KHz (+ or - 1.75 KHz). Of course it would have been nice to have a shift of + or - 2.5 KHz, which would fill in the gap completely between the basic 5 KHz steps (on most channels), but I considered it fortunate to get this much shift so simply, and with no complications with the Xtal oscillator.
The above-mentioned diodes (only a single diode D-4 after my modification) provide dc-bias to the varicap (D-3) whose capacitance is included in the Xtal-oscillator's circuit.
With the 10-meter band beginning its slow rise to improving conditions this year, perhaps 5 or 10 watts will enjoy success even without a linear amplifier.
With the FCC's new concern about radiation and power levels, there will certainly be no concern with this power-level!

I should point out that when the 5 KHz option (on the PLL-02A synthesizer) is chosen, you can't quite reach the top of the Novice-band....the highest

on the Chan-40 position is 28.462 MHz with the variable pot at maximum. Also, to remain safe you should use Chan-12 as the lower-limit (28,308.5 with the variable pot at min). Although it might be risky, on Chan-11 you can tune down thru 28,300, to 28,298.5 which of course is illegal.

>Hello all. I have a pile of CB radios that I have collected over the
>years and while looking at them today I had an idea:
>I like to run SSB on 10m and usually don't monitor the band too often.
>I am thinking of modifying my Hygain VII to recieve in the 28Mhz area to
>use as a monitor. Any ideas?
>I fiddled with adding a varcap but was only able to drag the thing off a
>few hz.
>I assume I need to change the IF crystal to something lower.....
>Any help would be appreciated by this wanna-be
>Jim
>KY7DX

--

Internet, BITNET: gene@csl.uiuc.edu

343. Re: CD Servicing Convention Reminder.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-10 00:00:00 UTC
From: Alec Marsh <spamsucks@example.com>
Message-ID: <375FF0B1.229BE171@example.com>
Source record: 69475
Cross-posted to: aus.electronics,aus.radio.amateur.digital,aus.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,sci.electronics.basics,sci.electronics.equipment,sci.electronics.misc,sci.electronics.repair

Max Harding wrote:
> G'day all Australian Tv / Video techs.Are you not as sharp on servicing
> CD's and DVD's and ROM drives as you would like to be. Then come along to
> the 1st CD convention and polish your skills.
> We will be instructed by Mr Max Pisano [ex R.M.I.T Lecturer]
>
> {sneck}
> THIS SEMINAR IS INVALUABLE TRAINING FOR ANY SERVICE PERSON.

And naturally, all amateur radio operators are TV servicemen, otherwise
you wouldn't have crossposted this to the amateur radio groups, right?

--
.signature missing

344. Re: REQ: Subaudible Tone Retrofit for Older 2m FM Gear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-10 00:00:00 UTC
From: mike@corn2.freeserve.co.uk
Message-ID: <375f9db8.4819394@news.freeserve.net>
Source record: 69476

the RSGB has a publication about modding commercial equipment. It has
a cct diag for a subaudible tone gen. I don't have the ISBN or name of
the book, but its written by Chris Lorek. look on the RSGB web page..
73 Mike W G8NXD

On Mon, 07 Jun 1999 17:58:46 GMT, jvm@inmind.com (Jim Morgan) wrote:

>
>Hi Folks !
>
>Anybody have occasion to brew a subaudible tone generator
>for use with older FM rigs, now that so many repeaters are
>tone (CTCSS) access ?
>
>Thanks for any leads !
>
>73,
>
>Jim Morgan W4QE
>jvm@inmind.com
>

345. CW Tranciever in RadCom Sept '88 by G3OGQ. Help pse

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-10 00:00:00 UTC
From: mike@corn2.freeserve.co.uk
Message-ID: <375f9e9c.5047168@news.freeserve.net>
Source record: 69477

Thanks for reading this, I've built the reciever side of this project,
but the xtal filter won't produce a narrow bandwidth, is there an
error in the cct diagram or the coil dimentions?

filter is
T50-6 torroid with 27 turns 30 swg tuned with a 5-65pF trimcap as
primary winding. damped with a 10K Resistor

6 turns secondary winding to 2 10Mhz xtals in series.
centre of xtals has a 220pF to ground

T50-6 torroid with 3 turns 30 swg , fed from xtal
and 27 turns 30 swg tuned with 5-65pF trimcap with no damping resistor

should resonate at 10Mhz, but its does'nt appear to be tuning anywhere
that freq..

cheers Mike W G8NXD

346. FT-50R Freeband mod

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-10 00:00:00 UTC
From: KB9TFH@MichianaToday.com
Message-ID: <375fe33a.1061684@News.alterdial.uu.net>
Source record: 69478

Hello, just woundering after you do the Mars/ cap mod and then the freeband mod what is the freq. range...Joe KB9TFH

347. Re: Homebrew power supply pass transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-10 00:00:00 UTC
From: Tom McDermott <mcdermot@NOSPAM.aud.alcatel.com>
Message-ID: <37600504.2E709263@NOSPAM.aud.alcatel.com>
Source record: 69479

I'm more familiar with a term "secondary breakdown" in power transistors.
It's an effect when the collector voltage is too high, and the collector
leakage avalanches
into the base, thus turning the transistor fully on in the absence of
significant
base bias. To a first order, it's not a termally-induced event.

Some other failure mechanisms to consider:

Poor sharing of current between parellel pass transistors. The emitter
resistance is to balance the current between trasistors when they have
slightly
different base-voltage characteristics. 0.01 ohms is probably not nearly
enough for 2N3055's.

Instability. Building a stable power supply is difficult, especially
with multiple
paralleled pass transistors, and even more so when an additional drive
transistor
is needed to supply adequate base current to the pass transistors. Do you
know
that the regulator/pass element is stable under the expected load
conditions? Has
the regulator's frequency response been rolled-off adequately to copensate
for
poles causes by the pass element(s)? The frequnecy response (pole location)

moves around a lot with load current and load impedance.

Dave Martindale wrote:

> Tom Bruhns <tomb@lsid.hp.com> writes:
>
> >An issue that I didn't notice Dave or the others addressing is "second
> >breakdown" in bipolar power transistors. If the devices have much
> >voltage drop, they are subject to catastrophic failure at well below
> >their maximum power dissipation. "Much" can be as little as ten or
> >fifteen volts, though the problem is much worse at higher voltages.
>
> What's the mechanism of second breakdown?
>
> When designing a linear supply, it's generally a good idea to keep the
> transformer secondary voltage as *low* as possible - just enough so that
> the troughs of the ripple waveform are still a couple of volts above
> the output voltage at maximum output current. This provides enough
> voltage to deal with the drop across the emitter resistors while

> keeping the collector-emitter voltage as low as possible to minimize
> power dissipation in the transistors. (Of course, with less load, the
> unregulated voltage rises, but the current drops, so net power should
> go down).
>
> It sounds like this would also automatically reduce the chances of
> second breakdown.
>
> Dave

348. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-10 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <37600D01.1CFF@ixpres.com>
Source record: 69480
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

Jeffrey Herman wrote:
>
> >> Sir wrote in message <373B7360.5E20@sir.com>...
> >> >The technician license does NOT allow you to use ANY of the Ham bands
> >> >below 6 meters.
>
> Which only amounts to 3.75 MHz, less than 1% of all amateur spectrum.
>
> >> >Thus you DO have to pass a Morse Code test if you want
> >> >to be a HAM without restrictions. A technician license is like a
> >> >fishing license that only allows you to fish in a small fraction of
> >> >small lakes.
>
> Those "small lakes" are over 99% of our total alloted spectrum.
>
> Jeff KH6O

...and these "small lakes" are the least utilized, with vast empty spaces, even on 70 CM. And in demand commercially. Hence, the most vulnerable to being lost.
The HF ham bands are heavily utilized on a world-wide simultaneous-use basis, and provide for non-channelized, unlimited time one-on-one QSO's without using a shared infrastructure like repeaters, and using a small fraction of the bandwidth. They are also the least sought after for commercial use, hence we have actually gained more bands over the years (12, 17, 30 meters).
It is understandable then that many of us consider HF operation an essential (for some of us the only desirable) ham radio spectrum in which to operate.

73,
Don, W6JL

349. Re: Yaesu FT-50 MODS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-10 00:00:00 UTC
From: davem@groucho.cs.ubc.ca
Message-ID: <7jp3ha$11b@groucho.cs.ubc.ca>
Source record: 69481
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

treynolds@my-deja.com writes:

>I have never made a mod to my FT-50 but the PTT button broke off. I got one
>from Yaesu right away but can anyone tell me how to take the darn radio
>apart?

- Take the battery and antenna off

- Remove the two knobs (they just pull off)

- Move the rubber covers on the DC input jack and mic/phone jack out of
the way, so you can see into the jacks

- Remove the black "nicad battery" sticker on the back of the radio

- You will see a slot in the rear of the radio under the sticker with
two pots and a trimcap on a PC board - don't touch them

- At the ends of this slot are two small screws - turn them several turns
counterclockwise, but not all the way out. Then push on the screws.
The keypad should pop out the front of the radio. Once the keypad
and its gasket are clear, remove the two screws completely.

- At this point the only thing holding the radio in the case is two
small tabs on the metal chassis down near the bottom of the radio
which fit into two notches on the plastic case. Holding the radio
facing you, press on the circuit board through the keypad hole
while spreading the lower rear part of the plastic case slightly with
your fingers. The lower part of the metal radio chassis should push
back and out.

- Slide the radio chassis and out of the case, clearing the knob shafts
and antenna jack.

Now you can replace the rubber PTT boot.

When reassembling the radio, it's best to pull the little rubber
transmit/receive indicator light pipe up out of the case. Then install
the chassis in the case without worrying about alignment of the light
pipe. When the chassis is seated properly, insert the light pipe from
outside the case - it will go to the right place on the circuit board.

Dave

350. HELP! Notch filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-11 00:00:00 UTC
From: "David P (D)" <pickards@SPAMBLOCKzen.co.uk>
Message-ID: <fbY73.238$YX3.6536@newreader.ukcore.bt.net>
Source record: 69394

Hi,
I'm after a plan on how to make a non tunable notch filter.
I need to filter out 105.400wbfm. It's my local Radio Station and I don't want it comeing through when I'm QSOing (which it does)

Please help!!!

David P

351. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-11 00:00:00 UTC
From: "David P (D)" <pickards@SPAMBLOCKzen.co.uk>
Message-ID: <J5Z73.249$YX3.6793@newreader.ukcore.bt.net>
Source record: 69395
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

just quickly.
morse code is a very corse mode!

only joking. I myself like CW

D

352. Re: 11 Meter Direction Finding Loop Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-11 00:00:00 UTC
From: w4pqwhs@aol.com
Message-ID: <19990610212343.22854.00000160@ng-fu1.aol.com>
Source record: 69396

Terry I use 1/4 " copper tubing abt 12" dia., split at top ,the var cap 50pf goes at top.at bottom of loop connect coax sh to center of copper loop,connect center conductor abt 4" up side,if you use a copper clamp to connect center to loop then you can slide the clamp and adjust imp to 50 ohms. MFJ 259 analyzer would work wonders on matching imp.and tuning for resonance with the cap..I have made dozens of these for transmitter hunts many years ago.. good luck Harold W4PQW

353. sony receiver icf pro 80

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-11 00:00:00 UTC
From: yves le forestier <leforestier@sympatico.ca>
Message-ID: <37251F44.136E2C42@sympatico.ca>
Source record: 69397

i try to find info to modifie this unit to guet more frequency thank
yves

354. Re: Homebrew power supply pass transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-11 00:00:00 UTC
From: &RETIRED0 <&retired0@hotmail.com>
Message-ID: <37605044.C11F8DF@hotmail.com>
Source record: 69398

Dave Martindale wrote:
>
> mcdermot@NOSPAM.aud.alcatel.com writes:
> >I'm more familiar with a term "secondary breakdown" in power transistors.
> >It's an effect when the collector voltage is too high, and the collector
> >leakage avalanches
> >into the base, thus turning the transistor fully on in the absence of
> >significant
> >base bias. To a first order, it's not a termally-induced event.
>
> I looked in Horowitz and Hill, which I should have done in the first place.
> They explain second breakdown and safe operating area quite well.
>
> Briefly, bipolar transistors have a positive temperature coefficient
> for collector current at a fixed base-emitter voltage. When you
> parallel several transistors in high-current applications, this can
> result in one transistor "hogging" most of the current and destroying
> itself. One transistor starts out taking a bit more current, so it gets
> hotter, which causes it to draw an even larger portion of the current,
> so it gets hotter yet, and so on. The fix with multiple transistors
> is to use emitter resistors, so increased current reduces the base-emitter
> voltage and all transistors share almost equally.
>
> The same current hogging can happen *within* a single transistor - one
> area gets hotter than others, draws more than its share of current, and
> destroys itself. The problem is reduced with pulse loads, since there
> isn't enough time for the thermal effects to occur. To avoid second
> breakdown, the transistor voltage and current have to be limited
> to values where there isn't enough power available to create this
> localized thermal feedback problem.
>
> Note that this can happen even when the current is below the maximum
> rated current and the voltage is below the maximum rated voltage (so no
> avalanche leakage) and the power dissipation is below the rated limit.
>
> FETs have a negative temperature coefficient, and so they automatically
> share current evenly - hot spots cause *reduced* current, which reduces
> heat.

This sounds good up to here for an individual transistor.

Current sharing among multiple transistors is a completely different
effect from localized heating and second breakdown in ONE transistor.

Since fets from different lots can have wildly differing threshold
voltages, wouldn't you need MORE emitter ballast with fets?
You'd need at least enough voltage across the ballast resistors to
swamp the worst case difference in threshold voltages. The hogging
fet will heat up and reduce it's current somewhat, but can it do that
enough
to swamp out a couple of volts in threshold difference without getting
reeeeely hot??

What am I missing here?

miker

So no emitter resistors are needed when paralleling multiple
> transistors, and there are no "second breakdown" effects to worry about
> within a single transistor. The operating limits are set solely by
> maximum current, maximum voltage, and maximum power dissipation.
>
> Dave

--
Big list of WANTS and FORSALES at link below.
Return Address is Bogus. Click below to reply
http://www.geocities.com/SiliconValley/Monitor/4710/
Or you can DELETE the & in the "from" address.

355. Re: Homebrew power supply pass transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-11 00:00:00 UTC
From: davem@groucho.cs.ubc.ca
Message-ID: <7jqch8$612@groucho.cs.ubc.ca>
Source record: 69399

DontHitReplyUseTheHotLinkInTheSignature writes:

>Since fets from different lots can have wildly differing threshold
>voltages, wouldn't you need MORE emitter ballast with fets?
>You'd need at least enough voltage across the ballast resistors to
>swamp the worst case difference in threshold voltages. The hogging
>fet will heat up and reduce it's current somewhat, but can it do that
>enough
>to swamp out a couple of volts in threshold difference without getting
>reeeeely hot??

I guess the real question is: Suppose you have a bunch of FETs in parallel
with no emitter resistors, so all are running at the same gate-source
voltage. When they are all operating at substantial current (say 5 A
each), is the differential heating effect combined with positive temperature
coefficient enough to swamp the effect of the individual variation in
the FETs *at high current*. You don't really care what happens at
low current - its OK if only one FET turns on before the others if you're
supplying only an amp or two.

And how different are power FETS from each other if they are all
exactly the same type?

In any case, I'm far from an expert on this - I'm just repeating what
I read in "The Art of Electronics". But its authors do seem to have
a pretty good knowledge of transistor behaviour.

Dave

356. Re: Homebrew power supply pass transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-11 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3760F080.583CC92D@mwci.net>
Source record: 69400

Dave Martindale wrote:

> I looked in Horowitz and Hill, which I should have done in the first place.
> They explain second breakdown and safe operating area quite well.
>
> Briefly, bipolar transistors have a positive temperature coefficient
> for collector current at a fixed base-emitter voltage. When you
> parallel several transistors in high-current applications, this can
> result in one transistor "hogging" most of the current and destroying
> itself. One transistor starts out taking a bit more current, so it gets
> hotter, which causes it to draw an even larger portion of the current,
> so it gets hotter yet, and so on. The fix with multiple transistors
> is to use emitter resistors, so increased current reduces the base-emitter
> voltage and all transistors share almost equally.
>
> The same current hogging can happen *within* a single transistor - one
> area gets hotter than others, draws more than its share of current, and
> destroys itself. The problem is reduced with pulse loads, since there
> isn't enough time for the thermal effects to occur. To avoid second
> breakdown, the transistor voltage and current have to be limited
> to values where there isn't enough power available to create this
> localized thermal feedback problem.

If you download the data sheet for the 2N3055 or the 2N3773 from Motorola's website you see the SOAR diagram. It does not agree with the conclusions that are being reached in this thread. The second breakdown limits are clearly defined, both for DC conditions and for pulse conditions.

Bill W0IYH

>
>

357. Re: P.O.W. "tap" code compared to Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-11 00:00:00 UTC
From: "Laszlo I. Morocz" <kf4pv@spammenotlmorocz.com>
Message-ID: <01beb407$70cb6060$e0de04d0@p133>
Source record: 69401

The same way as with a mechanical telegraph rig - the length of time
between the clicks (or taps).

Laszlo, KF4PV/8
--
To reply, remove the text spammenot from the e-mail address.

> Thorvaldt wrote:
>
> Out of curiosity, when P.O.W.'s use tap signals
> how do you tell a dit from a dah??
>
> Thor

358. Re: Homebrew power supply pass transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-11 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <37610986.D3E94AA9@mwci.net>
Source record: 69402

William E. Sabin wrote:

> If you download the data sheet for the 2N3055 or the 2N3773 from Motorola's
> website you see the SOAR diagram. It does not agree with the conclusions that
> are being reached in this thread. The second breakdown limits are clearly
> defined, both for DC conditions and for pulse conditions.

After looking at the comments of others more closely, I must clarify my previous post somewhat.

If the DC collector current is kept below a certain level the max collector to emitter voltage can be used. For currents greater than this the voltage must be derated.

But for the 2N3055 or the 2N3773 at DC in a series regulator the "main" limitation at high current is thermal dissipation, not second breakdown. The SOAR diagrams show this. In "normal operation" in a series regulator Vce does not get close to the second breakdown limits.

For the series regulator the worst problems occur when the DC output is short circuited. Then Vce is maximum. A current limiter plus a voltage foldback circuit will reduce the transistor dissipation to a safe value within the SOAR diagram.

The data sheets also show a small region of V and I where additional second breakdown derating is needed. Internal emitter ballasting of the constituent transistors probably reduces this region.

Also, when choosing a value of transformer voltage, the min and max values of AC line voltage must be considered so that at the min value the regulator is still working. This increases the dissipation somewhat when line voltage is normal. The transistors and heat sink must also be adequate for the max line voltage value. At max line voltage we must still be within the second breakdown and thermal limits of the transistors.

The stability of the series regulator is assured if an open-loop frequency response of -6 dB per octave can be maintained. The corner frequency for this is chosen such that the loop gain reaches unity before some secondary rolloff corner frequency (12 dB per octave) is reached.

Bill W0IYH

359. Re: Homebrew power supply pass transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-11 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <37611FD7.7AA6713@mwci.net>
Source record: 69403

William E. Sabin wrote:

> William E. Sabin wrote:

> But for the 2N3055 or the 2N3773 at DC in a series regulator the "main" limitation
> at high current is thermal dissipation, not second breakdown. The SOAR diagrams
> show this. In "normal operation" in a series regulator Vce does not get close to
> the second breakdown limits.

An exception to this could occur if the regulated voltage can be turned down to low values, for example if a 28 V, 10 A regulator is turned down to 5 V at 10 A. Second breakdown and/or excessive dissipation might occur. Normally this happens only in adjustable "lab bench" supplies. For radio equipment supplies it would not normally happen. If it did happen accidentally, protection circuits would kick in.

Bill W0IYH

360. Re: Homebrew power supply pass transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-11 00:00:00 UTC
From: davem@groucho.cs.ubc.ca
Message-ID: <7jrkb9$6r8@groucho.cs.ubc.ca>
Source record: 69404

sabinw@mwci.net writes:

>An exception to this could occur if the regulated voltage can be turned
>down to low values, for example if a 28 V, 10 A regulator is turned
>down to 5 V at 10 A. Second breakdown and/or excessive dissipation
>might occur. Normally this happens only in adjustable "lab bench"
>supplies. For radio equipment supplies it would not normally happen.
>If it did happen accidentally, protection circuits would kick in.

Many lab bench supplies have automatic range switching on the
unregulated DC supply. As the output voltage drops, circuitry changes
secondary taps on the transformer to keep the unregulated supply high
enough for proper regulator operation, but not too much higher. This
avoids the excessive dissipation problem.

There could still be a problem if the output of the supply is shorted
when operating at high voltage. For example, if the supply is operating
at 30 V out with 35-40 V out of the bulk supply and the output is shorted,
for a brief period there is still 40 V on the capacitors and thus 40 V
across the output transistor, at maximum current.

Dave

361. Re: Painting Aluminum

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-11 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <376157EB.3C8C@ixpres.com>
Source record: 69405

William P. Turner wrote:
>
> A COAT OF ZINC CHROMATE, FOLLOWED BY THE PAINT OF YOUR CHOICE.
>
> disregard caps, visual problem
> Bill Turner WA0ABI
> 1117 Pike Street
> Saint Charles, MO 63301
> 314-949-2210

Bill:
Zinc chromate, over ANODIZED aluminum? See original post.

Don, W6JL

362. Re: Painting Aluminum

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-11 00:00:00 UTC
From: "David P (D)" <pickards@SPAMBLOCKzen.co.uk>
Message-ID: <Mcd83.191$Nv4.3364@newreader.ukcore.bt.net>
Source record: 69406

Urm...Anodized means that you don't need to paint it???

I thought that was a protective coat?

David

Don W6JL wrote in message <376157EB.3C8C@ixpres.com>...
>William P. Turner wrote:
>>
>> A COAT OF ZINC CHROMATE, FOLLOWED BY THE PAINT OF YOUR CHOICE.
>>
>> disregard caps, visual problem
>> Bill Turner WA0ABI
>> 1117 Pike Street
>> Saint Charles, MO 63301
>> 314-949-2210
>
>Bill:
> Zinc chromate, over ANODIZED aluminum? See original post.
>
> Don, W6JL

363. Re: Painting Aluminum

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-11 00:00:00 UTC
From: Henry Knoll <knoll003@tc.umn.edu>
Message-ID: <37616A43.7382@tc.umn.edu>
Source record: 69407

David P (D) wrote:
>
> Urm...Anodized means that you don't need to paint it???
>
> I thought that was a protective coat?
>
> David

I want a different color. My concern is how to make paint stick to
the anodize.

73

Henry WA0GOZ

364. Re: Homebrew power supply pass transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-11 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <sVU4uEAO0UY3Ewgx@ifwtech.demon.co.uk>
Source record: 69408

William E. Sabin wrote:
>
>The data sheets also show a small region of V and I where additional second
>breakdown derating is needed. Internal emitter ballasting of the constituent
>transistors probably reduces this region.
>

Unfortunately, many devices sold as "2N3055s" are actually out-of-spec
chips that were originally intended as other devices, which happen to
fit the basic 3055 spec and are sold down-market.

Unfortunately they won't necessarily have the same "typical" performance
as the 2N3055 in all respects - especially those directly connected with
internal structure. Also, some of these devices have a higher Ft than a
genuine 3055, which can cause some interesting stability problems.

By the way, this kind of selling down-market is a legitimate industry
practice - not to be confused with the guy in a back-room stamping
"2N3055" on a batch of un-named TO3 cans... although that happens too,
and the 2N3055 is a favorite target.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

365. Re: Painting Aluminum

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-11 00:00:00 UTC
From: "David P (D)" <pickards@SPAMBLOCKzen.co.uk>
Message-ID: <_Rf83.311$Nv4.5633@newreader.ukcore.bt.net>
Source record: 69409

oh...I dunno?

Use vinyl paint. Acryillc won't stick.
??
D
Henry Knoll wrote in message <37616A43.7382@tc.umn.edu>...
>David P (D) wrote:
>>
>> Urm...Anodized means that you don't need to paint it???
>>
>> I thought that was a protective coat?
>>
>> David
>
>I want a different color. My concern is how to make paint stick to
>the anodize.
>
>73
>
>Henry WA0GOZ

366. Re: Homebrew power supply pass transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-11 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <37618208.22A82E0C@mwci.net>
Source record: 69410

Dave Martindale wrote:

> There could still be a problem if the output of the supply is shorted
> when operating at high voltage. For example, if the supply is operating
> at 30 V out with 35-40 V out of the bulk supply and the output is shorted,
> for a brief period there is still 40 V on the capacitors and thus 40 V
> across the output transistor, at maximum current.

The current limiting circuitry in the regulator limits the short circuit current. The voltage rating of the transistors must be enough to handle the short circuit voltage. For example, my 40 V 8A supply uses four 2N3773s with a rating of 140 V (the 2N3055 has a 60 V rating and is too marginal). The short circuit current is limited to 4 A and the max Vce is about 53 V. This is well within the SOAR for each transistor. The thermal boundary of the SOAR is also not violated under short circuit conditions.

This power supply is described in the March/April QEX.

Bill W0IYH

367. Re: Homebrew power supply pass transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-11 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3761879F.28FACB0E@mwci.net>
Source record: 69411

Ian White, G3SEK wrote:

> William E. Sabin wrote:
> >
> >The data sheets also show a small region of V and I where additional second
> >breakdown derating is needed. Internal emitter ballasting of the constituent
> >transistors probably reduces this region.
> >
>
> Unfortunately, many devices sold as "2N3055s" are actually out-of-spec
> chips that were originally intended as other devices, which happen to
> fit the basic 3055 spec and are sold down-market.

Solution: for a critical application, buy authentic Motorola 2N3055 or some other standard brand with a published spec sheet that the mfr guarantees. Also, always apply generous derating factors to accommodate the "typical" data sheet specs. One can also spend an extra dollar and get a better and more modern transistor such the 2N377X types.

The usual "basic" 60 V 2N3055 is OK for 24 V regulators if they are well heat sunk and protected from abuse. I have bought them at Radio Shack, no problem.

Bill W0IYH

368. Please explain transmitter harmonics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-11 00:00:00 UTC
From: internet@cafe.com
Message-ID: <Kbh83.2952$Et6.223015@newsgate.direct.ca>
Source record: 69412

I am studying to be a HAM

If my transmitter is transmitting on 28.0 megahertz
What is the formula for harmonics?

Is it like......

second harmonic is on 56 mhz
third on 84
fourth on 112
fifth on140
etc etc

Is this how it goes?

I am sending this in from an internet cafe and will read replies in this group please.

thanks Steve

369. Re: Please explain transmitter harmonics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-11 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7js7d8fkl1@autumn.news.rcn.net>
Source record: 69413

Yes, you have it correct. Good luck with the
ham license.

Pete

MindGrind User wrote in message ...
>I am studying to be a HAM
>
>If my transmitter is transmitting on 28.0 megahertz
>What is the formula for harmonics?
>
>
>Is it like......
>
>
>second harmonic is on 56 mhz
>third on 84
>fourth on 112
>fifth on140
>etc etc
>
>
>Is this how it goes?
>
>I am sending this in from an internet cafe and will read replies in this
>group please.
>
>thanks Steve
>

370. Witch Kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-11 00:00:00 UTC
From: TimWall@webtv.net
Message-ID: <26258-3761B019-89@newsd-251.iap.bryant.webtv.net>
Source record: 69414

I am going to buy a kit to monitor cw.
Which band has the most activity, 20 40 or 80 meter?
Thanks Tim

371. Custom monolithic filters?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-11 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7jsgeu$ht6$1@autumn.news.rcn.net>
Source record: 69415

Who produces custom 2-pole monolithic filters
for the 146 MHz region? Used to get them from
PTI, but their minimum order has become ridiculous.

Peter

372. FS rotary switches(sorry for the hawking)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-11 00:00:00 UTC
From: Robert Mozeleski <moz@ncx.com>
Message-ID: <4C707308D60C8A3A.15AE3436245C3BD1.1A07E1BBA44B0DC9@lp.airnews.net>
Source record: 69416

ROTARY SELECTOR SWITCHES

These are NOS from the 50s,silver contacts, shafts, mostly , 3/8,
long, some are longer, (e-
mail for jpgs or descriptions). Need contacts cleaned, some slight surface
rust on hardware. Good for input
selectors, stepped attenuators etc.etc. Centra-lab ? Wafer design, different
diameters, ceramic as noted.
Also have some odd ones not listed. Thanks for looking. REGULARS $2ea
CERAMIC $5ea Plus
shipping.
REGULAR
1 POLE 3 POS QTY 1
1 POLE 5 POS QTY 8
1 POLE 7 POS QTY 3 DOUBLE STACK
1 POLE 11 POS QTY 13 DOUBLE STACK
2 POLE 3 POS QTY 7
2 POLE 3 POS QTY 1 TRIPLE STACK
2 POLE 5 POS QTY 1 TRIPLE STACK
2 POLE 6 POS QTY 26

CERAMIC
1 POLE 5 POS QTY 2 DOUBLE STACK
1 POLE 6 POS QTY 1 DOUBLE STACK SHORTING TYPE
1 POLE 8 POS QTY 1
1 POLE 8 POS QTY 4 DOUBLE STACK
1 POLE 11 POS QTY 1 DOUBLE STACK + ON&OFF
1 POLE 11 POS QTY 1 DOUBLE STACK 6 CONTACTS
1 POLE 12 POS QTY 8
2 POLE 2 POS QTY 1
2 POLE 3 POS QTY 1 TRIPLE STACK 60 DEGREES
2 POLE 4 POS QTY 3 DOUBLE STACK
3 POLE 2 POS QTY 6
3 POLE 3 POS QTY 30
3 POLE 3 POS QTY 1 DOUBLE STACK

373. Re: Yaesu FT-50 MODS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-11 00:00:00 UTC
From: RICHARD J SAMPSON <RJOHNS54@prodigy.net>
Message-ID: <7jttu8$1s04$1@newssvr04-int.news.prodigy.com>
Source record: 69417
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Does this mean that the MARS/CAP mod will not work too?
Brad Kellison KA8TOK wrote in message <375FC617.BE96E0D6@four-way.net>...
>if you have bought it recently as NEW not USED then no it won't work.. from
>April 1, 1999 there not made to modifiable. if you have one of the ones
usedn
>before this date(above). then your fine.. the mods will work.
>
>JoeP wrote:
>
>> I was wondering if anyone has successfully performed the extended receive
>> (and/or freeband/mars/cap) mod on an ft50rd that has a serial number
>> beginning with 8H? I'm assuming that it still works for later models.
Most
>> of the information I've read on the subject is a little dated. Please let
me
>> know, if anyone has had problems, I'd hate to ruin a perfectly good
radio.
>> Thanks,
>> Joe
>

374. Re: Motorola MQP6100 ics: need pinout and description

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-12 00:00:00 UTC
From: "Thomas C. Sefranek" <tcs@cmcorp.com>
Message-ID: <3762B1E7.92453FA0@cmcorp.com>
Source record: 69332
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew

IW2KPU wrote:

> I have a number of Motorola MQP6100 ICs. Thay are dual in line integrated
> circuits.
> Could someone please help? I need the pinout and the datasheet.
> Thanks. IW2KPU.

Did you try the Motorola web site?

I see MPQ6100A as a Quad Complimentary pair of transistors.
45 volts, 900 mw.

--
Thomas C. Sefranek WA1RHP
ARRL Instructor, Technical Specialist, VE Contact.
http://hamradio.cmcorp.com/41_Repeater/repeater.html
http://hamradio.cmcorp.com/inventory/Inventory.html

375. HELP: Helical Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-12 00:00:00 UTC
From: "Y." <soj@sympatico.ca>
Message-ID: <3762CF68.6AD3@sympatico.ca>
Source record: 69333

Can anyone refer me to a good document or article or book on the construction of miniature helical filters. I have been trying to duplicate the TOKO helical filters by using cans and helix of three times the size. (Cans .5 inch square by 1.5 inch high. Results for a 3 section filter does not give much attenuation at frequencies far from the desired frequency. Any information on the mechanical aspect of coupling windows, coaxial input and output coupling, helix form material etc. will be appreciated. Frequency range 500 to 800 Mhz. 8 Mhz bandwidth. Are aluminum cans OK or if everything has to be silver plated? Thanks! "Y" VE2AUC

376. Re: Homebrew power supply pass transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-12 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3762D23A.AA490A8B@mwci.net>
Source record: 69334

Dave Martindale wrote:

> My point was simply that it's possible to design a supply where the Vce
> of the transistor is normally limited by adjusting the unregulated supply
> voltage, and the current is limited by the regulator circuitry, and *still*
> get into trouble. This is because the input-voltage adjustment cannot
> operate instantaneously, so when the output is suddenly shorted the
> output transistor suddenly finds itself operating at maximum current and
> near-maximum voltage simultanously. This condition doesn't last long
> enough to worry about thermal dissipation, but it might last long enough
> to worry about safe operating area limits.

Hopefully the designer will be aware of this and make provision for it. It dosesn't seem like a difficult task.

Bill W0IYH

377. Re: 10 meter dipole with 102" whips?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-12 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01beb568$53404620$LocalHost@default>
Source record: 69335
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

For some reason I am reminded of Cary Grant (English?) the famous, long-lived, Hollywood film star who towards the end of his extensive career received a wire (a telegram in the UK) from one of his loving but curious fans. It read "HOW OLD CARY GRANT STOP".

Conscious of maintaining good relations with his world-wide fan clubs he wired an immediate reply. It read "OLD CARY GRANT FINE STOP HOW YOU STOP".

Are baggy underpants still in vogue ?

A 102" whip is 1/4-wave resonant (above a perfect ground) at 28.1 MHz when one allows for an end-effect of 3%. But the end-effect depends on antenna diameter which is neglected in ARRL publications. Makes quite a difference between lattice masts and 18-gage wire on 160m.

Since everybody on your side of the pond quotes from them, out of curiosity a couple of months ago I purchased the two american bibles :- ARRL Handbook and the ARRL Antenna Book. One of the first thing I noticed was One S-unit = 6dB. The amount of excellent info contained between the covers is stupendous.

I'm getting near the end of a bottle of Californian red. Good for the arteries. Must put out the cat. Good night Cec and all other readers.
--
****
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp

****

378. Re: ? registration of double sided boards

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-12 00:00:00 UTC
From: Gary Blau <gblau@radiomasters.com>
Message-ID: <3762EF95.E6FF88DA@radiomasters.com>
Source record: 69336

Don wrote:

> Hi
>
> I'm getting ready to make my first dbl sided board using toner transfer
> (press n peel). Does anyone have any tried and true methods for getting
> the two sides to be alligned with each other? Anything I SHOULDNT try?
> And I'm also interested in the same thing as applicable to positive
> pre-sensitized boards, as I may try them when my pnp stuff runs out.

Howdy, Don:

Long ago I used to lay out my double sided artwork using clear plastic loose-leaf page protectors. I used to use the tape type pads and traces. That way it's easy to see registration thru both sides as you go.

When exposing the treated PC board, I'd tape it between the sheets and expose it. Used to work very well. Kinda low-tech, I know, but never had trouble.

I used to use the old Kodak positive resist, which they no longer make, which was terrific. The Kepro is ok, but very finnicky about it's drying and developing. That Kodak stuff was idiot proof. Used to develop it in a mild lye solution and etch with ferrous sulfate. I haven't done a PCB in a few years, so I'm sure there must be better chemicals and methods by now! Maybe you know of some good positive resist out there??

Good luck & 73,

Gary
W3AM
http://www.w3am.com

379. Stripping .141" semi-rigid coax?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-12 00:00:00 UTC
From: Dan Rae <rae4@ix.netcom.com>
Message-ID: <3762F3ED.FD545671@ix.netcom.com>
Source record: 69337

Can anyone tell me the best way of cutting and preparing this coax for connectors?
At the moment I find the best way is to roll the cable under a sharp razor blade, but find it difficult not to cut into the dielectric, and also it is easy to distort the outer copper.
Possibly tools exist for this but I'm talking about doing a few at home, not thousands in an industrial environment.
Using this cable with standard BNC connectors is another whole thread in itself, but I think I've got that sorted out :-)

73 All, Dan AC6AO / G3NCR

380. Re: Require prop-pitch help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-12 00:00:00 UTC
From: Arthur Unwin <aunwin@fgi.net>
Message-ID: <37630157.1D02E2A0@fgi.net>
Source record: 69338
Cross-posted to: alt.ham-radio.dxing,alt.ham-radio.hf,aus.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,uk.radio.amateur

I will be happy to help you. The notion that the motor is in "two halves" does concern me somewhat, maybe you have taken the cover off !
Art Unwin. KB9MZ

John Dvoracek wrote:

> I am overhauling an old WWII era prop-pitch motor to help a friend who is
> building a contest station. Does anyone have any information on disassembly
> one the motor is split open into two halves? I am especially wanting to
> know how to remove the electric motor and the huge planetary looking gear
> assembly. Thank you!
> 73,
> de ke5c,
> op John
> jdvoracek@vvm.com

381. Re: Witch Kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-12 00:00:00 UTC
From: "Al, N2NKB"
Message-ID: <7juvs8$a9d$1@bgtnsc01.worldnet.att.net>
Source record: 69339

Don wrote in message <3761F84B.EABD813A@usit.net>...
>Tim Wall wrote:
>>
>> I am going to buy a kit to monitor cw.
>> Which band has the most activity, 20 40 or 80 meter?
>> Thanks Tim

40 Meters is plagued with commercial shortwave broadcast radio stations
at night.
Al, N2NKB

382. Re: 10 meter dipole with 102" whips?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-12 00:00:00 UTC
From: tatasadasayago <Jcrosley@mocc.com>
Message-ID: <37631808.E8A0E828@mocc.com>
Source record: 69340
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Too bad I missed the beginning of this thread.....
FYI: I used 6 102" steel whips spaced .125A to .065A apart and planted on the flat roof of my shack using grounded chickenwire mesh as counterpoise. To my surprise and delight, the array work as well as my 4 element 10m beam. Of course the array refuses to rotate :(
Hames in the Southeast hear my 2.5 watt signal very well with it, so It does work.
See ya
Jim

Reg Edwards wrote:

> For some reason I am reminded of Cary Grant (English?) the
> famous, long-lived, Hollywood film star who towards the end
> of his extensive career received a wire (a telegram in the
> UK) from one of his loving but curious fans. It read "HOW
> OLD CARY GRANT STOP".
>
> Conscious of maintaining good relations with his
> world-wide fan clubs he wired an immediate reply. It read
> "OLD CARY GRANT FINE STOP HOW YOU STOP".
>
> Are baggy underpants still in vogue ?
>
> A 102" whip is 1/4-wave resonant (above a perfect ground)
> at 28.1 MHz when one allows for an end-effect of 3%. But
> the end-effect depends on antenna diameter which is
> neglected in ARRL publications. Makes quite a difference
> between lattice masts and 18-gage wire on 160m.
>
> Since everybody on your side of the pond quotes from them,
> out of curiosity a couple of months ago I purchased the two
> american bibles :- ARRL Handbook and the ARRL Antenna Book.
> One of the first thing I noticed was One S-unit = 6dB.
> The amount of excellent info contained between the covers
> is stupendous.
>
> I'm getting near the end of a bottle of Californian red.
> Good for the arteries. Must put out the cat. Good night
> Cec and all other readers.
> --
> ****************************
> Reg, G4FGQ For free software go to:-
> http://www.btinternet.com/~g4fgq.regp

>
> ******************************

383. Re: Witch Kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-12 00:00:00 UTC
From: TimWall@webtv.net
Message-ID: <28083-37632418-83@newsd-251.iap.bryant.webtv.net>
Source record: 69341

Thanks to everyone for your help. I'm going with the 40 meter.
Thanks again Tim

384. Quagi Design Specifications

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-12 00:00:00 UTC
From: Deon Erwin <zr1dq@qsl.net>
Message-ID: <7jvo7t$2ipo$1@nnrp01.ops.uunet.co.za>
Source record: 69342
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,aus.radio.amateur.misc,uk.radio.amateur,alt.ham-radio.vhf-uhf

I require specifications or formulae to design quagi's for 2m and 70cm.
I have a very old ARRL Antenna Handbook without any reference to the quagi.

Please reply to my email address. Help will be appreciated.

Regards
Deon ZR1DQ

385. Re: Charging Jell Cells

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-12 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19990612232032704 32@zetnet.co.uk>
Source record: 69343

> It depends - if the charger has a current limiter you should be okay. If
> it doesn't, you could smoke the charger if the battery is very low on
> charge. If it's a two-step charger then it *probably* has a current
> limiter during the initial step.
> Martin McCormick wrote:
==========

A simple charger current limiter is a 12V bulb .
If your charger can do 2 A max (for example) ,put a 20 -25 W car bulb
in series.
Normally the bulb with hardly glow due to small voltage differential
between charger (say 13.8 V) and 12 V battery. But if battery is
veeery low or internally shorted ,you will not blow the charger.
The bulb glowing is also an indication of the battery status while charging.

If you wish to charge faster you can fit a higher power bulb ,say a
50 Watts headlight.
In the event of a battery short a 2 A fuse in the charger circuit
will protect the charger.

73 Frank GM0CSZ / KN6WH

Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland UK
e-mail : gm0csz.kn6wh@ukrs.org

386. Re: Tech America Website anyone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-12 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierFD9zzz.IGq@netcom.com>
Source record: 69344

In article <mMv83.3085$Et6.241492@newsgate.direct.ca>,
Bob Charles <bobc@hotmail.com> wrote:
>Tech America Website anyone?
>
>please and thanks! Bob

Used to be www.techam.com, but whatever it is now, there should
be a link from www.tandy.com.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

387. RF amplifier circuit wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-12 00:00:00 UTC
From: df700@torfree.net
Message-ID: <FD6tz2.8Hy.0.queen@torfree.net>
Source record: 69418

Hi there.

I'm looking for a circuit to bump a 5 watt (or less) HT output to 10 watts (or more) output. Anybody have one? Anybody point me to one on the Net somewhere?

Thanks.

/O Neil Oosten * neil@crosswinds.net
|| Do you have any radio job leads?
<__> http://neil.home.dhs.org/job/

--

388. Re: Witch Kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-12 00:00:00 UTC
From: Don <bjmcpher@usit.net>
Message-ID: <3761F84B.EABD813A@usit.net>
Source record: 69419

Tim Wall wrote:
>
> I am going to buy a kit to monitor cw.
> Which band has the most activity, 20 40 or 80 meter?
> Thanks Tim
It depends on time of the sunspot cycle and the time of day. On 80 meters, there isnt much at all in the daytime, but it is a well used band after sundown. 40 is a good band for day or night, as is 20. When the sunspots are at minimum, 20 meters can be pretty much dead at times, but 40 will usually have something even then. You cant really go wrong with any of the bands, but the antenna will be smaller for the higher frequencies. I dont know how well you copy CW. If you can go at a pretty fast clip, 20 would be ok, but if you are looking for slower speeds, then 80 or 40 would be better as there is novice subbands there.

Don

389. Re: Witch Kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-12 00:00:00 UTC
From: Michael Young <nobody@all.org>
Message-ID: <929168830.126.19@news.remarQ.com>
Source record: 69420

Generally, 40m at night is lively. 20m is hot 24 hours now, but slows down at night during solar lows. If you're interested in DX, get the 20m; the 40m will pick up good regional ragchews even during daytime. I don't spend any time on 80m, so I can't comment.

Me personally, I'd get both 20m and 40m. For that matter, the few extra dollars for full HF coverage seems a bargain.

Michael.

Tim Wall <TimWall@webtv.net> wrote in message news:26258-3761B019-89@newsd-251.iap.bryant.webtv.net...
> I am going to buy a kit to monitor cw.
> Which band has the most activity, 20 40 or 80 meter?
> Thanks Tim
>

390. Motorola MQP6100 ics: need pinout and description

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-12 00:00:00 UTC
From: IW2KPU <iw2kpu@radionostalgia.net>
Message-ID: <7jthu7$1aig$1@urano.inet.it>
Source record: 69421
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew

I have a number of Motorola MQP6100 ICs. Thay are dual in line integrated circuits.
Could someone please help? I need the pinout and the datasheet.
Thanks. IW2KPU.

391. Re: FS rotary switches(sorry for the hawking)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-12 00:00:00 UTC
From: dialcover@webtv.net
Message-ID: <11943-37625C56-9@newsd-122.bryant.webtv.net>
Source record: 69422

FS ISN'T HAWKING, FA IS

disregard caps, visual problem
Bill Turner WA0ABI
1117 Pike Street
Saint Charles, MO 63301
314-949-2210

392. copying BA designs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-12 00:00:00 UTC
From: Will White <wcw@asu.uswest.net>
Message-ID: <376288A6.911C7E4A@asu.uswest.net>
Source record: 69423
Cross-posted to: rec.radio.amateur.boatanchors,Rec.radio.amateur.homebrew

To what extent have BA designs been duplicated by home constructors? I would be interested to see a commercially manufactured unit and a home built copy perform side by side. You would think they should both perform almost identically (allowing for slight variations in components) if both are in 100% shape. Which BAs have folks duplicated, and with what results?
--
Will White, KD7BFX

to reply, please click this link mailto:wcw@asu.uswest.net

393. Tech America Website anyone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-12 00:00:00 UTC
From: bobc@hotmail.com
Message-ID: <mMv83.3085$Et6.241492@newsgate.direct.ca>
Source record: 69424

Tech America Website anyone?

please and thanks! Bob

394. Re: Tech America Website anyone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-12 00:00:00 UTC
From: Rob Dunn <dunnr@ix.netcom.com>
Message-ID: <7ju2e3$r3r@sjx-ixn6.ix.netcom.com>
Source record: 69425

www.techam.com

Bob Charles <bobc@hotmail.com> wrote in message
news:mMv83.3085$Et6.241492@newsgate.direct.ca...
> Tech America Website anyone?
>
> please and thanks! Bob
>

395. Re: Tech America Website anyone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-12 00:00:00 UTC
From: Will White <wcw@asu.uswest.net>
Message-ID: <37629147.F47851CB@asu.uswest.net>
Source record: 69426

http://www.techam.com
--
Will White, KD7BFX

to reply, please click this link mailto:wcw@asu.uswest.net

396. Require prop-pitch help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-12 00:00:00 UTC
From: John Dvoracek <jdvoracek@vvm.com>
Message-ID: <929209144.963.79@news.remarQ.com>
Source record: 69427
Cross-posted to: alt.ham-radio.dxing,alt.ham-radio.hf,aus.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,uk.radio.amateur

I am overhauling an old WWII era prop-pitch motor to help a friend who is
building a contest station. Does anyone have any information on disassembly
one the motor is split open into two halves? I am especially wanting to
know how to remove the electric motor and the huge planetary looking gear
assembly. Thank you!
73,
de ke5c,
op John
jdvoracek@vvm.com

397. Re: Painting Aluminum

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-12 00:00:00 UTC
From: Marty <marty-k2@snet.net>
Message-ID: <37629B79.634F7E70@snet.net>
Source record: 69428

I've sanded anodized surfaces with fine garnet paper and then dipped them in, or brushed on, a solution of sodium hydroxide (lye) for a few minutes, then rinsed and dried; and have gotten very good adhesion with acrylic, polyurethane and oil based paints. I think vinyl latex paints would stick to such a prepared surface as well.

Marty K1FHR

"David P (D)" wrote:
> Use vinyl paint. Acryillc won't stick.
> ??
> D
> Henry Knoll wrote in message <37616A43.7382@tc.umn.edu>...
> >
> >I want a different color. My concern is how to make paint stick to
> >the anodize.
> >

398. Maryland Hamfest - 20 June 99

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-12 00:00:00 UTC
From: windbrkr@erols.com
Message-ID: <3762A7FE.EB8D1D56@erols.com>
Source record: 69429

Interested in Amateur Radio, Electronics, Computers, etc.?

Next weekend, come out to the 1999 FATHERS DAY HAMFEST
Sunday, June 20th 1999

In Historic Frederick, Maryland
At the Frederick County Fairgrounds, 797 East Patrick St.

- Easy access from I-70, I-270, US-40, US-15 etc.
- Plenty of Parking

- ARRL VE Testing (courtesy of MADRA VE Team)
- Testing starts promptly at 09:00

- Large Outdoor Flea Market / Tailgating Area
- Indoor Ham Radio, Electronics, Computer Commercial Vendors
- New and used Ham Radio equipment and accessories - Two
commercial new equipment vendors - Icom, Kenwood, Yaesu etc.

- Good Food and Refreshments (no outside food vendors, please)

- Rain or shine, 08:00 to 15:00 EDT

- Admission: $5.00 per person donation
- Tailgating spaces: $5.00 each + one admission
- Indoor vendor tables: $15.00 each

Talk-in: Call K3ERM on 147.060 (+) K3MAD repeater
146.640 (-) K3ERM repeater
146.520 (x) Simplex

Email to me or to n3vok@erols.com with questions, vendor reservations,
etc. Include fax number for map and/or flyer.

73 and see you there,
Bob K9CMR

399. Re: Homebrew power supply pass transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-12 00:00:00 UTC
From: davem@groucho.cs.ubc.ca
Message-ID: <7ju97k$8nf@groucho.cs.ubc.ca>
Source record: 69430

sabinw@mwci.net writes:

>The current limiting circuitry in the regulator limits the short circuit
>current. The voltage rating of the transistors must be enough to handle the
>short circuit voltage. For example, my 40 V 8A supply uses four 2N3773s with
>a rating of 140 V (the 2N3055 has a 60 V rating and is too marginal). The
>short circuit current is limited to 4 A and the max Vce is about 53 V. This
>is well within the SOAR for each transistor. The thermal boundary of the SOAR
>is also not violated under short circuit conditions.

It sounds like your power supply is well designed.

My point was simply that it's possible to design a supply where the Vce
of the transistor is normally limited by adjusting the unregulated supply
voltage, and the current is limited by the regulator circuitry, and *still*
get into trouble. This is because the input-voltage adjustment cannot
operate instantaneously, so when the output is suddenly shorted the
output transistor suddenly finds itself operating at maximum current and
near-maximum voltage simultanously. This condition doesn't last long
enough to worry about thermal dissipation, but it might last long enough
to worry about safe operating area limits.

Dave

400. Re: Homebrew power supply pass transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-12 00:00:00 UTC
From: hamm4fun@aol.com
Message-ID: <19990612145105.03112.00001032@ng-fh1.aol.com>
Source record: 69431

```
>
>FWIW, had pretty good luck with equalized PNP/NPNs at up
>to 30A controlled by a 3-term regulator, LM317K/350K.
>Seems the rules are...
>1. most any 3055 and up work OK
>2. about 5A per pass transistor
>3. heavy pass heatsinks and fan
>4. lightly heatsink regulator so will auto-shutdown before
> pass transistors go. this is cut and try...
>5. keep Vin to a minimum
>
>73 - John W7ZFB
>1400 Catron SE Albq, NM 87123
>*********************************************************
>* Homebrewer since 1947 CW BoatAnchors Norcal #930 *
>* BA CW freqs - 3578, 7050, 7147, 14050, 21050, 28050 *
>*********************************************************
>
>
>
>
>
>
>
```

One of the problems I had when designing a high curren power supply was with the connections to the transistors. You can find transistors that will handle more current than the connections to them will. this is especially tru of some of the high current TO-3 case transistors. I usually try to limit these to about 7 amps per device. 5 amps would be even better.

401. Re: Stripping .141" semi-rigid coax?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-13 00:00:00 UTC
From: Steve Ratzlaff <sratzlaf@flash.net>
Message-ID: <37630BEE.A5BA9AF2@flash.net>
Source record: 69345

The "best" way is with a fancy machine that uses a rotary blade where you set the depth so as not to cut into the dielectric.
The easy/bench method is to score the outer sleeve, just as you have been doing, but not to keep going around until you cut thru the sleeve. Just score it then use needlenose pliers to grab the scored end and gently flex it back and forth until the score breaks thru all around. Then pull off the outer sleeve and you're ready to attempt the same on the dielectric! An easier way is to use cheap wire strippers, setting the blades so they don't quite meet, or leaving the inside circle when the blades close just larger than the inner conductor. I've been doing the stripping operation that way for many years at work.
Steve AA7U

402. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-13 00:00:00 UTC
From: sphinx@world.std.com
Message-ID: <FD91F3.31x@world.std.com>
Source record: 69346
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

In article <375E0B07.12C8DDD3@aznet.net>, Wooka <hass@aznet.net> wrote:
>
>Do you know any studies that point to radiation hindering radio communications?
>
It's not the radiation directly, it's the effect of the radiation on the
ionosphere that disrupts communications. As I recall, HF "skip" propagation
is gonzo for many hours after a nuclear blast, but the effect should clear
up in 24 hours or so and you can go back to DXing... if you still have
a power source.

I don't recall any references offhand but if you really wanted references
instead of just confirmation that the effect exists, e-mail me and I will
see if I can find some.

-John S., W3IKG

403. Looking for YIG oscillators and dielectric resonators

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-13 00:00:00 UTC
From: Peter Bolch <nc-bolchpe@netcologne.de>
Message-ID: <7jvq9d$4sf$1@news.netcologne.de>
Source record: 69347

Hi

I'm loking for vendors selling YIG oscillators and dielectric resonators in small quantities to overseas customers.

Peter

404. WTB: Vacuum Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-13 00:00:00 UTC
From: BlueStrat <bluestat@erols.com>
Message-ID: <3763C684.95EEADF5@erols.com>
Source record: 69348

Looking for the following NOS (preferably in
original boxes) tubes.

6V6GT, 6L6GC, 5AR4, 5Y3GT, 5R4, 6CA7/EL34, 6BQ5/EL84, 7189A, 7027,
7591A, 7581A, 12AX7A , 5751, 12AY7, 7025, 12AT7, 7199, 5881, 6550,
7868, KT-66,77,88.

Also, octal socket extenders/savers.

Please list brand, price, qty available, and whether in
original box.

Thanks,
Mike
703-430-8713
bluestat@erols.com

405. Re: Please explain transmitter harmonics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-13 00:00:00 UTC
From: Gary Ferdinand <gferdinand@ipass.net>
Message-ID: <rOP83.486$u3.1984@news.ipass.net>
Source record: 69349

Your examples are correct.

The formula is:

nf, where n is the harmonic number and f is the frequency of the
fundamental.

2f is 2nd harmonic, 3f is 3rd harmonic, etc. The 1st harmonic is the
fundamental.

MindGrind User wrote in message ...
>I am studying to be a HAM
>
>If my transmitter is transmitting on 28.0 megahertz
>What is the formula for harmonics?
>

406. FS: Kantronics KAMPlus packet modem $275

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-13 00:00:00 UTC
From: "Jeffery A. Purtle" <jpurtle@home.com>
Message-ID: <3763D2F3.62ED96E5@home.com>
Source record: 69350
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.packet

```
For sale:
Kantronics KAMPlus packet modem
Dual port, so that it can do HF and VHF packet simultaneously
Built-in personal BBS and many automated functions
Built-in help system
Also, receives WEFAX and all the other digital protocols

In perfect condition.
Original box, manuals, cables, etc..
$275

Call (864) 292-3532 in Greenville, South Carolina
Or email: jpurtle@home.com

73,
Jeff Purtle, AC6IW
```

407. FS: Yeasu FT-51R + extras for $300

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-13 00:00:00 UTC
From: "Jeffery A. Purtle" <jpurtle@home.com>
Message-ID: <3763DCAC.29A42E88@home.com>
Source record: 69351
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

For Sale:
Yeasu FT-51R
5 watt dual band handheld transceiver
receives 110-180 Mhz and 420-470 Mhz
transmits 140-174 Mhz and 420-470 Mhz
alpha numeric labels for each memory channel
sub audible tone encode and decode stored in each memory
can be set-up to act as a mini repeater
computer programmable

original box, manual, antenna, adapter, etc.
works fine, in good condition

additional items include: a MFJ 2m/440 quarter wave telescoping antenna,

an MFJ 2m/440 magmount, and a Yeasu mobile drop charger/power supply.

Asking $300

Call or email Jeff Purtle, AC6IW:
jpurtle@home.com
(864) 292-3532 in Greenville, South Carolina USA

408. Re: Require prop-pitch help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-13 00:00:00 UTC
From: "David P (D)" <pickards@SPAMBLOCKzen.co.uk>
Message-ID: <maS83.1220$Tf6.5714@newreader.ukcore.bt.net>
Source record: 69352
Cross-posted to: alt.ham-radio.dxing,alt.ham-radio.hf,aus.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,uk.radio.amateur

Arthur Unwin wrote in message <37630157.1D02E2A0@fgi.net>...
>I will be happy to help you. The notion that the motor is in "two halves"
does
>concern me somewhat, maybe you have taken the cover off !
>Art Unwin. KB9MZ
>
>John Dvoracek wrote:
>
>> I am overhauling an old WWII era prop-pitch motor to help a friend who is
<SNIP>
>

I know this is cross posted, but why cross post to the UK ham group

409. Re: Homebrew Plans On-line

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-13 00:00:00 UTC
From: "D." <n0dbx@mindspring.com>
Message-ID: <7k0v64pvu1@nntp2.atl.mindspring.net>
Source record: 69353

Cedric <sabbatai_zvi@hotmail.com> wrote in message
news:376061b3.15689821@news.earthlink.net...
> Many Homebrew Articles, schematics and plans on-line.
>
> Plus Links to hundreds of other projects and reference material
> on the web that you won't find anywhere else!
>
> Visit:
>
> http://home.earthlink.net/~af4k/hamfiles.htm
>
I ain't NEVER SEEN this much stuff on one webpage.
Took three days to load and I never did read it all :-)

N0DBX

410. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-13 00:00:00 UTC
From: "Frank A. Adrian" <fadrian@uswest.net>
Message-ID: <rHT83.4085$N3.210534@news.uswest.net>
Source record: 69354
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Wow! This is really getting surrealistic. Even most no-coders know how to send and recognize SOS (That's why they could use it in the show "believably". LA cops AFAIK, don't receive Morse training). Besides that, (a) it was a stupid plot device, (b) Martin Milner still can't act, and (c) TV shows are probably not a really great input to base federal communication policy upon.

WebMonkey <click@below.com> wrote in message news:375E77A6.7F29@below.com...
> Michael Young wrote:
> >
> > Wooka <hass@aznet.net> wrote in message
> > news:375E0B07.12C8DDD3@aznet.net...
> > >
> > >
> > > Trevor Harris wrote:
> > >
> > > > the military still teaches it. The reason that they still want to
> > teach it is that
> > > > in a nuclear wasteland, it is theorized that CW will be the only
> > method that will
> > > > work. If you don't hear the dih you will hear the static "beat"
> > silent. I hope
> > > > this make sense. 73's brother
> > > > Trevor Harris, Former SUB Radioman
> > > >
> > >
> > > Do you know any studies that point to radiation hindering radio
> > communications?
> >
> > You're trolling, right? You're really one of the know-code crowd in
> > disguise, trying to discredit the movement to dummify.
> >
> > Michael.
>
> anyone see the adam-12 episode where malloy got shot? his radio mic
> was smashed and the only way he could communicate was to 'key' the
> radio on and off. he sent a bit of morse code, was cool.
>
> morse code is pretty cool, you don't need a radio to use it.
> a mirror and sunlight works too.
>
> anyway, i thought i might throw this in. my repeater is

> voice id heavy, i was asked to add more morse code id
> in the mix by my friend. after this suggestion,
> i made a few rotating bulletins with morse code followed
> by a voice counterpart to assist a tech ham in getting some
> copy practice right from my repeater. it appears to have
> helped alot. upgrade in sight =]
> --
> A.C. Curtis
> KB WLF
> 53.45 and 442.45, 77.0Hz enc/dec [multi-cast repeater system]
> mailto:demoman@rollanet.org
> http://www.rollanet.org/~demoman

411. Homebrew Cavities

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-13 00:00:00 UTC
From: Dano <webster@express-delivery.net>
Message-ID: <7k12tm$8kf@nnrp3.farm.idt.net>
Source record: 69355

I've been looking at all these web pages for home made radio's.
Is it pratical to hand make your own cavities for a VHF-repeater.
Anyone know where to find info for home making one.
Dano

412. Technology Demo Day and URLs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-13 00:00:00 UTC
From: kc5goi <kc5goi@hotmail.com>
Message-ID: <929306082.576.40@news.remarQ.com>
Source record: 69356
Cross-posted to: alabama.birmingham.radio.amateur,aus.radio.amateur.digital,aus.radio.amateur.misc,aus.radio.amateur.wicen,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,tamu.amat

Hello everyone. just a reminder about TDD and I now have a web page up that has the current list of known particiapting stations. If you are going to participate let me know. You dont have to keep score to count. By just setting a few parameters you can help fellow hams rack up point without you even watching. I have included links to my email, the TDD site at TAPR and the list server subscription page.

73, Guy
www.infospeedway.net/~kc5goi/tdd.htm
www.infospeedway.net/~kc5goi/home.htm

413. New URL!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-13 00:00:00 UTC
From: Yaesu <cq.fabio@iol.it>
Message-ID: <7k16pp$494$1@hermes.iol.it>
Source record: 69357

Hi
when you can, please visit this URL: http://drcp.findhere.com/
Thank's

414. Re: Homebrew Cavities

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-13 00:00:00 UTC
From: Bob Headrick <bobh@proaxis.com>
Message-ID: <929312348.496.85@news.remarQ.com>
Source record: 69358

Dano <webster@express-delivery.net> wrote in message
news:7k12tm$8kf@nnrp3.farm.idt.net...
> I've been looking at all these web pages for home made radio's.
> Is it pratical to hand make your own cavities for a VHF-repeater.
> Anyone know where to find info for home making one.
> Dano

http://www.dallas.net/~jvpoll/dup6m/dup6m.html has an example of a 6M duplexer that could be scaled to 2M. The July '72 QST has an article "A Homemade Duplexer for 2 Meter Repeaters", and it seems like CQ or 73 had an article in the last few years on building a 2M duplexer from copper pipe.

In any case it seemed like a lot of work for relatively marginal results :-)

- 73 Bob W7OV

>
>

415. FS: Large power (plate) transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-13 00:00:00 UTC
From: Bobby <someone@somedomain.com>
Message-ID: <01beb5ef$18f875a0$6c0ad7d8@p15218>
Source record: 69359
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

Super duty transformer mfg by Osborne transformer in Detroit. 4000 or 5650 Volts center tapped output at 500 mA continuous duty. Rated at 1.98 kVA with 220 or 110 Volt input. Size is approx 9" deep by 7.5 " wide and 10" to insulator tips. I would guess weight at about 50 pounds. It has never been used (to my knowledge) and does not flash over with 160 Volts applied to the 110 Volt inputs in very humid conditions. I was going to build an amplifier with it a few years back but lost interest. Forget about me shipping this behemoth.... pick it up in southeastern Michigan (Detroit) area for $75 or might trade for 300 watt roller inductor antenna tuner.
Bob
KB8TL

e-mail if interested to XYZ_P15218@FLASH.NET but remove the XYZ_

root@localhost
postmaster@localhost
admin@localhost
abuse@localhost
postmaster@127.0.0.1

416. Re: Require prop-pitch help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-13 00:00:00 UTC
From: Arthur Unwin <aunwin@fgi.net>
Message-ID: <37644575.CABF882E@fgi.net>
Source record: 69360
Cross-posted to: alt.ham-radio.dxing,alt.ham-radio.hf,aus.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,uk.radio.amateur

David P (D) wrote:

> Arthur Unwin wrote in message <37630157.1D02E2A0@fgi.net>...
> >I will be happy to help you. The notion that the motor is in "two halves"
> does
> >concern me somewhat, maybe you have taken the cover off !
> >Art Unwin. KB9MZ
> >
> >John Dvoracek wrote:
> >
> >> I am overhauling an old WWII era prop-pitch motor to help a friend who is
> <SNIP>
> >
> I imagine he feels that the British tend to be more

73s Art Unwin KB9MZ ....XG

417. Looking for info on Triad TY-84 transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-13 00:00:00 UTC
From: Mike Silva <mjsilva@jps.net>
Message-ID: <3764bb78@news1.jps.net>
Source record: 69361
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Hi all,

I've got a Triad TY-84 inverter transformer and now that I'm ready to build it into a power supply naturally I can't find the data sheet (I knew where it was for years, but then I moved and...). If anybody can supply me with this data I'd be very grateful (as well as paying for your postage, time, etc). Thanks.

73,
Mike, KK6GM

418. Re: RF amplifier circuit wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-13 00:00:00 UTC
From: Woody White <woody.white@att.net>
Message-ID: <376461AA.6ACCB258@att.net>
Source record: 69362

Neil,

A few years back QST had an article describing a fet amp
that would suit you needs. I can't remember the issue
however. Maybe someone else can...

Another possibility is: Communications Concepts Inc My
catalog is a bit old, but they have a kit (was $80) for a 2M
amp 1/4 watt to 3 watts in (5 absolute max) that provided
2-35 out (drive dependent). Good for SSB or FM. I don't
think they have a net site. They are in Beavercreek, Ohio.
Phone: (was)
513 426 8600. IO have delt with them in the past - no
problems.

Woody

Neil Oosten wrote:
>
> You know there's something wrong when you follow-up to your own message. :-)
>
> I neglected to mention the band! It's 2 meters--144 to 148 MHz. Still
> looking for that fairly simple circuit I know exists somewhere--anyone
> have it?
>
> /O Neil Oosten * neil@crosswinds.net
> || Do you have any radio job leads?
> <__> http://neil.home.dhs.org/job/
>
> I wrote:
> : I'm looking for a circuit to bump a 5 watt (or less) HT output to 10
> : watts (or more) output. Anybody have one? Anybody point me to one on the
> : Net somewhere?
> --

--

---------- de Woody, WB4QXE ----------

Ham Homebrew/ATV Circuits -*- Scanning Electron
Microscope Images

http://www.geocities.com/capecanaveral/3722

419. Re: Stripping .141" semi-rigid coax?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-13 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <376485FF.C0C7BB67@teleport.com>
Source record: 69363

I've had good luck using a small tubing cutter. It does smear the shield some in toward the center of the cable, but not enough to short the center conductor.

Roy Lewallen, W7EL

Steve Ratzlaff wrote:
>
> The "best" way is with a fancy machine that uses a rotary blade where
> you set the depth so as not to cut into the dielectric.
> The easy/bench method is to score the outer sleeve, just as you have
> been doing, but not to keep going around until you cut thru the sleeve.
> Just score it then use needlenose pliers to grab the scored end and
> gently flex it back and forth until the score breaks thru all around.
> Then pull off the outer sleeve and you're ready to attempt the same on
> the dielectric! An easier way is to use cheap wire strippers, setting
> the blades so they don't quite meet, or leaving the inside circle when
> the blades close just larger than the inner conductor. I've been doing
> the stripping operation that way for many years at work.
> Steve AA7U

420. Re: Homebrew Cavities

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-13 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <nglqzQAM6BZ3Ew7J@ifwtech.demon.co.uk>
Source record: 69364

Dano wrote:
>I've been looking at all these web pages for home made radio's.
>Is it pratical to hand make your own cavities for a VHF-repeater.
>Anyone know where to find info for home making one.

http://www.dallas.net/~jvpoll/techidx.html gives good information on making low-cost cavities from sections of large hardline.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

421. Re: Hard-Line

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-14 00:00:00 UTC
From: tatasadasayago <Jcrosley@mocc.com>
Message-ID: <37656804.D0EA74F9@mocc.com>
Source record: 69282

If you can deal with 75 Ohm, head to your nearest CATV yard and ask for an end cut. You can cheeos from 5/8" 1" and 1.5" and average lengths are 75-350' depending on your luck.
I have over 500' of 5/8" run here and it feeds a 20M monobander just fine with homebrew matching nets on each end. I have been successful with it up to 144Mhz using 1/4 wave 3/4" copper pipe matching units.
Best Regards
Jim

Mark N Dumont wrote:

> Wanted 250 to 300 feet of 7/8" to 1" hard-line
>
> mark@ciainc.com

422. Big Bucks

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-14 00:00:00 UTC
From: Bill <wrc@tir.com>
Message-ID: <3765747B.77026C7C@tir.com>
Source record: 69283

Gosh,

I've been watching the ads over in the swap groups for a little while.
When did the prices of used stuff get so *high* ?

Can probably make something better than commercial

Can make exactly what you want

Can have lotsa fun

Get to brag

....and now... I changed my mind... you can easily save money

Does anybody really need any more incentive to build their own?

Bill KU8H <click on remove news group for swaps>

423. How to Program a Midland??????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-14 00:00:00 UTC
From: Bill Crann <bcrann@nf.sympatico.ca>
Message-ID: <3765897a.0@209.128.1.3>
Source record: 69284
Cross-posted to: alt.ham-radio.vhf-uhf,rec.ham-radio,rec.ham-radio.packet,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.packet

I have an old 8ch Midland 70-336A VHF radio. I was wondering if there was anyway to program the EPROM with a regular EPROM burner??? Can anyone tell me a way to get this radio programmed. I bought it from a guy not in my area so the repeaters in my area are not programmed into the radio. Any help would be appreciated. Thanks. 73's

VO1BIL

424. Re: How to Program a Midland??????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-14 00:00:00 UTC
From: schertzer@ns.sympatico.ca
Message-ID: <%Wf93.2509$aP5.73254@sapphire.mtt.net>
Source record: 69285
Cross-posted to: alt.ham-radio.vhf-uhf,rec.ham-radio,rec.ham-radio.packet,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.packet

In article <3765897a.0@209.128.1.3>
"Bill Crann" <bcrann@nf.sympatico.ca> wrote:

> I have an old 8ch Midland 70-336A VHF radio. I was wondering if there was
> anyway to program the EPROM with a regular EPROM burner??? Can anyone tell
> me a way to get this radio programmed. I bought it from a guy not in my
> area so the repeaters in my area are not programmed into the radio. Any
> help would be appreciated. Thanks. 73's
>
> VO1BIL

Try http://www.brinkleyelec.com/ Andy does most fer $20USD

425. Info needed on directional power detector.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-14 00:00:00 UTC
From: EC Therapy <docshok@sunlink.net>
Message-ID: <3765A1E2.2A6E344C@sunlink.net>
Source record: 69286

Does anyone have any information on a Coaxial Dynamics directional power detector??? Model 3025, P/N 509146-23... States 60W Fwd, 15 W. rev... 116-150 MHz.... Can anyone tell me what this is for and how it operates???? I got one in a box of parts... Thanks for all of the help.

Paul

426. FS MFJ -207 Analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-14 00:00:00 UTC
From: lbooth <lbooth@ametro.net>
Message-ID: <7k493gpbf1@news.ametro.net>
Source record: 69287
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.swap

Good condition, with manual. This antenna analyzer measures SWR from 1.8 to 30 mhz.

$45 shipped CONUS

427. Scanner Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-14 00:00:00 UTC
From: Nick <ringo@sbt.net>
Message-ID: <7k4ga2atk1@forge.sbt.net>
Source record: 69288

I was told a Plane Jane Alum. T.V. antenna would work good for a scanner antenna if there is any truth to this please e-mail me ringo@sbt.net

428. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-14 00:00:00 UTC
From: WebMonkey <demoman@rollanet.org>
Message-ID: <3765DC2E.7C8D@rollanet.org>
Source record: 69289
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Frank A. Adrian wrote:
>
> Wow! This is really getting surrealistic. Even most no-coders know how to
> send and recognize SOS (That's why they could use it in the show
> "believably". LA cops AFAIK, don't receive Morse training). Besides that,
> (a) it was a stupid plot device, (b) Martin Milner still can't act, and (c)
> TV shows are probably not a really great input to base federal communication
> policy upon.
>
what, no comment on morse usage on my repeater..... =]

> WebMonkey <click@below.com> wrote in message news:375E77A6.7F29@below.com...
> > Michael Young wrote:
> > >
> > > Wooka <hass@aznet.net> wrote in message
> > > news:375E0B07.12C8DDD3@aznet.net...
> > > >
> > > >
> > > > Trevor Harris wrote:
> > > >
> > > > > the military still teaches it. The reason that they still want to
> > > teach it is that
> > > > > in a nuclear wasteland, it is theorized that CW will be the only
> > > method that will
> > > > > work. If you don't hear the dih you will hear the static "beat"
> > > silent. I hope
> > > > > this make sense. 73's brother
> > > > > Trevor Harris, Former SUB Radioman
> > > > >
> > > >
> > > > Do you know any studies that point to radiation hindering radio
> > > communications?
> > > >
> > > You're trolling, right? You're really one of the know-code crowd in
> > > disguise, trying to discredit the movement to dummify.
> > >
> > > Michael.
> >
> > anyone see the adam-12 episode where malloy got shot? his radio mic
> > was smashed and the only way he could communicate was to 'key' the
> > radio on and off. he sent a bit of morse code, was cool.
> >
> > morse code is pretty cool, you don't need a radio to use it.

> > a mirror and sunlight works too.
> >
> > anyway, i thought i might throw this in. my repeater is
> > voice id heavy, i was asked to add more morse code id
> > in the mix by my friend. after this suggestion,
> > i made a few rotating bulletins with morse code followed
> > by a voice counterpart to assist a tech ham in getting some
> > copy practice right from my repeater. it appears to have
> > helped alot. upgrade in sight =]
> > --
> > A.C. Curtis
> > KBï¿½WLF
> > 53.45 and 442.45, 77.0Hz enc/dec [multi-cast repeater system]
> > mailto:demoman@rollanet.org
> > http://www.rollanet.org/~demoman

--
A.C. Curtis
KBï¿½WLF
53.45 and 442.45, 77.0Hz enc/dec [multi-cast repeater system]
mailto:demoman@rollanet.org
http://www.rollanet.org/~demoman

429. Re: Building my own repeater - where to get the filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-14 00:00:00 UTC
From: tatasadasayago <Jcrosley@mocc.com>
Message-ID: <3765DDB1.8C53319F@mocc.com>
Source record: 69290

The ARRL Handbook has a great VHF duplexer projext for you. I built one
here using Shedule 20 steel pipe and the thing Isolates as well as any
commercial units I've used. The added bennie is a single antenna.
I was able to "Cheese" together a Mastr series transmitter using an old
ICOM 2m mobile as agile reciever with limited results. I ended up
installing the Icom inside a copper box as it was picking up stray RF.
Good luck on your project.
Jim
KY7DX

Matt Roberds wrote:

> Hello all!
>
> I've been thinking about what it would take to build my own repeater
> for VHF (150 Mhz). Parts of it are pretty simple. I basically need
> a transmitter set to my desired "output" frequency, a receiever on
> my desired "input" frequency, a connection from the "squelch open"
> on the receiver to the PTT on the transmitter, audio (with level
> matching) from the receiver to the transmitter, and possibly tone
> decoding and encoding. So far so good.
>
> But I also think I need some kind of super-duper filter to keep
> my transmitter out of my receiver. I have observed that even with
> very nice 2M transceivers, you can hear a commercial 150 Mhz radio
> (with an antenna near the 2M antenna) through the 2M set when the
> commercial radio is transmitting. Basically I want it to pass
> my receive frequency but roll off sharply for the transmit frequency.
> I can run two different antennae, if need be, so I don't have to
> worry about combining the transmit and receive signals into one
> co-ax. But I do have to keep the transmitted RF out of the
> receiver.
>
> Can anyone point me to a source of such sharp filters? Or is it
> cost-effective to make your own? If so, are there any articles
> or books you could point me at? Or is this the wrong approach
> entirely?
>
> Thanks very much for your help!
>
> Matt Roberds
> mroberds@worldnet.att.net

430. Re: Estimating breakdown voltage of air-variable caps.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-14 00:00:00 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <3769D22F.BF5@haertig.com>
Source record: 69291

In my experience, breakdown voltage is also somewhat frequency dependent. Certainly breakdown voltage at RF is markedly lower than at 60 Hz.

Gray

Barry L. Ornitz wrote:
>
> Will White wrote in message <37674A14.558A2331@asu.uswest.net>...
> >I have more than a dozen air-variable caps with no markings as
> >to capacitance or working/puncture voltage, or indeed any
> >markings at all. I know the formula for calculating capacitance
> >from dimensions of the plates, but don't have a clue how to
> >figure out breakdown voltage. Of course, plate spacing is the
> >central variable (NPI), but going off the plate spacing alone
> >isn't good for more than a guestimate. Is there an equation for
> >this? Let me know, or let me know where to go {and look :)}.
>
> The following table was listed in Bill Orr's "Radio Handbook." This is
> rotor plate to stator plate (air gap) spacing. In plotting the numbers,
> some curvature was noted. I fit a curve to the data and found a modified
> power-law model to fit best. The curve flattens for higher voltages and is
> around 30 KV for 1 inch spacing as someone else noted.
>
> The fitted equation is:
>
> BV = 27100 * (SP)**0.78 - 641
>
> where: BV = breakdown voltage, volts
> SP = air gap spacing, inches
>
> This equation predicts (incorrectly) that the breakdown voltage is zero at
> a little over 0.0082 inches. Thus you should only use this equation for
> spacings of 0.03 or higher.
>
> The tabular data is:
>
> Air Gap, inch Breakdown Voltage
> 0.03 1000
> 0.05 2000
> 0.07 3000
> 0.10 4000
> 0.125 4500
> 0.15 5200
> 0.17 6000

> 0.20 7500
> 0.25 9000
> 0.35 11000
> 0.50 15000
> 0.70 20000
>
> 73, Barry L. Ornitz WA4VZQ ornitz@dpnet.net

--
Telecommunications Engineering
Gray Frierson Haertig & Assoc.
820 North River Street, Suite 100
Portland, Oregon 97227
503-282-2989
503-282-3181 FAX
gfh@haertig.com

431. Re: RF amplifier circuit wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-14 00:00:00 UTC
From: df700@torfree.net
Message-ID: <FDAKA8.Ayt.0.queen@torfree.net>
Source record: 69365

You know there's something wrong when you follow-up to your own message. :-)

I neglected to mention the band! It's 2 meters--144 to 148 MHz. Still
looking for that fairly simple circuit I know exists somewhere--anyone
have it?

/O Neil Oosten * neil@crosswinds.net
|| Do you have any radio job leads?
<__> http://neil.home.dhs.org/job/

I wrote:
: I'm looking for a circuit to bump a 5 watt (or less) HT output to 10
: watts (or more) output. Anybody have one? Anybody point me to one on the
: Net somewhere?
--

432. Re: New URL!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-14 00:00:00 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <01beb609$51483480$aab14d0c@default>
Source record: 69366

Slow as molasses.

Yaesu <cq.fabio@iol.it> wrote in article <7k16pp$494$1@hermes.iol.it>...
> Hi
> when you can, please visit this URL: http://drcp.findhere.com/
> Thank's
>
>
>
>
>

433. New repeater controler design (TCX-150-A)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-14 00:00:00 UTC
From: Matt Krick <unahacker@geocities.com>
Message-ID: <376484D6.A0F9EE51@geocities.com>
Source record: 69367

Hello,

I have designed a repeater controler, but I have no idea how to market
the thing,
It is built on an ISA card and designed to run in a PC 4 full deplex
ports plus 1 recive only and autopatch
anyone have any ideas on ho to start a company or sell the design at
least?
I have a somewhat functional site at
http://www.geocities.com/Area51/Lair/4584/

434. Eimac 4CX1500B Socket

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-14 00:00:00 UTC
From: brigode@ibm.net
Message-ID: <7k2drsjpc1@nnrp1.deja.com>
Source record: 69368

I am looking for a socket for a 4cx1500B - Thanks

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

435. Wanted 2SC2509

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-14 00:00:00 UTC
From: Barry <barry@anglianappliances.freeserve.co.uk>
Message-ID: <7k2j60$q4u$2@news7.svr.pol.co.uk>
Source record: 69369

Can any help with a pair of 2sc2509 RF Transistors, or were to Buy them.
MAny Thanks G4LVD Barry IPSWICH.

436. Wanted 2SC2509

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-14 00:00:00 UTC
From: Barry <barry@anglianappliances.freeserve.co.uk>
Message-ID: <7k2j92$q6j$2@news7.svr.pol.co.uk>
Source record: 69370

```
Required Two Transistors 2SC2509 can anyone Help
or were to Purchase..
```

437. Re: Looking for info on Triad TY-84 transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-14 00:00:00 UTC
From: "Thomas C. Sefranek" <tcs@cmcorp.com>
Message-ID: <3764CB73.21761365@cmcorp.com>
Source record: 69371
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Mike Silva wrote:

> Hi all,
>
> I've got a Triad TY-84 inverter transformer and now that I'm ready to build
> it into a power supply naturally I can't find the data sheet (I knew where
> it was for years, but then I moved and...). If anybody can supply me with
> this data I'd be very grateful (as well as paying for your postage, time,
> etc). Thanks.
>

Can you accept a .jpg attachment?

>
> 73,
> Mike, KK6GM

--
Thomas C. Sefranek WA1RHP
ARRL Instructor, Technical Specialist, VE Contact.
http://hamradio.cmcorp.com/41_Repeater/repeater.html
http://hamradio.cmcorp.com/inventory/Inventory.html

438. Re: Homebrew Cavities

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-14 00:00:00 UTC
From: 7g4 <7g4@iname.com>
Message-ID: <7k2s46$6to$1@mail.nursat.net>
Source record: 69372

Hi Dano,

Dano wrote <7k12tm$8kf@nnrp3.farm.idt.net> ...
>I've been looking at all these web pages for home made radio's.
>Is it pratical to hand make your own cavities for a VHF-repeater.
>Anyone know where to find info for home making one.

Try this: http://www.xs4all.nl/~pa0nhc, hope this help you!
Igor

439. Re: Require prop-pitch help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-14 00:00:00 UTC
From: "David P (D)" <pickards@SPAMBLOCKzen.co.uk>
Message-ID: <Ba793.1750$Tf6.11861@newreader.ukcore.bt.net>
Source record: 69373
Cross-posted to: alt.ham-radio.dxing,alt.ham-radio.hf,aus.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

Ok then

Arthur Unwin wrote in message <37644575.CABF882E@fgi.net>...
>
>
>> I imagine he feels that the British tend to be more
>
>73s Art Unwin KB9MZ ....XG
>

440. Re: HB Cavities

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-14 00:00:00 UTC
From: "Mr. Muckle" <jdwalton@home.com>
Message-ID: <37653FA6.773A4069@home.com>
Source record: 69374

From Jack:

Yours for the shipping. I have some (9) stainless steel pipette holders - used to contain pipettes when they were autoclaved - they are about 2 3/8" diameter and 14" long with a tight fit cap. Perhaps some VHF/UHF experimenter could use them. I told the XYL not to throw them out about 10 yrs ago, but they have just been collecting dust. They are yours for the shipping from 07078 (maybe you could throw in $5 for the inner city school I do some work for.)

If interested e-mail to jdwalton@home.com

441. Hard-Line

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-14 00:00:00 UTC
From: Mark N Dumont <mark@ciainc.com>
Message-ID: <lka93.1254$vN3.57196@typ32b.nn.bcandid.com>
Source record: 69375

Wanted 250 to 300 feet of 7/8" to 1" hard-line

mark@ciainc.com

442. Tx/Rx Switch

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-14 00:00:00 UTC
From: Michael Anderson <michaela@qualitau.com>
Message-ID: <7k3bu3$dsu@journal.concentric.net>
Source record: 69376

I'm for a circuit to do an automatic Transmit/Receive switch in a linear amp. I've got a linear amp kit that comes with a pre-amp kit, but no glue circuits to stick the two together. I don't want to modify the HT (2m) or have a second switch on the amp.

I've found some PIN diode switch designs, but they still depend on a DC input signal. I guess if I had a TX/RX detection circuit with a DC output I could glue everything together with that.

Thanks,

Mike KF6LGN

443. New Amateur Radio Search Engine

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-14 00:00:00 UTC
From: #wharrell@surfsouth.com
Message-ID: <37648a21.352132@enews.newsguy.com>
Source record: 69377

A new Search Engine Dedicated to Amateur Radio is online. We need your help to build the database. Visit http://www.hamfind.com to add your personal or club web url. We look forward to your visit. Help us spread the word about the www.hamfind.com search site.. Place a link on your pages, even our banner...

Thanks for the help
Wayne Harrell

444. Re: Hard-Line

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-14 00:00:00 UTC
From: Thorg <dontbother@rmi.nospam.net>
Message-ID: <7k3hvomfq1@news1.rmi.net>
Source record: 69378

Mark N Dumont <mark@ciainc.com> wrote:
: Wanted 250 to 300 feet of 7/8" to 1" hard-line

90 ohm?

445. PA with MRF 150 or MRF 151? where?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-14 00:00:00 UTC
From: nabaut@ibm.NET
Message-ID: <37654B53.1A9D@ibm.net>
Source record: 69379

Hi! Greetings from PY land.

I�m looking for a VHF-only project using MRF 150 or 151, it�s intended
to be used, mostly, with SSB rigs. Any ideas?
Thanks in advance.
--

73 DE PY2NI - HORTA
GG66RK

http://www.qsl.net/py2ni

446. WTB: Autek RF-1 Antenna Analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-14 00:00:00 UTC
From: daveaust@my-deja.com
Message-ID: <7k3spp$4e5$1@nnrp1.deja.com>
Source record: 69380
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

```
WTB Autek Antenna Analyzer. Please send price, etc.
Thanks,
dave austerman, n5wnm

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.
```

447. Re: Stripping .141" semi-rigid coax?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-14 00:00:00 UTC
From: Kevin Johnson <kej2@ix.netcom.com>
Message-ID: <7k3o0j$rim@dfw-ixnews9.ix.netcom.com>
Source record: 69381

In article <376485FF.C0C7BB67@teleport.com>,
Roy Lewallen <w7el@teleport.com> wrote:

>I've had good luck using a small tubing cutter. It does smear the shield
>some in toward the center of the cable, but not enough to short the
>center conductor.
>
>Roy Lewallen, W7EL
>
>Steve Ratzlaff wrote:
>>
>> The "best" way is with a fancy machine that uses a rotary blade where
>> you set the depth so as not to cut into the dielectric.
>> The easy/bench method is to score the outer sleeve, just as you have
>> been doing, but not to keep going around until you cut thru the sleeve.
>> Just score it then use needlenose pliers to grab the scored end and
>> gently flex it back and forth until the score breaks thru all around.
>> Then pull off the outer sleeve and you're ready to attempt the same on
>> the dielectric! An easier way is to use cheap wire strippers, setting
>> the blades so they don't quite meet, or leaving the inside circle when
>> the blades close just larger than the inner conductor. I've been doing
>> the stripping operation that way for many years at work.
>> Steve AA7U

A sharp razor blade is a heck of a lot cheaper than a $25,000.00 rotary
stripper made by Schleuniger(swiss). Fine piece of equipment but for us a
razor blade does the job.

Another suggestion is to make a simple razor blade fixture with a stop which
when pressing down slightly on the razor blade and rotating the cable it
will score the jacket only to a certain depth (O.D. of insulation). The
outside diameter on the semi-rigid .141 is held if I remember correctly, to
within .002" total.

Just a thought...Good luck

448. Re: Problems with 121MHz Crystal Oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-15 00:00:00 UTC
From: "Y." <soj@sympatico.ca>
Message-ID: <37659A3D.1709@sympatico.ca>
Source record: 69292

Luke Enriquez wrote:
>
> Hi People,
>
> I've been tearing my hair out over a 121 MHz crystal
> oscillator.
> My original idea was to use this as the 1st LO for a 2m to HF
> down converter (for a 23MHz to 25MHz IF) for a fox hunting
> system. My previous attempt used a 40MHz crystal but I had
> problems with the 80MHz harmonic mixing with local FM broadcast stations.
>
> The problem with the 121MHz crystal oscillator is this.
> It oscillates at 60.5 MHz! Now, 60.5 is exactly 1/2 of 121 Mhz,
> but how can the crystal operate at this frequency? Surely a
> 121MHz crystal will be a 5th or 7th overtone? I know nothing
> else about the crystal except that there is 121.000 stamped on
> the case.
>
> I've tried several different circuit configurations,
> values, voltages and even a grounded base oscillator that
> Ulrich Rohde suggested in his book on receievers (His values
> were for 120MHz). I've simulated his circuit and found that
> the free running osc frequency (no crystal) with his values
> is 65 MHz. I've tried several different slug tuned coils
> in the collector and still no go.
>
> When the crystal does oscillate at 60.5MHz I do get 121 MHz as a
> harmonic, but its about 20dB down on 60.5 MHz.
>
> I've wasted a lot of time on this osc, so I will
> probably go back to the 40 MHz and trippler with a
> lot of filtering to notch 80MHz. I'd just like to know if
> anyone else has seen this weird behaivour or am I not
> understanding my crystal theory properly?
>
> Anyone have any ideas on this?
>
> Regards,
> Luke
> VK3EM
>
> ____
> Get Your Private, Free Email at http://www.hotmail.com

Try Analog Devices WEB site applications notes. They have a circuit for
a
clock around 125 Mhz, crystal controled. "Y" VE2AUC

449. O-Scope for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-15 00:00:00 UTC
From: tekdiver@aol.com
Message-ID: <19990614224704.07581.00001872@ng-cp1.aol.com>
Source record: 69293

```
20 mhz o-scope tenma
2 10x probes,,,
all cables
DUAL TRACE
manual inc.
new,,,usewd 10 times only
$250.00

tek diver@aol.com
```

450. Building my own repeater - where to get the filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-15 00:00:00 UTC
From: mroberds@worldnet.att.net
Message-ID: <7k4ken$4vs$2@bgtnsc02.worldnet.att.net>
Source record: 69294

Hello all!

I've been thinking about what it would take to build my own repeater for VHF (150 Mhz). Parts of it are pretty simple. I basically need a transmitter set to my desired "output" frequency, a receiever on my desired "input" frequency, a connection from the "squelch open" on the receiver to the PTT on the transmitter, audio (with level matching) from the receiver to the transmitter, and possibly tone decoding and encoding. So far so good.

But I also think I need some kind of super-duper filter to keep my transmitter out of my receiver. I have observed that even with very nice 2M transceivers, you can hear a commercial 150 Mhz radio (with an antenna near the 2M antenna) through the 2M set when the commercial radio is transmitting. Basically I want it to pass my receive frequency but roll off sharply for the transmit frequency. I can run two different antennae, if need be, so I don't have to worry about combining the transmit and receive signals into one co-ax. But I do have to keep the transmitted RF out of the receiver.

Can anyone point me to a source of such sharp filters? Or is it cost-effective to make your own? If so, are there any articles or books you could point me at? Or is this the wrong approach entirely?

Thanks very much for your help!

Matt Roberds
mroberds@worldnet.att.net

451. Re: CD Servicing Convention Reminder.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-15 00:00:00 UTC
From: Matthew Sheldrick <msheldrick@stmarks.pp.catholic.edu.au>
Message-ID: <7k4qd5$71q$1@news.mel.aone.net.au>
Source record: 69295
Cross-posted to: aus.electronics,aus.radio.amateur.digital,aus.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,sci.electronics.basics,sci.electronics.equipment,sci.electronics.misc,sci.electronics.repair

umm... 61 is the international code for Australia, and 3 is for Melbourne
:-)

Allan <allan01@optusnet.com.au> wrote in message
news:7jlba3krk1@news1.mpx.com.au...
> Well Ross Iam STUPID because I dont see any 03 in the Phone number! Also
613
> means nothing to anyone other than someone who lives in that Area, or
knows
> all the Prefix numbers.
>
> Also just because he is Ex rmit, does that mean he will always live in
VIC!
>
> Its a typical "I know where I live and so should everyone else!"
> Realize its the WORLD and not your Backyard you are Broadcasting to, Use
an
> Area Code and a Location.
> As I said he has posted this to all newsgroups WORLDWIDE he should have
> included a bit more INFO.
>
> Allan
>
> Ross <nross@vic.bigpond.net.au> wrote in message
> news:7jinm1$58o$1@m2.c2.telstra-mm.net.au...
> >
> > Allan wrote in message <7jimd4$2ju$1@news1.mpx.com.au>...
> > >Hi. The link does not work.. and as this is a AUSTRALIAN Newsgroup,
what
> > >STATE are you in??
> > >
> > >>> For further information have a look at Max's Web site.
> > >> http://cdservicing.find.com
> > >> or call him on 613-9384-1951 or email him at maxp@primus.com.au
> > >>
> >
> >
> > Just a rough idea, Id reckon the fact that he is ex RMIT, has an aussie
> > email address and a Melbourne area code phone number would possibly
locate
> > him in Melbourne Australia.
> >
> > Of course Ive been wrong before.

> >
> >
> >
> >
>
>

452. DK3 Screwdriver plans Wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-15 00:00:00 UTC
From: Jim@j1mbo.force9.co.uk
Message-ID: <3767de20.493796238@news.force9.net>
Source record: 69296

Hi There.

I understand that W6AAQ no loger has much to do with the DK3 antennas
he built.
I have his book Everything you forgot to ask about HF mobileering and
this gives a little insight into his DK3 screwdriver.

I would love to build this antenna so I'm looking for the construction
manual he used to sell for $5.

Please E-mail me direct if you can help.

jim@j1mbo.force9.co.uk

Thanks.
g7uyp@qsl.net

Jim Balls M0CKE / G7UYP
Holbeach
Lincs
ENGLAND

453. Re: CD Servicing Convention Reminder.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-15 00:00:00 UTC
From: Rudolf Ladyzhenskii <rudolfl@icpdd.neca.nec.com.au>
Message-ID: <929429482.710155@busy.neca.nec.com.au>
Source record: 69297
Cross-posted to: aus.electronics,aus.radio.amateur.digital,aus.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,sci.electronics.basics,sci.electronics.equipment,sci.electronics.misc,sci.electronics.repair

If you are not in Australia, you dial 61 (Australia) and then 3 (Melbourne)
and phone number.
If you are in Australia and want to dial Melbourne, then you have to dial 03
and phone number.

Rudolf

Matthew Sheldrick wrote in message <7k4qd5$71q$1@news.mel.aone.net.au>...
>umm... 61 is the international code for Australia, and 3 is for Melbourne
>:-)
>
>
>Allan <allan01@optusnet.com.au> wrote in message
>news:7jlba3krk1@news1.mpx.com.au...
>> Well Ross Iam STUPID because I dont see any 03 in the Phone number! Also
>613
>> means nothing to anyone other than someone who lives in that Area, or
>knows
>> all the Prefix numbers.
>>
>> Also just because he is Ex rmit, does that mean he will always live in
>VIC!
>>
>> Its a typical "I know where I live and so should everyone else!"
>> Realize its the WORLD and not your Backyard you are Broadcasting to, Use
>an
>> Area Code and a Location.
>> As I said he has posted this to all newsgroups WORLDWIDE he should have
>> included a bit more INFO.
>>
>> Allan
>>
>> Ross <nross@vic.bigpond.net.au> wrote in message
>> news:7jinm1$58o$1@m2.c2.telstra-mm.net.au...
>> >
>> > Allan wrote in message <7jimd4$2ju$1@news1.mpx.com.au>...
>> > >Hi. The link does not work.. and as this is a AUSTRALIAN Newsgroup,
>what
>> > >STATE are you in??
>> > >
>> > >>> For further information have a look at Max's Web site.
>> > >> http://cdservicing.find.com
>> > >> or call him on 613-9384-1951 or email him at maxp@primus.com.au

>> > >>
>> >
>> >
>> > Just a rough idea, Id reckon the fact that he is ex RMIT, has an aussie
>> > email address and a Melbourne area code phone number would possibly
>locate
>> > him in Melbourne Australia.
>> >
>> > Of course Ive been wrong before.
>> >
>> >
>> >
>> >
>>
>>
>
>

454. Help: Philips (?) Snyth Chip TDD1742T

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-15 00:00:00 UTC
From: rjburden@bigpond.com
Message-ID: <37663585.999254@news.bigpond.com>
Source record: 69298

Hi all,

thanks in advance for taking the time to help. I have a couple of
boards I acquired at a recent Hamfest that were part of an anolgue
mobile phone base station. The synthesizer chip looks interesting:

marked TDD1742T
Appears to be the Philips logo on chip, but is smudged making this
uncertain
looks like a parallel load

Philips carry no data on their web site...any ideas where I should go
looking for data?

Thanks again,

Richard

Regards,
Richard VK5OO
"Nothing better than home-brew, except perhaps an absence of Spam"

455. Re: Building my own repeater - where to get the filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-15 00:00:00 UTC
From: 7g4 <7g4@iname.com>
Message-ID: <7k5lgusvv1@mail.nursat.net>
Source record: 69299

Hi Matt,

Matt Roberds wrote <7k4ken$4vs$2@bgtnsc02.worldnet.att.net> ...
>Can anyone point me to a source of such sharp filters? Or is it
>cost-effective to make your own? If so, are there any articles
>or books you could point me at? Or is this the wrong approach
>entirely?

Try this: http://www.xs4all.nl/~pa0nhc, hope this help you!
Igor

>Thanks very much for your help!
You welcome!

456. Re: Tech America Website anyone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-15 00:00:00 UTC
From: "Barry Burke Jr." <nospam@snet.net>
Message-ID: <37665A99.7901F363@snet.net>
Source record: 69300

Bob Charles wrote:
>
> Tech America Website anyone?
>
> please and thanks! Bob

It's not very easy to find. <G>

http://www.techamerica.com

--
****
Barry Burke Jr. Middletown, Connecticut, USA
nospam@snet.net is my REAL email address!

To reply, do not edit it, simply click "reply"

SPAM BAIT FOLLOWS, these are addresses from
the removal instructions for spam sent to me!
ralph@polbox.com
biz-offers@usa.net
jfoxy@animalhouse.com
NoSub@bigfoot.com

****

457. Re: HELP: Helical Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-15 00:00:00 UTC
From: davem@groucho.cs.ubc.ca
Message-ID: <7k607p$ssh@groucho.cs.ubc.ca>
Source record: 69301

soj@sympatico.ca writes:
>Can anyone refer me to a good document or article or book on the
>construction of miniature helical filters. I have been trying to
>duplicate the TOKO helical filters by using cans and helix of three
>times the size.

The "VHF UHF Manual" published by the RSGB has some information on
designing and building helical filters.

Dave

458. Philips Board OM 5610

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-15 00:00:00 UTC
From: Dieter Kujawa <dkujawa@web.de>
Message-ID: <7k681b$l86$2@news.nordwest.net>
Source record: 69302

hallo,
is there any application for Philips Board OM 5610 (Matchbox global
FM-Tuner)

thanks

dieter

459. Re: Tx/Rx Switch

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-15 00:00:00 UTC
From: skipp@catbert.ucdavis.edu
Message-ID: <7k6d19$gp1$6@mark.ucdavis.edu>
Source record: 69303

Just takes a simple circuit of one 2N2905a transistor and a relay.
Otherwise Ramsey Electronics sells one in a small kit.

cheers
skipp

http://sonic.ucdavis.edu

: Michael Anderson (michaela@qualitau.com) wrote:
: I'm for a circuit to do an automatic Transmit/Receive switch in a linear
: amp. I've got a linear amp kit that comes with a pre-amp kit, but no glue
: circuits to stick the two together. I don't want to modify the HT (2m) or
: have a second switch on the amp.
:
: I've found some PIN diode switch designs, but they still depend on a DC
: input signal. I guess if I had a TX/RX detection circuit with a DC output I
: could glue everything together with that.
:
: Thanks,
:
: Mike KF6LGN
:
:

460. Homebrew duplexer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-15 00:00:00 UTC
From: famille_magnan@infoteck.qc.ca
Message-ID: <19990615173659233651@ppp2-77.infoteck.qc.ca>
Source record: 69304
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

I currently use a FT-50 HT along with a 2 m linear amp at home. I have a 2 m quad and a 70 cm yagi up the tower. I mainly use my HT in the ham bands but I also use it to listen to the emergency frequencies in my area.

As a firefighter, I like to stay on top of the situation so I monitor the surounding department's frequencies. Unfortunately, many of them are on the UHF band and I must switch coax to use the yagi or else I get a very faint signal. Also, on occasionsI have forgotten to switch coax and have transmitted in UHF through the linear while it was on. Nothing bad has happened yet but I don't want this to happen to often...

I have built many antennas in the 2 years I have been a amateur radio operator and now I'd like to try something else. I am in need of a duplexer so that I can have the 2 beams plugged into the HT at the same time to listen to frequencies on both bands without having to switch coax. My budget is kinda tight so I was wondering if there is a way to homebrew a duplexer.

What I need is a duplexer that will let the following frequencies into the HT:

130 to 174 MHz
400 to 470 MHz

I hope someone can help me with this as I really need that duplexer.

--
Stay safe !

73 de VE2JPT

Jean-Pierre

_____
Jean-Pierre Magnan
Firefighter
VE2 JPT
Notre-Dame-du-Mont-Carmel FD, Quï¿½bec, Canada G0X 3J0
email: ve2jpt@rac.ca
URL: http://members.tripod.com/~Famille_Magnan/ (Brand new page. Go take a look)

The opinions expressed above are mine, all mine.
But I love to share them 8-)

461. Re: 407 NHz radiosonde questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-15 00:00:00 UTC
From: dennis@wawa.juniper.net
Message-ID: <7k6tuqil1@wawa.juniper.net>
Source record: 69305

On Thu, 10 Jun 1999, Paul Keinanen wrote:

> On Thu, 10 Jun 1999 07:24:33 -0400, EC Therapy <docshok@sunlink.net>
> wrote:
>
> : I just obtained a radiosonde unit that is solid state and is labeled
> : "407 MHz VLF/Omega." Can anyone give me info on why it is labeled "VLF"
>
> In order to track the radiosonde accurately to accurately calculate
> wind speed and direction, some radiosondes contain a radio
> navigational receiver. The received signal or calculated position is
> multiplexed on the UHF downlink with all the temperature and pressure
> measurements. The ground system then calculates the position from this
> information.
>
> I have heard of radiosondes carrying a GPS receiver, but apparently it
> is much simpler to use the Omega signal, which is/was transmitted on
> VLF and the signal is simply relayed down to the ground station and do
> all process on the ground.

Omega was at 12 kHz, I think, and is definitely a "was". It was turned off
2 years ago. See http://tycho.usno.navy.mil/omega.html.

Dennis Ferguson

462. Duplexer Or Cavity ????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-15 00:00:00 UTC
From: Dano <webster@express-delivery.net>
Message-ID: <7k76eq$1sq@nnrp3.farm.idt.net>
Source record: 69306

Ok, I'm not completely lost on this subject, But I'm still looking for a simple answer...
I'm gonna run 2 ant's for a repeater setup.
my transmit is 152.27 megs
my rec is 157.52 megs

Do I need a full bp,br duplexer ???
or can I just run a pair of bp cavities on the rec side??

463. Improving/Modifying MFJ tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-15 00:00:00 UTC
From: Will White <wcw@asu.uswest.net>
Message-ID: <3767486C.9056C99F@asu.uswest.net>
Source record: 69307
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

I have a MFJ-969 300W roller tuner that I am just getting around to using after having it a good while, and out of curiosity opened it up tonight to have a look at the circuit. Everything is there that should be and assembly is a bit more solid than I had expected given the less than Millen/Drake/Collins reputation that MFJ has.

However, some of the parts MFJ uses could be a *lot* better, notably the balun and the binding posts/wire & balanced line feed-thrus. I would like to replace the balun with a beefier one. The OEM balun is a only about 1 1/8" O.D. x 1/2" thick, wound with 22 AWG (estimated) hook-up wire. I plan to use this tuner with 450 ohm window-line and no more than 200W, but I don't trust the MFJ-provided balun, so I want to wind a heftier one and put it in there in its place. What core size/type & wire size/number of turns should I use for best results?

I am also thinking I could extend the tuner's safe (for me *and* my transmitters) operating range down to >50W on 160M (using either my 66', 18 AWG dipole or 132', 14 AWG loop) by clipping HV mica transmitting caps in parallel with each of the two variables, and also a HV switch to toggle them in and out as needed. Will this be an effective way to allow safe operation on the low bands at moderate power? What exact type of fixed caps should I use for this application, and about what values? Doesn't the Nye--Viking transmatch have a similar arrangement where fixed caps are switched in or out in parallel with the air-variables for certain bands?

What experience have others had making similar mods to tuners? What other "optimizing" mods of no more than moderate cost and complexity should I consider?
--
Will White, KD7BFX

to reply, please click this link mailto:wcw@asu.uswest.net

464. Estimating breakdown voltage of air-variable caps.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-15 00:00:00 UTC
From: Will White <wcw@asu.uswest.net>
Message-ID: <37674A14.558A2331@asu.uswest.net>
Source record: 69308
Cross-posted to: rec.radio.amateur.antenna,Rec.radio.amateur.homebrew

I have more than a dozen air-variable caps with no markings as to capacitance or working/puncture voltage, or indeed any markings at all. I know the formula for calculating capacitance from dimensions of the plates, but don't have a clue how to figure out breakdown voltage. Of course, plate spacing is the central variable (NPI), but going off the plate spacing alone isn't good for more than a guestimate. Is there an equation for this? Let me know, or let me know where to go {and look :)}. Thanks.
--
Will White, KD7BFX

to reply, please click this link mailto:wcw@asu.uswest.net

465. Re: Yaesu FT-50 MODS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-15 00:00:00 UTC
From: Bryan Herbert <eavesdrop@earthlink.net>
Message-ID: <37667AE4.CE7C934D@earthlink.net>
Source record: 69309
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.equipment,rec.radio.amateur.homebrew
Body handling: Binary attachment payload not displayed: vcard.vcf

The "FREE" Band mod can not be performed with a serial number of 7L or later. However, the CAP/MARS mod "can" still be performed on all radios by removing a simple diode and solder pad, mods for this radio can be found at qrz.com.

[One or more binary attachments are retained only in the source text.]

466. Re: Estimating breakdown voltage of air-variable caps.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-16 00:00:00 UTC
From: Will White <wcw@asu.uswest.net>
Message-ID: <37683FDE.A8473BCE@asu.uswest.net>
Source record: 69232
Cross-posted to: rec.radio.amateur.antenna,Rec.radio.amateur.homebrew

mike.luther@ziplog.com wrote:
>
> In <37674A14.558A2331@asu.uswest.net>, Will White <wcw@asu.uswest.net> writes:
> >I have more than a dozen air-variable caps with no markings as to capacitance
> >or working/puncture voltage, or indeed any markings at all. I know the formula
> >for calculating capacitance from dimensions of the plates, but don't have a
> >clue how to figure out breakdown voltage. Of course, plate spacing is the
> >central variable (NPI), but going off the plate spacing alone isn't good for
> >more than a guestimate. Is there an equation for this? Let me know, or let me
> >know where to go {and look :)}. Thanks.
> >--
> >Will White, KD7BFX
> >
> >to reply, please click this link mailto:wcw@asu.uswest.net
>
> Isn't the old notion about 30,000 volts per inch?

OK, thanks. Now, how to measure plate spacing: is it plate to plate on the
rotor, stator, or between rotor and stator plate?

--
Will White, KD7BFX

to reply, please click this link mailto:wcw@asu.uswest.net

467. Re: Estimating breakdown voltage of air-variable caps.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-16 00:00:00 UTC
From: Woody White <woody.white@att.net>
Message-ID: <37684284.91787374@att.net>
Source record: 69233
Cross-posted to: rec.radio.amateur.antenna,Rec.radio.amateur.homebrew

The smallest distance , rotor to stator.
Woody

Will White wrote:

> OK, thanks. Now, how to measure plate spacing: is it plate to plate on the
> rotor, stator, or between rotor and stator plate?
>
> --
> Will White, KD7BFX
>
> to reply, please click this link mailto:wcw@asu.uswest.net

--

----------- de Woody, WB4QXE -----------

Ham Homebrew/ATV Circuits -*- Scanning Electron
Microscope Images

http://www.geocities.com/capecanaveral/3722

468. Re: Improving/Modifying MFJ tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-16 00:00:00 UTC
From: Will White <wcw@asu.uswest.net>
Message-ID: <376847CA.DA1833A6@asu.uswest.net>
Source record: 69234
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

OK, I am learning a bit from this thread, and archiving the posts for more thorough digestion later as I am intellectually able. For the moment, can Cecil, Richard, or other interested parties recommend what to do about the rinky-doink balun in my tuner? I want to use the tuner with a 132' horizontal loop for 40-10 (and some low power work on 80CW) and want the best setup (without buying any new major pieces of gear) given what I have on hand. How would I use one of those W2DU ferrite bead choke-baluns since I have no coax in my antenna system? Or is there a version to use with window-line and in place of the MFJ little balun-oreo?

Richard Clark wrote:
>
> On Wed, 16 Jun 1999 20:50:40 GMT, W6RCecilA <Cecil.A.Moore@IEEE.org>
> wrote:
>
> >Richard Clark wrote:
> >> Much of what Cecil has to say has practical value.
> >
> >Only "much", not all? Richard, do you want to hurt my feelings? :-)
> >If I had that many words available, I would have said the same thing
> >as you. Good posting. However, I think we should point out that a
> >1:4 balun for transmitting is a 4:1 balun for receiving.
>
> Hi Cecil,
>
> Much is better than all (who would believe a statment containing such
> an absolute?).
>
> Your last point is well taken, perhaps we should call it a 1:4:1 Balun
> ;-) Or perhaps this is yet another attempt to haul out the necessary
> correlative of the source exhibiting an R for the Balun to work? Lest
> we get into that side-thread (yet again)....
>
> 73's
> Richard Clark, KB7QHC

--
Will White, KD7BFX

to reply, please click this link mailto:wcw@asu.uswest.net

469. Re: Improving/Modifying MFJ tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-16 00:00:00 UTC
From: "George T. Baker" <w5yr@swbell.net>
Message-ID: <37685C88.85CD4F9B@swbell.net>
Source record: 69235
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Will, the short answer to your last question is that you would terminate
your ladder line at one end of the W2DU balun and then run coax from the
other end to one of the coax connectors on the back of your tuner. Forget
about the built-in balun. The tuner then operates in its native
'single-ended' or unbalanced mode as it was designed to do. And probably
does a better job than when attempting to handle ladder line with that
"rinky-doink (?) balun." ;^)

72/73, George AMA 98452 R/C since 1964
Amateur Radio W5YR, in the 53rd year and it just keeps getting better!
AutoPOWER Systems, Fairview, TX (30 mi NE Dallas) Collin County
QRP-L QRP-ARCI FISTS NORCAL ZOMBIE ARS 10-X 33.2 N 96.6 W EM13RE

Will White wrote:
>
> OK, I am learning a bit from this thread, and archiving the posts for more
> thorough digestion later as I am intellectually able. For the moment, can
> Cecil, Richard, or other interested parties recommend what to do about the
> rinky-doink balun in my tuner? I want to use the tuner with a 132' horizontal
> loop for 40-10 (and some low power work on 80CW) and want the best setup
> (without buying any new major pieces of gear) given what I have on hand.

> How would I use one of those W2DU ferrite bead choke-baluns since I have no coax
> in my antenna system? Or is there a version to use with window-line and in
> place of the MFJ little balun-oreo?

470. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-16 00:00:00 UTC
From: NO SPAM <NOSPAM@mail.rsccd.org>
Message-ID: <3768678F.B0229B88@mail.rsccd.org>
Source record: 69236
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Kevin Hoult wrote:

> 623402 wrote:

> > The first place to start is acoustic efficiency, ie a tapered horn on the
> > earpiece.

> I am also playing around with amplifying the output of an Xtal set in
> non-traditional ways. I had heard of this approach (tapered horn, or "physical
> amplifier"), but I wonder if there are any sources of infromation on how this
> horn should be shaped? Does anyone know of any info on the configuration of
> this type of device? I imagine RCA Victor or someone put a lot of thought into
> the design of the "horns" on the Victrola record players, but I wonder how this
> info could be found? Any suggestions?

Well, the Altec Voice of the Theater speaker system uses a horn
tweeter that has a very high efficiency, but it is also too expensive
for a xtal set. Seriously, tho it's going to be hard to get high
efficiency in any speaker. You would be better off using a headphone,
which can give good volume with a few milliwatts.

471. Re: lookking for diagram of 811a or 572b RF power amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-16 00:00:00 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <7k9ovd$6o3@nnrp2.farm.idt.net>
Source record: 69237

Check out this web site for a 350 watt design:

http://www.svetlana.com/docs/TechBulletins/technoteNO.34.html

73's

Leland C. Scott
KC8LDO

BD2RH/Xu wrote in message <7k9h4ucju1@news.cz.js.cn>...
>Hi!
> I'm looking for a diagram of power amplifer,
>500-1KW,use 811A or 572,could someone help me?thanks!
> Yue Xu
>
>

472. Re: RF amplifier circuit wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-16 00:00:00 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <7k9p9u$6qp@nnrp2.farm.idt.net>
Source record: 69238

Here's the web site:

http://www.communication-concepts.com/vhfamps.htm

73's
Leland C. Scott
KC8LDO

Woody White wrote in message <376461AA.6ACCB258@att.net>...
>Another possibility is: Communications Concepts Inc My
>catalog is a bit old, but they have a kit (was $80) for a 2M
>amp 1/4 watt to 3 watts in (5 absolute max) that provided
>2-35 out (drive dependent). Good for SSB or FM. I don't
>think they have a net site. They are in Beavercreek, Ohio.
>Phone: (was)
>513 426 8600. IO have delt with them in the past - no

473. Portable Low Power Generation ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-16 00:00:00 UTC
From: Muck <muck@mdbs.com>
Message-ID: <3767DBE1.6F07D8BA@mdbs.com>
Source record: 69239

I'm looking for a low power electrical generator.
It needs to be mechanical, not solar. I'm only
looking for about 100 watts (12-15 VDC at 5-10 A).

I thought about extracting the generator from a
hand-cranked flashlight or radio, but their power
output is too low.

The commercial units I've located so far are much
too big and expensive for this homebrew project.

Can anyone suggest a supplier?

474. S-COM model 6K

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-16 00:00:00 UTC
From: VE6NH <edbve6nh@ptialaska.net>
Message-ID: <7ka82c$mu0$1@news.ptialaska.net>
Source record: 69240

I need the command list for programing the S-Com model 6K repeater controller. We have apparently lost the manual.
I can accept attachments to E-mail if anyone can scan in the couple of pages.

Thanks
Ed Back VE6NH/KL7

475. FS: New 5-pin Nuvistor sockets

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-16 00:00:00 UTC
From: mmoss@mindspring.com
Message-ID: <37670a4f.9967018@news.mindspring.com>
Source record: 69310
Cross-posted to:
rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Cinch Jones 5NS Ring type 5-pin Nuvistor sockets. New. $1 each plus shipping.

Compare to Antique Electronic Supply 1999 price of $2.70 each.

Marv

476. MFJ 40 meter QRP rig

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-16 00:00:00 UTC
From: jspiker@aol.com
Message-ID: <19990615225441.17332.00000016@ng-ff1.aol.com>
Source record: 69311

Anyone using the MFJ 40 meter QRP rig?
I'm considering purchasing one and would like your feedback on this!
Is it worth the money? Can you make contacts on it?

Jspiker@aol.com

477. ** FLEA at MIT ** Sunday June 20th Cambridge MA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-16 00:00:00 UTC
From: w1gsl@mit.edu
Message-ID: <7k73vt$8ip@senator-bedfellow.MIT.EDU>
Source record: 69312
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc,rec.radio.info,sci.electronics.misc,ne.forsale,ne.general,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Subject: ** FLEA at MIT ** Sunday June 20th Cambridge MA
Summary: Buy Sell SWAP Ham Radio Electronics Computers 9AM - 2PM

This coming Sunday....

Sellers NB ... Prepaid vendors (monthly and season) are admitted first.

*** !!!! In our Traditional GARAGE and lot !!!! ****
so come rain or shine or super heat the Flea is on !!!

********* $1 buyers discount with hardcopy of this notice ********

COMPUTERS - ELECTRONICS - HAM RADIO - COMPUTERS - ELECTRONICS - HAM RADIO

FLEA all SUMMER at MIT
Sunday June 20th 1999
9AM-2PM

Come to the city for a great flea - plenty of free parking.

MIT's electronics and ham radio flea will take
place on the third Sunday of each month this summer,
April thru October.

There is tailgate space for over 600 sellers and
free, off-street parking for >2000 cars!

Buyers admission is $4 (you get $1 off if
you're lucky enough to have a copy of our ad)
and sellers spaces are $10.00-each at the gate.

The flea will be held at the corner of Albany and
Main streets in Cambridge; right in the Kendall
Square area from 9AM to 2PM, with sellers set-up
time starting at 7AM.

*** Attention Sellers ***
Prepaid vendors.. Season Pass or monthly,
will be admitted FIRST.
Separate lines will form prior to gate opening
for prepaid and nonprepaid vendors

!! RAIN or SHINE !! Have no fear of rain, a covered
well illuminated tailgate area is available for all
sellers (6'8" clearance).

Talk-in: 146.52 and W1XM/R-449.725/444.725 (PL 114.8/2A).

Sponsors: MIT Electronics Research Society
MIT UHF Repeater Association (W1XM)
MIT Radio Society (W1MX)
Harvard Wireless Club (W1AF)

For more info / advanced reservations 617 253 3776

********** $1 buyers discount with hard copy of this notice ************

<<<<<<<<<<<<<<<<<<<<<<< cut here >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

1999 SELLERS ADVANCED DISCOUNT REGISTRATION if Mailed by the 5th

Name..... Call.....

Address..... Phone.....

City..... State..... Zip.....

E-Mail .....

Spaces Required ___ Season @ $50 / space = $ ..... CK # .....

___ April ____ May ___ June ____ July

___ Aug ____ Sept ___ Oct

Total Monthly spaces @ $9/ Space = $ ..... CK # .....

Make checks payable to The MIT Radio Society

Mail to PO Box 397082 MIT Branch Cambridge MA 02139-7082

rcvd by..... Stamp

.....
Flea at MIT 1999
RECEIPT fill in only your name ->

Received $ from .....

For .....

By ..... Stamp

Enclose SASE for return by mail.

****
Steve Finberg W1GSL w1gsl@mit.edu
PO Box 82 MIT Br Cambridge MA 02139-7082 617 258 3754
****

478. Substitution for BB104 tuning diode - MV104 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-16 00:00:00 UTC
From: holly@mtcr.net
Message-ID: <N9F93.3724$Et6.347811@newsgate.direct.ca>
Source record: 69313

BB104 - Can I replace this with MV104 ?
merci Holly

479. Re: CD Servicing Convention Reminder.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-16 00:00:00 UTC
From: Steve Gunnell <steveg@ccis.adisys.com.au>
Message-ID: <376718EB.CC1280D@ccis.adisys.com.au>
Source record: 69314
Cross-posted to: aus.electronics,aus.radio.amateur.digital,aus.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,sci.electronics.basics,sci.electronics.equipment,sci.electronics.misc,sci.electronics.repair

Yes, fine. Except that 613-9384-1951 is formatted like a USA number.
The international standard formatting would be +61 3 9384-1951. The
plus tells you it is a country access code and the area code is seperated
out so you know how to dial locally.

Steveg

Matthew Sheldrick wrote:

> umm... 61 is the international code for Australia, and 3 is for Melbourne
> :-)
>

480. Re: Duplexer Or Cavity ????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-16 00:00:00 UTC
From: "Thomas C. Sefranek" <tcs@cmcorp.com>
Message-ID: <376768FD.CC046732@cmcorp.com>
Source record: 69315

Dano wrote:

> Ok, I'm not completely lost on this subject, But I'm still looking for a
> simple answer...

From Dilbert:

BOSS: "Lets start by assuming that whatever I don't know is easy..."

> I'm gonna run 2 ant's for a repeater setup.
> my transmit is 152.27 megs
> my rec is 157.52 megs
>
> Do I need a full bp,br duplexer ???
> or can I just run a pair of bp cavities on the rec side??

It would depend on how much phase noise the transmitter has and what power
it's running.
My guess is you MUST have an anti-resonant element in the band-pass cavities
to notch out the other
frequency. (Making them duplexers...)

--
Thomas C. Sefranek WA1RHP
ARRL Instructor, Technical Specialist, VE Contact.
http://hamradio.cmcorp.com/41_Repeater/repeater.html
http://hamradio.cmcorp.com/inventory/Inventory.html

481. Re: Improving/Modifying MFJ tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-16 00:00:00 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <376785E6.B05B8A6D@IEEE.org>
Source record: 69316
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Will White wrote:
> ... I don't trust the
> MFJ-provided balun, so I want to wind a heftier one and put it in there in its
> place. What core size/type & wire size/number of turns should I use for best results?

I've had lots of experience along those lines and for non-resonant
length dipoles, I wouldn't use anything but a W2DU 1:1 choke/balun
as described on my web page. Multiturn Toroidal Transmission Line
Transformers are designed to work into their designed-for load and
do not tolerate large deviations from that load value very well.
--
73, Cecil, W6RCA http://www.bigfoot.com/~w6rca

482. Re: Improving/Modifying MFJ tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-16 00:00:00 UTC
From: Will White <wcw@asu.uswest.net>
Message-ID: <37678FC2.8AAEACBB@asu.uswest.net>
Source record: 69317
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Hi Cecil,

OK, I will have a look at the design you mention. Do toroidal baluns deal with non-resonant loops any better than non-resonant dipoles? A point of some interest for me is how one can determine the designed-for input and output of conventional baluns?

I don't for a moment dispute that you are correct in what you say about them not working well when their load varies much from the design value, though I wonder how tuner and balun mass-manufacturers "get away" with selling products that they *know* that their customers in fact buy just because they expect that these devices *will* indeed function well over a wide range of load conditions?

W6RCecilA wrote:
>
> Will White wrote:
> > ... I don't trust the
> > MFJ-provided balun, so I want to wind a heftier one and put it in there in its
> > place. What core size/type & wire size/number of turns should I use for best results?
>
> I've had lots of experience along those lines and for non-resonant
> length dipoles, I wouldn't use anything but a W2DU 1:1 choke/balun
> as described on my web page. Multiturn Toroidal Transmission Line
> Transformers are designed to work into their designed-for load and
> do not tolerate large deviations from that load value very well.
> --
> 73, Cecil, W6RCA http://www.bigfoot.com/~w6rca

--
Will White, KD7BFX

to reply, please click this link mailto:wcw@asu.uswest.net

483. Re: Estimating breakdown voltage of air-variable caps.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-16 00:00:00 UTC
From: mike.luther@ziplog.com
Message-ID: <929540220.678.35@news.remarQ.com>
Source record: 69318
Cross-posted to: rec.radio.amateur.antenna,Rec.radio.amateur.homebrew

In <37674A14.558A2331@asu.uswest.net>, Will White <wcw@asu.uswest.net> writes:
>I have more than a dozen air-variable caps with no markings as to capacitance
>or working/puncture voltage, or indeed any markings at all. I know the formula
>for calculating capacitance from dimensions of the plates, but don't have a
>clue how to figure out breakdown voltage. Of course, plate spacing is the
>central variable (NPI), but going off the plate spacing alone isn't good for
>more than a guestimate. Is there an equation for this? Let me know, or let me
>know where to go {and look :)}. Thanks.
>--
>Will White, KD7BFX
>
>to reply, please click this link mailto:wcw@asu.uswest.net

Isn't the old notion about 30,000 volts per inch?

//----------------------------
Mike.Luther@ziplog.com
Mike.Luther@f3000.n117.z1.fidonet.org

484. Re: CD Servicing Convention Reminder.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-16 00:00:00 UTC
From: andrewd@ozemail.com.au
Message-ID: <376799d2.24564875@news.ozemail.com.au>
Source record: 69319
Cross-posted to: aus.electronics,aus.radio.amateur.digital,aus.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,sci.electronics.basics,sci.electronics.equipment,sci.electronics.misc,sci.electronics.repair

On Tue, 8 Jun 1999 10:25:16 +1000, "Max Harding" <mgh@eisa.net.au>
wrote:

>G'day all Australian Tv / Video techs.Are you not as sharp on servicing
>CD's and DVD's and ROM drives as you would like to be. Then come along to
>the 1st CD convention and polish your skills.

And when one of you guys believes you can service a CD drive, I have
two that need help. No-one I have asked here in Canberra wants to
even talk about repairing a CD drive. Fair enough when they only cost
$95 or so, but still - I'd rather repair than replace, so if it could
be done cost effectively I'm happy to give someone my business.

Thanks

Andrew

NB. Balance of original post deleted, sufficient quoted above to set
context, as per usenet guidelines.

Andrew Davis, IT and Business Systems Consultant -- Canberra, Australia
AdvantEdge Business Solutions Pty Ltd http://www.AdvantEdge.com.au
Andrew's Web Hub: http://www.ozemail.com.au/~andrewd/
Associate - Australasian Web Publishers Association www.awpa.asn.au

485. JFET SPICE Models

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-16 00:00:00 UTC
From: bkizerian@my-deja.com
Message-ID: <7k8fkr$n5a$1@nnrp1.deja.com>
Source record: 69320

Looking for SPICE models for the following devices:

J310
MPF102
2N3819
2N5457
2N5459

Reply to me directly at kizerian@ced.utah.edu

Thanks

Bruce kk7zz

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

486. Re: Improving/Modifying MFJ tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-16 00:00:00 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3767B8AD.6D27EEE0@IEEE.org>
Source record: 69321
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Will White wrote:
> Do toroidal baluns deal with
> non-resonant loops any better than non-resonant dipoles?

SWR and Zï¿½ are all that matter at the transmitter end so I doubt it.

> A point of some
> interest for me is how one can determine the designed-for input and output of
> conventional baluns?

The ratio number implies the designed-for impedance. Unless otherwise specified
the primary impedance is 50 ohms. Thus for a 1:1 balun, the secondary
impedance is 50 ohms, 200 ohms for a 4:1, 300 ohms for a 6:1, and 450 ohms
for a 9:1

> I don't for a moment dispute that you are correct in what you say about them
> not working well when their load varies much from the design value, though I
> wonder how tuner and balun mass-manufacturers "get away" with selling products
> that they *know* that their customers in fact buy just because they expect
> that these devices *will* indeed function well over a wide range of load
> conditions?

The tuner manufacturers may not be aware of that, Will. The great majority
of their customers never use those dinky built-in baluns. Those who do
often give up on that configuration without ever notifying the tuner
manufacturer of any problem.
--
73, Cecil, W6RCA http://www.bigfoot.com/~w6rca

487. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-16 00:00:00 UTC
From: Kevin Hoult <mudshark@ricochet.net>
Message-ID: <3767CD80.36A61047@ricochet.net>
Source record: 69322
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

623402 wrote:

> The first place to start is acoustic efficiency, ie a tapered horn on the
> earpiece.

I am also playing around with amplifying the output of an Xtal set in non-traditional ways. I had heard of this approach (tapered horn, or "physical amplifier"), but I wonder if there are any sources of infromation on how this horn should be shaped? Does anyone know of any info on the configuration of this type of device? I imagine RCA Victor or someone put a lot of thought into the design of the "horns" on the Victrola record players, but I wonder how this info could be found? Any suggestions?

488. Re: MFJ 40 meter QRP rig

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-16 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <3767F2A5.2EF6@ixpres.com>
Source record: 69323

Jspiker wrote:
>
> Anyone using the MFJ 40 meter QRP rig?
> I'm considering purchasing one and would like your feedback on this!
> Is it worth the money? Can you make contacts on it?
>
> Jspiker@aol.com

Spiker OM (Callsign?),

I have not been impressed with many of MFJ's products. I am sure you can find a more cost-effective rig solution. you can make contacts using just about anything. Check NorCal and other QRP web sites for homebrew proven QRP designs.
Does it have to be QRP? Many multiband 100W rigs are available on the used market for equal or less cost than factory built new low-power rigs. You can always run 10W or less with these rigs too, if you want, but you have higher power available when needed, and 160-10M coverage. I can recommend the TS120S, TS130S, TS520/530/820/830(S) from first-hand experience with them. And, the 5xx and 8xx rigs all have built-in AC power supplies and pi-network outputs that will drive reasonable antenna loads with no tuner. These rigs are available at $300 and up, depending on exact condition, etc. They are rugged, REPAIRABLE rigs, and will probably be worth the same if you decide to sell later on.

73 and GL,
Don, W6JL

489. Re: Improving/Modifying MFJ tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-16 00:00:00 UTC
From: rwclark@rwclark.seanet.com
Message-ID: <3767cb5c.1253719@news.seanet.com>
Source record: 69324
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Wed, 16 Jun 1999 14:46:35 GMT, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>Will White wrote:
>> Do toroidal baluns deal with
>> non-resonant loops any better than non-resonant dipoles?
>
>SWR and Zï¿½ are all that matter at the transmitter end so I doubt it.
>
>> A point of some
>> interest for me is how one can determine the designed-for input and output of
>> conventional baluns?
>
>The ratio number implies the designed-for impedance. Unless otherwise specified
>the primary impedance is 50 ohms. Thus for a 1:1 balun, the secondary
>impedance is 50 ohms, 200 ohms for a 4:1, 300 ohms for a 6:1, and 450 ohms
>for a 9:1
>
>> I don't for a moment dispute that you are correct in what you say about them
>> not working well when their load varies much from the design value, though I
>> wonder how tuner and balun mass-manufacturers "get away" with selling products
>> that they *know* that their customers in fact buy just because they expect
>> that these devices *will* indeed function well over a wide range of load
>> conditions?
>
>The tuner manufacturers may not be aware of that, Will. The great majority
>of their customers never use those dinky built-in baluns. Those who do
>often give up on that configuration without ever notifying the tuner
>manufacturer of any problem.

Hi Cecil,Will,

Much of what Cecil has to say has practical value. When getting into
the "design" of the Baluns, however, there is a shortfall of
discussion when it comes to this "ratio number."

This number is a short-hand expression. To say you have a 4:1 Balun
is not saying enough; because it could be a 1:4 Balun instead! Please
note that this ratio has nothing to do with turns count.

4:1 - 1:4? I'm sure this goes right over many reader's heads because
the first thought that comes to mind with Baluns is that they operate
like standard 60 Hz power transformers. Baluns do not operate like
these transformers and consequently the "ratio number" is not like a
windings ratio.

I will provide an example of this confusion of "ratio number." Let us consider a 4:1 Balun designed to provide service between a 50 Ohm source and a 200 Ohm load where, perhaps, it would be more natural to call this Balun a 1:4. Ah! now I have introduced load and source specifications and found that the expression of the ratio works to drive the naming convention of the Balun to 1:4. As this is a standard available item for amateur use one may forgive and forget this distinction.

Having allowed the distinction to lapse, the unwary amateur may suspect that he could use this same, common device for other applications. A tempting one could be for that short vertical that only presents 12.5 Ohms. 12.5 Ohms is to 50 Ohms as 50 Ohms is to 200 Ohms - not so? That is, a 1:4 will always work as a 1:4 (or 4:1 for that matter) should it not?

The short and long answers are NO.

Again this is not about windings ratios. The commonly available 1:4 Balun works between Z's of 50 Ohms and 200 Ohms. It is NOT designed to work between Z's of 12.5 Ohms and 50 Ohms (nor 100 Ohms and 400 Ohms). It may be forced into such service, and it may function in such service; however, it may as easily fail in such service if you are unaware of the limitations presented by such miss-application. These limitations will emerge rapidly at the "band" edges for this miss-applied device.

Baluns are very efficient transformers within a well characterized frequency range. The alternatives to common 1:4 Baluns I see for sale often come in 160 M versions which is to say that the common design just about covers 80 M but runs out of gas at lower frequencies. The same could be said for the upper end of HF, but I have seen no high HF variants for sale. Most designs I see have an insertion loss of less than 0.1 dB over a decade of frequency range. Outside of these band limits and the insertion loss climbs extremely fast.

There are also variations in design as to toroid or rod implementations. There are also variations in material used in the rod or toroid. By and large the best designs (most efficient and widest frequency range - both) come from ferrite toroid followed by ferrite rod followed by powered iron toroid. The ferrite toroid can present less than 0.1 dB insertion loss from 500 kHz to 20 MHz. The ferrite rod can present less than 0.1 dB loss from 1 MHz to 18 MHz. The powdered-iron toroid will present less than 0.1 dB loss from 3 MHz to 15 MHz. If one were to replace a ferrite toroid in 160 M service with an iron-powder toroid, the insertion loss would climb from 0.1 dB to 0.6 dB. This last suggests a 6 fold increase of loss for a simple, naive substitution. With 100 W, this substitute Balun is going to have to dissipate 6 W, or fail.

Of course, most of the numbers above is so much pencil whipping as there are variants in design to answer every objection. However, almost none of these considerations are presented along with

advertising copy. Thus the marketplace gives the impression one size fits all (t'ain't so). There are frequent contributions to this newsgroup of the experiences of exploding, flaming Baluns attended with mumblings of core saturation and such. The experience (less the mumbled explanations) is evidence of the margins being exceeded much in the manner I describe above.

This takes us back to Will's original question of how is one to assess the quality of any particular Balun? How is one to assess its characteristics? The insertion loss of the already provided Balun can be guesstimated by the amount of heat produced in service.

Will's impression of applicability of the current Balun and winding his own can only be guided by impressions. Unfortunately I suspect such impressions are driven by considerations usually observed only for 60 Hz power transformers. What impels me to make this statement is the discussion of wire size and turns. The proper consideration is for the winding's transmission line Z and its ends' isolation.

That is, the windings consist not of individual wires (like the primary or secondary of a power transformer), but of wound transmission lines (wire pairs). Yes, those wires wound through the core are a transmission line with a characteristic Z. The number of turns of that transmission line relate to isolating the input of the transmission line from its own output. For high frequency operation, it is well to keep this transmission line short (and thus fewer turns); for low frequency operation it is well to keep the number of turns high. As you can see, such imperatives are counter-influencing. A solution to this enigma is found in using a smaller core. This raises the stakes though when marginal operation forces this core to sustain higher power loss.

This aspect of the windings being transmission lines rather than individual wires is the least discussed/understood topic in this forum. To achieve proper operation (most efficient operation), the Z of the wound transmission line (like that of the 1/4 wave transmission line transformer) should be equal to the square root of the product of the two Z's being matched. As an example for the 1:4 Balun operating between a Z of 50 Ohms and 200 Ohms; that wound transmission line should exhibit a characteristic Z of 100 Ohms. If we had a 1:4 Balun that matched from 12.5 Ohms to 50 Ohms; then that Balun would be wound with transmission line of characteristic Z of 25 Ohms. As you will note, the same "ratio" but different construction requirements for different service requirements. Again, more pencil whipping (my simple assertion does not strictly hold for 1:4), but the substance of the point is well illustrated by this.

There is a world of other technical consideration (as long as you want wide bandwidth for low insertion loss). If you take care to follow models provided by authors that discuss issues of Load and Source Z, establishing the winding's transmission line Z, and the trade-offs of how many turns; then you may construct these and feel reasonably

assured of their performance. I am afraid that the state of the art for much Balun design in casual articles descends to the level of scribblings on a box-top of cereal. Fortunately, even poor designs tend to work - somewhere, sometimes.

Barring obvious losses (AKA heat) from an existing design, there is probably no reason to replace the MFJ Balun. It is probably not the best design, but without knowing the requirements, any attempts to replace it will not necessarily lead to an improvement.

As a final touch: Will, you mentioned you intend to move toward using 450 Ohm transmission line. This will require a 1:9 Balun, not a 1:4 (much less 4:1); however, I suspect even this would not improve your system requirements (as I doubt that this line will be terminated in 450 Ohms). As you can see, there are many issues that go beyond the one device.

73's
Richard Clark, KB7QHC

490. Helical filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-16 00:00:00 UTC
From: stoskopf@tri.NET
Message-ID: <3768051E.E8108CD3@tri.net>
Source record: 69325

From Zverev: All dimensions in INCHES

S=side length of square tubing

Q=60 * S/(sqrt freq)

N=1600/(freq * S) number of turns

Zo = 81500/(freq * S)

d = 0.66 * S for d/D=0.55 coil diameter

b = S for b/d=1.5 coil length

H = 1.6 * S

wire diameter do = d * D * freq / (3,800)

or from Spencer, A review of the design of helical resonator filters, in J. of the Institution of Electronic and Radio Engineers, Vol 57, No 5 pp 213-220, Sept/Oct 87

Input/output tap located at theta from short circuit where theta = electrical angle

sin(theta) = sqrt((Rb * Rt)/(2 * Zosquared)

coil length L = 1720 *{ sqrt((log(D/d)/[(1-(d/D)squared))]} / (n * d * fo)

no I won't enter the equation for Q-factor, my old math teacher would flunk me for the above.

this article also has graphs for coupling aperatures.

Read German? AEU, 25, no.4, ppl 25-31, Jan 71. The calculation of parameters of helical line resonators. I don't have

Hope this helps

N0UU

491. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-16 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <LQGh5XBgiAa3Ew03@jmwa.demon.co.uk>
Source record: 69326
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

<3767CD80.36A61047@ricochet.net>, Kevin Hoult <mudshark@ricochet.net>
inimitably wrote:
>I imagine RCA Victor or someone put a lot of thought into
>the design of the "horns" on the Victrola record players, but I wonder how this
>info could be found? Any suggestions?

A very great deal of work has been done since 'Victrola' days. Try the
Journal of the Audio Engineering Society.
--
Regards, John Woodgate, OOO - Own Opinions Only.
Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
Did you hear about the hungry genetic engineer who made a pig of himself?

492. Re: Improving/Modifying MFJ tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-16 00:00:00 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <37680E00.5E2A8AF2@IEEE.org>
Source record: 69327
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Richard Clark wrote:
> Much of what Cecil has to say has practical value.

Only "much", not all? Richard, do you want to hurt my feelings? :-)
If I had that many words available, I would have said the same thing
as you. Good posting. However, I think we should point out that a
1:4 balun for transmitting is a 4:1 balun for receiving.
--
73, Cecil, W6RCA http://www.bigfoot.com/~w6rca

493. Re: Improving/Modifying MFJ tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-16 00:00:00 UTC
From: rwclark@rwclark.seanet.com
Message-ID: <376811d0.154524@news.seanet.com>
Source record: 69328
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Wed, 16 Jun 1999 20:50:40 GMT, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>Richard Clark wrote:
>> Much of what Cecil has to say has practical value.
>
>Only "much", not all? Richard, do you want to hurt my feelings? :-)
>If I had that many words available, I would have said the same thing
>as you. Good posting. However, I think we should point out that a
>1:4 balun for transmitting is a 4:1 balun for receiving.

Hi Cecil,

Much is better than all (who would believe a statment containing such
an absolute?).

Your last point is well taken, perhaps we should call it a 1:4:1 Balun
;-) Or perhaps this is yet another attempt to haul out the necessary
correlative of the source exhibiting an R for the Balun to work? Lest
we get into that side-thread (yet again)....

73's
Richard Clark, KB7QHC

494. Re: CD Servicing Convention Reminder.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-16 00:00:00 UTC
From: "Sarlock T." <sarlock@no!spam.twcny.rr.com>
Message-ID: <2YU93.241$U6.1870@newsr2.twcny.rr.com>
Source record: 69329
Cross-posted to: aus.electronics,aus.radio.amateur.digital,aus.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,sci.electronics.basics,sci.electronics.equipment,sci.electronics.misc,sci.electronics.repair

Maybe not for a single disc player, when you have to replace a pioneer external multi-disc changer, replacing the pickup because a cheap alternative.

Jonathon Caywood
alt.energy.high-voltage

>And when one of you guys believes you can service a CD drive, I have
>two that need help. No-one I have asked here in Canberra wants to
>even talk about repairing a CD drive. Fair enough when they only cost
>$95 or so, but still - I'd rather repair than replace, so if it could
>be done cost effectively I'm happy to give someone my business.

495. Re: Duplexer Or Cavity ????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-16 00:00:00 UTC
From: snoskow11woksons@liame.tom.com
Message-ID: <snoskow11woksons-1606991821380001@il75-fc-mac1-16.acpg.cig.mot.com>
Source record: 69330

Thomas C. Sefranek <tcs@cmcorp.com> wrote that:

> Dano wrote:

> > I'm gonna run 2 ant's for a repeater setup.
> > my transmit is 152.27 megs
> > my rec is 157.52 megs
> >
> > Do I need a full bp,br duplexer ???
> > or can I just run a pair of bp cavities on the rec side??

> It would depend on how much phase noise the transmitter has and what power
> it's running.
> My guess is you MUST have an anti-resonant element in the band-pass cavities
> to notch out the other
> frequency. (Making them duplexers...)

Dano,
Tom is correct. There are two considerations for a duplexer (or
whatever you want to call it)

1) Keep Tx power out of the RX. This requires something to stop Tx
carrier energy from getting to the Rx. It doesn't pass the TX freq. This
can be a band pass (cavity) tuned to the RX freq in the Rx leg which is
narrow enough to block the Tx freq. Or it can be a notch at the Tx freq.
in the Rx leg. (hope I got that right)

2) Keep TX sideband noise out of the RX. This requires something which
stops the RX freq (YES RX FREQ) in the Tx leg. It can be a band pass
cavity in the TX leg tuned to the TX freq - and narrow enough to block the
sideband noise comming from the TX whixh is on the RX freq. OR a notch
in the TX leg tuned to the RX freq.

There are some Motorola cavities for 450MHz which are band pass, but with
a little coupling from in to out put you can also get a notch at the
companion frequency. So you can get both types in one pair of filters

The double band pass version tends to get called duplexers This is what's
in current car phones) and the dual notch versions tend to be
called...gee, I forgot, but they have a different term (here inside
Motorola anyway)....A rose by any other name still can kill a receiver.
THis type was in an older car phone by Motorola for 450 called the "MK".

Regards, Steve K9DCI@arrl.org

--
I know everything, except how to be humble...a.a..and... how to stop

e-spam. Sorry 'bout the address munge, but it has reduced much now.
Use snoskow1 at server email here in mot in the com domain.

496. Re: Building my own repeater - where to get the filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-16 00:00:00 UTC
From: snoskow11woksons@liame.tom.com
Message-ID: <snoskow11woksons-1606991828250001@il75-fc-mac1-16.acpg.cig.mot.com>
Source record: 69331

In article <7k4ken$4vs$2@bgtnsc02.worldnet.att.net>,
mroberds@worldnet.att.net (Matt Roberds) wrote:

> Hello all!
>
> I've been thinking about what it would take to build my own repeater
> [...] But I also think I need some kind of super-duper filter to keep
> my transmitter out of my receiver.

Here's my response to a post a little further down the list:

There are two considerations for a duplexer (or
whatever you want to call it)

1) Keep Tx power out of the RX. This requires something to stop Tx
carrier energy from getting to the Rx. It doesn't pass the TX freq. This
can be a band pass (cavity) tuned to the RX freq in the Rx leg which is
narrow enough to block the Tx freq. Or it can be a notch at the Tx freq.
in the Rx leg. (hope I got that right)

2) Keep TX sideband noise out of the RX. This requires something which
stops the RX freq (YES RX FREQ) in the Tx leg. It can be a band pass
cavity in the TX leg tuned to the TX freq - and narrow enough to block the
sideband noise comming from the TX whixh is on the RX freq. OR a notch
in the TX leg tuned to the RX freq.

There are some Motorola cavities for 450MHz which are band pass, but with
a little coupling from in to out put you can also get a notch at the
companion frequency. So you can get both types in one pair of filters

The double band pass version tends to get called duplexers This is what's
in current car phones) and the dual notch versions tend to be
called...gee, I forgot, but they have a different term (here inside
Motorola anyway)....A rose by any other name still can kill a receiver.
THis type was in an older car phone by Motorola for 450 called the "MK".

You can make these things, but they have to be very well made. Drift from
temperatute changes can easily kill the notch type. The single narrow
bandpass cavity ain't much better.

Regards, Steve K9DCI@arrl.org

--
I know everything, except how to be humble...a.a..and... how to stop
e-spam. Sorry 'bout the address munge, but it has reduced much now.
Use snoskow1 at server email here in mot in the com domain.

--
I know everything, except how to be humble...a.a..and... how to stop
e-spam. Sorry 'bout the address munge, but it has reduced much now.
Use snoskow1 at server email here in mot in the com domain.

497. Re: RF amplifier circuit wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: Woody White <woody.white@att.net>
Message-ID: <3769A45D.58D3981B@att.net>
Source record: 69182

Thanks for posting that, Leland, been searching from time to
time and never found it.
Woody

"Leland C. Scott" wrote:
>
> Here's the web site:
>
> http://www.communication-concepts.com/vhfamps.htm
>
> 73's
> Leland C. Scott
> KC8LDO
>
> Woody White wrote in message <376461AA.6ACCB258@att.net>...
> >Another possibility is: Communications Concepts Inc My
> >catalog is a bit old, but they have a kit (was $80) for a 2M
> >amp 1/4 watt to 3 watts in (5 absolute max) that provided
> >2-35 out (drive dependent). Good for SSB or FM. I don't
> >think they have a net site. They are in Beavercreek, Ohio.
> >Phone: (was)
> >513 426 8600. IO have delt with them in the past - no

--

---------- de Woody, WB4QXE ----------

Ham Homebrew/ATV Circuits -*- Scanning Electron
Microscope Images

http://www.geocities.com/capecanaveral/3722

498. Re: Improving/Modifying MFJ tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: Phil Wheeler <w7ox@mindspring.com>
Message-ID: <3769ACE7.76B04133@mindspring.com>
Source record: 69183
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

W6RCecilA wrote:
>
> Richard Clark wrote:
> > Much of what Cecil has to say has practical value.
>
> Only "much", not all? Richard, do you want to hurt my feelings? :-)
>

Faint praise is often worse than criticism: It is so hard to regect!

Phil

499. For Trade: TekMeter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: Rod Kirkhart <pratch@pacbell.net>
Message-ID: <376953EA.61736A56@pacbell.net>
Source record: 69184
Cross-posted to:
sci.electronics.equipment,misc.industry.electronics.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hello,

I have for Trade a Tektronix THM565 TekMeter True RMS Multimeter
with Autoranging Scope.

Includes:
AC Power Adapter(THM5AC)
Battery pack
Test Leads
User Manual
Excellent Condition Retail: $1,300

I would like to trade for a TEK-465M oscilloscope or a bucket of
rf/microwave components, ie. couplers, amplifiers, mixers, filters etc.

Thanks,

Rod-KF6SXC

500. lookking for diagram of 811a or 572b RF power amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: BD2RH/Xu <bd2rh@netease.com>
Message-ID: <7k9h4ucju1@news.cz.js.cn>
Source record: 69241

Hi!
I'm looking for a diagram of power amplifer,
500-1KW,use 811A or 572,could someone help me?thanks!
Yue Xu

501. Re: Improving/Modifying MFJ tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <37685518.1DC3D539@IEEE.org>
Source record: 69242
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Will White wrote:
> How
> would I use one of those W2DU ferrite bead choke-baluns since I have no coax
> in my antenna system?

Use the unbalanced output of your tuner into a W2DU choke then into
your ladder line. The W2DU choke replaces the balun in your tuner. I
have the mother of all chokes. Twenty-five #77 1/2" ID cores with four
turns of RG-400 looped through all of them. High voltage/super-high-
resistance is what one needs for a non-resonant system where the
impedance looking into the transmission line is unknown. If you are
unlucky enough to try to push power into a 5K "load" you need ~50K
of resistance/inductance in the choke.
--
73, Cecil, W6RCA http://www.bigfoot.com/~w6rca

502. FA-Hi-Precision UHF/VHF BRASS Switch, cheep!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: rlucch2098@aol.com
Message-ID: <19990616232117.29110.00000640@ng-cj1.aol.com>
Source record: 69243

Heres a neat switch, all Precision Machined brass with 2 position BNC's on it.
Only at $8.99.
Looks like it might be for UHF/VHF operation, Check it out!
URL with pics>>
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=117215593
73.....Rich

503. Ebay-ERIE"DoorKnob" Caps 500pf@30KV,NEW!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: rlucch2098@aol.com
Message-ID: <19990616232237.29110.00000642@ng-cj1.aol.com>
Source record: 69244

Hi Guys;
Building something big?
How's about a few BRAND NEW ERIE "doorknob" Caps Rated at 500pf @ 30kv. There are three pairs at dutch auction and are kinda cheep so far. Only at $10 & $7 a pair.
Heres the URL with PICS>>
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=116761326

Thanks es 73..........RICH-WA2RQY RLUCCH2098@aol.com
Web-Page URL> HTTP://members.aol.com/rlucch2098/index.html

504. Re: Estimating breakdown voltage of air-variable caps.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: "Barry L. Ornitz" <ornitz@dpnet.net>
Message-ID: <4w_93.2022$vN3.95278@typ32b.nn.bcandid.com>
Source record: 69245
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Will White wrote in message <37674A14.558A2331@asu.uswest.net>...
>I have more than a dozen air-variable caps with no markings as
>to capacitance or working/puncture voltage, or indeed any
>markings at all. I know the formula for calculating capacitance
>from dimensions of the plates, but don't have a clue how to
>figure out breakdown voltage. Of course, plate spacing is the
>central variable (NPI), but going off the plate spacing alone
>isn't good for more than a guestimate. Is there an equation for
>this? Let me know, or let me know where to go {and look :)}.

The following table was listed in Bill Orr's "Radio Handbook." This is rotor plate to stator plate (air gap) spacing. In plotting the numbers, some curvature was noted. I fit a curve to the data and found a modified power-law model to fit best. The curve flattens for higher voltages and is around 30 KV for 1 inch spacing as someone else noted.

The fitted equation is:

BV = 27100 * (SP)**0.78 - 641

where: BV = breakdown voltage, volts
SP = air gap spacing, inches

This equation predicts (incorrectly) that the breakdown voltage is zero at a little over 0.0082 inches. Thus you should only use this equation for spacings of 0.03 or higher.

The tabular data is:

Air Gap, inch Breakdown Voltage
0.03 1000
0.05 2000
0.07 3000
0.10 4000
0.125 4500
0.15 5200
0.17 6000
0.20 7500
0.25 9000
0.35 11000
0.50 15000
0.70 20000

73, Barry L. Ornitz WA4VZQ ornitz@dpnet.net

505. FS Ft-101

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: JOHN WARD <HITECH@EROLS.COM>
Message-ID: <7kag63$rh0$1@autumn.news.rcn.net>
Source record: 69246
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.swap

For sale ft-101 operatable a device attach to it about 8 out of 10 make me a reasonable offer.

506. Re: Estimating breakdown voltage of air-variable caps.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: Jim <jim-p.remove@ihug.co.nz>
Message-ID: <7kalggnbk1@newsource.ihug.co.nz>
Source record: 69247
Cross-posted to: rec.radio.amateur.antenna,Rec.radio.amateur.homebrew

Woody White wrote in message <37684284.91787374@att.net>...
>The smallest distance , rotor to stator.
>Woody
>
Don't forget that the rotor may not be exactly in the centre of the stator plates, and it may not even be parallel with them. Check the gaps with a feeler gauge with the plates fully, and part meshed.

Dirt can reduce the gap too and reduce the voltage rating.

And use a safety factor on the applied voltage if this is necessary.

Jim, ZL2APE.
jim-p@ihug.co.nz

507. Re: Portable Low Power Generation ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: Christopher Cox <cobox@netexp.net>
Message-ID: <01beb8b6$c2a7fb60$e260b6cd@chris>
Source record: 69248

How about a junk yard. I am thinking of pairing a old car alternator with a old lawn mower engine. Should do the trick.

Christopher Cox
KC8FRJ

508. (none)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: cobb@flashmail.COM
Message-ID: <3768efb4.1d1.0@flashmail.com>
Source record: 69249

looking for homebrew transceiver hat work with oe5dxl modem,I'll glad taht work with simple stuff.

also looking for transceiver that work with baycom,I'll glad that commmon tools and crystal.

thanks 73
e-mail me

_____
Get Your FREE FlashMail Address now at http://www.flashmail.com
It's Free, Easy, & Fun !!!

509. Homebrewing scope probes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: Will White <wcw@asu.uswest.net>
Message-ID: <3768EF5F.74AD60D4@asu.uswest.net>
Source record: 69250
Cross-posted to: sci.electronics.equipment,Rec.radio.amateur.homebrew,Rec.radio.amateur,Rec.radio.amateur.boatanchors

I picked up a TEK RM-45A 33MHz dual trace scope at a surplus supplier that appears to work. I have a trace, calibrator signal, and get and wiggle traces attaching my RF generator leads to the scope input and varying the signal frrequency and level. I have a manual copy on order, and need a pair of 33MHz or greater probes to get started calibrating, setting up, and using the old TEK.

This is my first scope, though I have been working on tube gear without a scope for several years, and would basically like to use this scope to learn scope fundamentals, improve and speed up my homebrewing and repair (almost all tube based work at low HF), and just to play. So I won't need the best probes at first, and I would like to see how homebrew probes compare with commercial ones.

I need info: parts & materials list, construction method and caveats, schematic, and possibly drawings, on how to do this. Sources? Advice? Comments? Thanks much.
--
Will White, KD7BFX

to reply, please click this link mailto:wcw@asu.uswest.net

510. Re: lookking for diagram of 811a or 572b RF power amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: David Fentem <david.fentem@gtri.gatech.edu>
Message-ID: <3768F209.2E8FCC0D@gtri.gatech.edu>
Source record: 69251

Back in the early 70's, 73 Magazine published a construction article on the "Tiny Tim" amplifier. It used a pair of 811A's mounted sideways in a grounded grid configuration. Nice, low profile design physically similar to Heath's Compact Kilowatt amplifier.

Several of my friends and I built a few of these with excellent results. It may be worth looking through some old 73's in a library.

Mine is on loan to a friend and is still in regular use.

-Dave
kw4m

BD2RH/Xu wrote:
>
> Hi!
> I'm looking for a diagram of power amplifer,
> 500-1KW,use 811A or 572,could someone help me?thanks!
> Yue Xu

511. >>>Ft-50R ADMS-1C<<<

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: KB9TFH@MichianaToday.com
Message-ID: <3768ec1f.2234362@News.alterdial.uu.net>
Source record: 69252

Hello, I just bought a FT-50R used w/ the Mars/cap mod done, however i have the ADMS-1D version. I was woundering if someone could send me a link to download it or send it via email...Thanks...Joe KB9TFH

512. Re: Improving/Modifying MFJ tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: nobody@crosslink.net
Message-ID: <376903bc.9594907@news.crosslink.net>
Source record: 69253
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Wed, 16 Jun 1999 17:56:44 -0700, Will White <wcw@asu.uswest.net>
wrote:

>OK, I am learning a bit from this thread, and archiving the posts for more
>thorough digestion later as I am intellectually able. For the moment, can
>Cecil, Richard, or other interested parties recommend what to do about the
>rinky-doink balun in my tuner? I want to use the tuner with a 132' horizontal
>loop for 40-10 (and some low power work on 80CW) and want the best setup
>(without buying any new major pieces of gear) given what I have on hand. How
>would I use one of those W2DU ferrite bead choke-baluns since I have no coax
>in my antenna system? Or is there a version to use with window-line and in
>place of the MFJ little balun-oreo?

Dear Will,

Here's an obvious solution that requires only a small amount of
re-wiring and re-winding. It was written up by A Roehm, W2OBJ, but I
don't know where it was publilshed. I'm sure he would make a copy
available to you upon request.

He uses a tuner, like yours, but lets it float (don't ground it) and
has the ladder line going across the terminals for random or long wire
and the chassis terminal. In other words, the T-match tuner is used as
a balanced tuner even though it is designed as an unbalanced tuner.

Having done that, the Balun is now placed at the coax line from the
tuner to the transmitter. There are different ways to implement that -
one is to use the W2DU balun, and another is to take the 4:1 balun out
of the T-match circuit, re-wind it as a 1:1 current balun (voltage
balun is acceptable but current preferred), and re-install it in a
separate box between the coax to the transmitter and the SO-239 on the
back panel of the tuner.

It's going to be a little tricky with that latter method to keep the
tuner chassis floating, and that's why the W2DUU choke balun is the
preferred way to do it.

Otherwise, you have to put a real short pigtail coax with a PL-259 on
it to mate with the back panel of the tuner, and the other end of that
pigtail goes into the little black box with the balun in it, to
connect to the balanced output leads of the balun. I don't like that -
it's too much of a kludge, but schematically, it looks OK.

The reason that I do not like these other suggestions which place the
balun between the T-match tuner and the ladder line is that it
requires the balun to work into a wide range of impedances, which is

the very reason why baluns don't work as you expect. If you use the balun at the transmitter side of the tuner, you have adusted the tuner for a 50 ohm impedance presented to the balun. That means that the balun ALWAYS OPERATES AT ITS DESIGN VALUE.

In fact, if the balun is a 4:1 balun, and your tuner can transform the impedance seen lookin into the ladder line into a 200 ohm impedance at its input terminals, then you could stick with the 4:1 balun rather than re-winding it.

Last but not least, DO NOT USE THE BUILT IN SWR METER, if you are going to use the tuner as a floating tuner. It will no longer give you meaningful indications. You MUST put a conventional SWR indicator into the coax at the transmitter output. If your transmitter has a built-in SWR meter, that's fine - use that.
73 de Bob, W9DMK, King George, VA
Change "nobody" to "w9dmk" for e-mail
http://www.qsl.net/w9dmk
http://www.fortunecity.com/meltingpot/albania/784

513. Re: Improving/Modifying MFJ tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <37690D67.A9C71ECB@IEEE.org>
Source record: 69254
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Robert Lay (W9DMK) wrote:
> If you use the
> balun at the transmitter side of the tuner, you have adusted the tuner
> for a 50 ohm impedance presented to the balun. That means that the
> balun ALWAYS OPERATES AT ITS DESIGN VALUE.

Didn't Tom, W8JI, once prove that the common mode currents were the
same on either side of the tuner used in that configuration?
--
73, Cecil, W6RCA http://www.bigfoot.com/~w6rca

514. Manual needed for Jackson 658A tube tester!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: mjzuccaro@aol.com
Message-ID: <19990617122205.11260.00000766@ng-cd1.aol.com>
Source record: 69255

Guys:
Does anyone have a manual for the above tester? Will pay for a copy of trade
for a copy of service data I have that you may need.
Please respond by email.
Thanks,
Mike zuccaro

515. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: Kevin Hoult <mudshark@ricochet.net>
Message-ID: <37690D1D.284E529E@ricochet.net>
Source record: 69256
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

THAT'S IT!!
NO SPAM - You are a genius! You have just given me a terrific idea! I have an old horn tweeter with a blown voice coil!!!!!
I will cut the horn off, (it is NOT altec lansing, just a cheap knock off, but it has an exponential horn - plastic) and mount it over the .1 watt speaker I have for the xtal set. I am also using the one transistor amplifier powered by another L/C diode circuit to provide a tiny bit of of amplification of the detected audio signal from the Xtal set - you may have seen that in a previous post. The amplifier plus the horn just could get me what I am trying to get - a little xtal radio that I can set up in the corner to play low level but audible (without an earphone) audio without any batteries.

NO SPAM wrote:

> Kevin Hoult wrote:
>
> > 623402 wrote:
>
> > > The first place to start is acoustic efficiency, ie a tapered horn on the
> > > earpiece.
>
> > I am also playing around with amplifying the output of an Xtal set in
> > non-traditional ways. I had heard of this approach (tapered horn, or "physical
> > amplifier"), but I wonder if there are any sources of infromation on how this
> > horn should be shaped? Does anyone know of any info on the configuration of
> > this type of device? I imagine RCA Victor or someone put a lot of thought into
> > the design of the "horns" on the Victrola record players, but I wonder how this
> > info could be found? Any suggestions?
>
> Well, the Altec Voice of the Theater speaker system uses a horn
> tweeter that has a very high efficiency, but it is also too expensive
> for a xtal set. Seriously, tho it's going to be hard to get high
> efficiency in any speaker. You would be better off using a headphone,
> which can give good volume with a few milliwatts.

516. JFET source

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: stereodoc1@aol.com
Message-ID: <19990617125548.01113.00000262@ng-fi1.aol.com>
Source record: 69257

Need a source for the following transistors

2SK115
2SJ405

Thanks

Bob

517. Heathkit SB-313 Manual needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: Don Cunningham <wb5hak@texhoma.net>
Message-ID: <7kbc07$5uf$1@ionews.ionet.net>
Source record: 69258

I picked up a nice SB-313 over last weekend and need a manual (or copy of operation/alignment/maintenance with schematic) if someone can help. Would gladly pay a fair price or reimburse expenses. Tks, Don, WB5HAK

518. Alinco dr-605/dr610 CAS sourse

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: Dano <webster@express-delivery.net>
Message-ID: <7kbbe9$49c@nnrp3.farm.idt.net>
Source record: 69259

I'm looking to use one of these radio's in a repeater setup, both in
crossband & vhf.
Does anyone know where the cas sourse is in either of these radios.
P.S.
I'm looking for the actual location, considering I'm still a "newbie" to the
hobby, telling what "stage" to look in is greek to me.
thank you

519. Re: Improving/Modifying MFJ tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <376935D7.C88B9F62@teleport.com>
Source record: 69260
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

I reviewed that paper for Al -- it's "Some Additional Aspects of the Balun Problem", in the _ARRL Antenna Compendium_, Vol. 2, and at the time agreed that it was a good idea. Since then, I've become convinced that putting the balun ahead of the tuner doesn't improve its operation at all. I wrote up why I reached this conclusion and put it on my ftp space as ibalun.txt, and a shortened version as ibalbrf.txt. You can download it from ftp.teleport.com/pub/vendors/w7el.

Roy Lewallen, W7EL

Robert Lay (W9DMK) wrote:
>
> On Wed, 16 Jun 1999 17:56:44 -0700, Will White <wcw@asu.uswest.net>
> wrote:
>
> >OK, I am learning a bit from this thread, and archiving the posts for more
> >thorough digestion later as I am intellectually able. For the moment, can
> >Cecil, Richard, or other interested parties recommend what to do about the
> >rinky-doink balun in my tuner? I want to use the tuner with a 132' horizontal
> >loop for 40-10 (and some low power work on 80CW) and want the best setup
> >(without buying any new major pieces of gear) given what I have on hand. How
> >would I use one of those W2DU ferrite bead choke-baluns since I have no coax
> >in my antenna system? Or is there a version to use with window-line and in
> >place of the MFJ little balun-oreo?
>
> Dear Will,
>
> Here's an obvious solution that requires only a small amount of
> re-wiring and re-winding. It was written up by A Roehm, W2OBJ, but I
> don't know where it was publilshed. I'm sure he would make a copy
> available to you upon request.
>
> He uses a tuner, like yours, but lets it float (don't ground it) and
> has the ladder line going across the terminals for random or long wire
> and the chassis terminal. In other words, the T-match tuner is used as
> a balanced tuner even though it is designed as an unbalanced tuner.
>
> Having done that, the Balun is now placed at the coax line from the
> tuner to the transmitter. There are different ways to implement that -
> one is to use the W2DU balun, and another is to take the 4:1 balun out
> of the T-match circuit, re-wind it as a 1:1 current balun (voltage
> balun is acceptable but current preferred), and re-install it in a
> separate box between the coax to the transmitter and the SO-239 on the
> back panel of the tuner.

>
> It's going to be a little tricky with that latter method to keep the
> tuner chassis floating, and that's why the W2DUU choke balun is the
> preferred way to do it.
>
> Otherwise, you have to put a real short pigtail coax with a PL-259 on
> it to mate with the back panel of the tuner, and the other end of that
> pigtail goes into the little black box with the balun in it, to
> connect to the balanced output leads of the balun. I don't like that -
> it's too much of a kludge, but schematically, it looks OK.
>
> The reason that I do not like these other suggestions which place the
> balun between the T-match tuner and the ladder line is that it
> requires the balun to work into a wide range of impedances, which is
> the very reason why baluns don't work as you expect. If you use the
> balun at the transmitter side of the tuner, you have adusted the tuner
> for a 50 ohm impedance presented to the balun. That means that the
> balun ALWAYS OPERATES AT ITS DESIGN VALUE.
>
> In fact, if the balun is a 4:1 balun, and your tuner can transform the
> impedance seen lookin into the ladder line into a 200 ohm impedance at
> its input terminals, then you could stick with the 4:1 balun rather
> than re-winding it.
>
> Last but not least, DO NOT USE THE BUILT IN SWR METER, if you are
> going to use the tuner as a floating tuner. It will no longer give you
> meaningful indications. You MUST put a conventional SWR indicator into
> the coax at the transmitter output. If your transmitter has a built-in
> SWR meter, that's fine - use that.
> 73 de Bob, W9DMK, King George, VA
> Change "nobody" to "w9dmk" for e-mail
> http://www.qsl.net/w9dmk
> http://www.fortunecity.com/meltingpot/albania/784

520. Re: JFET SPICE Models

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: Tom Bruhns <tomb@lsid.hp.com>
Message-ID: <376935E5.295002F9@lsid.hp.com>
Source record: 69261

Have a look on the Siliconix web site for AN104,
http://www.siliconix.com/www/data/appnote/70597.pdf, which has at least
the J310. Try the Motorola site for the MPF102...mabye National for the
2N3819? Web sites are your friends...

Sorry, I don't reply directly...too much bounced email. Hope you come
back here to look for replies.

Cheers,
Tom

bkizerian@my-deja.com wrote:
>
> Looking for SPICE models for the following devices:
>
> J310
> MPF102
> 2N3819
> 2N5457
> 2N5459
>
> Reply to me directly at kizerian@ced.utah.edu
>
> Thanks
>
> Bruce kk7zz
>
> Sent via Deja.com http://www.deja.com/
> Share what you know. Learn what you don't.

521. Re: Substitution for BB104 tuning diode - MV104 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: Tom Bruhns <tomb@lsid.hp.com>
Message-ID: <37693656.68F4B4B2@lsid.hp.com>
Source record: 69262

Try comparing the data sheets. BB104 is likely on the Philips (or possibly the Siemens) web site, and with luck the MV104 will be on the Motorola site.

Holly Nevdoff wrote:
>
> BB104 - Can I replace this with MV104 ?
> merci Holly

522. Re: Estimating breakdown voltage of air-variable caps.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: Tom Bruhns <tomb@lsid.hp.com>
Message-ID: <376937E6.1391C029@lsid.hp.com>
Source record: 69263

(With apologies beforehand to my dear friend Barry...)

Gee, if instead of breakdown voltage it was safe working voltage, then perhaps zero would be right for 0.0082"! Breathe on it very hard and it just _might_ short out! ;-)

(Actually, some of the piston trimmers I have may have a spacing about that tight, and are indeed rated for more than zero volts, but not much more!)

Cheers,
Tom

"Barry L. Ornitz" wrote:

...

> The fitted equation is:
>
> BV = 27100 * (SP)**0.78 - 641
>
> where: BV = breakdown voltage, volts
> SP = air gap spacing, inches
>
> This equation predicts (incorrectly) that the breakdown voltage is zero at
> a little over 0.0082 inches. Thus you should only use this equation for
> spacings of 0.03 or higher.
>

523. Re: Improving/Modifying MFJ tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: nobody@crosslink.net
Message-ID: <37693cab.24172430@news.crosslink.net>
Source record: 69264
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Thu, 17 Jun 1999 10:52:23 -0700, Roy Lewallen <w7el@teleport.com>
wrote:

>I reviewed that paper for Al -- it's "Some Additional Aspects of the
>Balun Problem", in the _ARRL Antenna Compendium_, Vol. 2, and at the
>time agreed that it was a good idea. Since then, I've become convinced
>that putting the balun ahead of the tuner doesn't improve its operation
>at all. I wrote up why I reached this conclusion and put it on my ftp
>space as ibalun.txt, and a shortened version as ibalbrf.txt. You can
>download it from ftp.teleport.com/pub/vendors/w7el.

I'm going there now to see what you sair, Roy - Thanks.
73 de Bob, W9DMK, King George, VA
Change "nobody" to "w9dmk" for e-mail
http://www.qsl.net/w9dmk
http://www.fortunecity.com/meltingpot/albania/784

524. Hammalund HQ-129-X

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: chrism1111@aol.comspamless
Message-ID: <19990617141634.18129.00001019@ng-fr1.aol.com>
Source record: 69265

Best offer, plus shipping rom here on wunderful Long Island NY, two other family units soon 1 rca table top one rca floor model,

The hammalund is in very good condition and has all tubes I can see, you need to replace the power chord. Even has the allen key in holder , Verniers are clean and the knobs all there. email remove the spam line

chris
For free plans and info on solar oven's water and purifiers, that actually work, see<http://www.accessone.com/~sbcn/index.htm>
==========
Sufficiently advance technology is indistinguishable from magic..

525. Re: Improving/Modifying MFJ tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: nobody@crosslink.net
Message-ID: <37693b7a.23867265@news.crosslink.net>
Source record: 69266
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Thu, 17 Jun 1999 15:00:23 GMT, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>Robert Lay (W9DMK) wrote:
>> If you use the
>> balun at the transmitter side of the tuner, you have adusted the tuner
>> for a 50 ohm impedance presented to the balun. That means that the
>> balun ALWAYS OPERATES AT ITS DESIGN VALUE.
>
>Didn't Tom, W8JI, once prove that the common mode currents were the
>same on either side of the tuner used in that configuration?

I must not be understanding what you mean, Cecil, because common mode
currents would inherently be common mode up to the point where they
hit the balun - at which point they should be stopped, or impeded by
the balun. The fact that the balun is on the South side of the tuner
rather than the North side of the tuner should not matter. Unless I'm
missing the meaning of your question. Tom Rauch had little or nothing
to say on this newsgroup for about 2 years other than a brief
interchange about 4 months ago. I don't know that I remember the
particualr discussion to which you are referring.

73 de Bob, W9DMK, King George, VA
Change "nobody" to "w9dmk" for e-mail
http://www.qsl.net/w9dmk
http://www.fortunecity.com/meltingpot/albania/784

526. Re: lookking for diagram of 811a or 572b RF power amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <376946B4.5EA6@ixpres.com>
Source record: 69267

Leland C. Scott wrote:
>
> Check out this web site for a 350 watt design:
>
> http://www.svetlana.com/docs/TechBulletins/technoteNO.34.html
>
> 73's
>
> Leland C. Scott
> KC8LDO
>
> BD2RH/Xu wrote in message <7k9h4ucju1@news.cz.js.cn>...
> >Hi!
> > I'm looking for a diagram of power amplifer,
> >500-1KW,use 811A or 572,could someone help me?thanks!
> > Yue Xu
> >
> >

Leland OM,

The above reference you supplied, [http://www.svetlana.com/docs/TechBulletins/technoteNO.34.html] is an excellent example of how one goes about designing and building homebrew gear. For all those many posts I see on here requesting "plans" for building this or that, I recommend they read EA3ALB's thoughtful example of how to go about it. His methodology applies to most any kind of ham homebrewing.

73,
Don, W6JL

527. Re: Improving/Modifying MFJ tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: nobody@crosslink.net
Message-ID: <376942d4.25750210@news.crosslink.net>
Source record: 69268
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Thu, 17 Jun 1999 15:00:23 GMT, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>Didn't Tom, W8JI, once prove that the common mode currents were the
>same on either side of the tuner used in that configuration?

I went to Roy's FTP site and looked at both of the articles. I now
remember reading them at the time they were originally published.

Nonetheless, I am struggling to get a good comprehension of the
meaning of it all, and I hope I am not missing something, but here
goes.

1) I understand from Roy's analysis that the "common mode" impedance
of the balun is the same regardless of the position that it has in the
circuit. That is no surprise. When you move a given impedance to
different locations in a series circuit, it has the same current
flowing through it and it has the same voltage across it - so, no
surprises there.

2) I also see from his analysis that the differential mode signals are
essentially not discussed. The implication being that everything works
the way you would expect it to work, without any surprises, and
without regard to whether the Balun is at the input of the tuner or
after the tuner. Again, no surprises there.

My conclusion is that the Balun works just as well, or just as poorly,
regardless of location. so, where's the problem there? I don't see a
problem.

Now, we come to the question of how well the balun works in its
differential mode. I maintain, as I said in my original post, that the
Balun works FAR BETTER at the input to the tuner than when it is
placed at the output. I say that because of one salient point that no
one has either acknowledged or refuted, and that is that at the tuner
input the balun sees the designed for impedance - namely, 50 + j0
ohms. That fact and that fact alone is the bais for locating the balun
at the input of the tuner.

Not to be a name dropper, but Dick Measures discovered this a long
time ago when he designed his balanced tuner as published in the Feb
1990 QST. In his description of the rationale for designing the tuner
with the balun at the input, he cites the problems inherent in
designing baluns for high impedances, such as may be found at the
output of the tuner. For example, if the tuner is working into a 450
or 600 ohm balanced line, the impedance seen looking into that line

might very well be very high impedances (they might also be very low impedances).

In my opinion, he and Al Roehm are both promoting the balun at the input to the tuner for a variety of reasons, including better performance when operating a given antenna on multiple bands, but they are not emphasizing the fact that the balun that is designed as a 1:1 balun for 50 ohm lines is going to do a better job in the differential mode if it sees a 50 ohm load. Granted, this does nothing one way or the other for its common mode rejection capability. That is a function of other aspects of its characteristics and the characteristics of the antenna system.

For example, if the antenna system reduces to a simple series circuit for common mode with a very small magnitude common mode current at the balun location, then a balun with a low common mode impedance is going to do damn little to impede the common mode current. On the other hand, if the antenna system reduces to a simple series circuit for common mode with a very large magnitude common mode current at the balun location, then a balun with a moderal comm\mon mode impedance can be quite helpful. Either way, however, the differential mode behaviour of the balun is also important from the standpoint of efficiency, impedance transformation and heating. And in the differential mode, it is far better for it to be working into its proper design impedance instead of some off the wall impedance that it would see at the tuner output.
73 de Bob, W9DMK, King George, VA
Change "nobody" to "w9dmk" for e-mail
http://www.qsl.net/w9dmk
http://www.fortunecity.com/meltingpot/albania/784

528. Re: Improving/Modifying MFJ tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <37695B72.1B73DB4E@IEEE.org>
Source record: 69269
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Robert Lay (W9DMK) wrote:
>
> W6RCecilA <Cecil.A.Moore@IEEE.org wrote:
> >Didn't Tom, W8JI, once prove that the common mode currents were the
> >same on either side of the tuner used in that configuration?
>
> I must not be understanding what you mean, Cecil, because common mode
> currents would inherently be common mode up to the point where they
> hit the balun - at which point they should be stopped, or impeded by
> the balun.

Let's see if I can remember the logic. The balun/choke passes
differential currents and opposes common mode currents. The
differential impedance has little to do with the common mode
impedance. So saying that a balun on the input of the tuner
always sees 50 ohms is not the whole story. It may see 50 ohms
as far as differential currents go, but the impedance seen by
the common mode currents is not changed by moving the choke from
the output to the input of the tuner. Sound right? I think Roy,
W7EL, was also involved in that discussion. I gathered from
that discussion that moving the balun from the output of the
tuner to the input of the tuner is a somewhat futile gesture.
--
73, Cecil, W6RCA http://www.bigfoot.com/~w6rca

529. MMIC MAR-1 Where to Buy

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: Eric <user0087@excite.com>
Message-ID: <37694BF7.D4D84D65@excite.com>
Source record: 69270

Does anyone know where to buy the MMIC MAR-1 AMP IC in the united states? I once knew where to get these but I forgot the address and phone number.

530. Re: MMIC MAR-1 Where to Buy

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <376961D0.4DC9@pop.removethistomailme.net>
Source record: 69271

Eric wrote:
>
> Does anyone know where to buy the MMIC MAR-1 AMP IC in the united
> states? I once knew where to get these but I forgot the address and
> phone number.

You can order the MAR amps in small quantities directly from
Mini-Circuits (http://www.minicircuits.com). They have a nifty
designers' kit that includes an assortment of the more useful parts. I
believe http://www.shfmicro.com also sells them (although they're
somewhat less convenient to do business with since they don't take
credit cards).

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam
---

531. Re: Improving/Modifying MFJ tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <376969C6.BBD3F0B5@teleport.com>
Source record: 69272
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Robert Lay (W9DMK) wrote:
>
> I must not be understanding what you mean, Cecil, because common mode
> currents would inherently be common mode up to the point where they
> hit the balun - at which point they should be stopped, or impeded by
> the balun.

Currents can't be "stopped" at a particular point without violating Kirchoff's Current law which states that the sum of all currents entering (or leaving) a node have to sum to zero. The balun inserts a common-mode impedance at a point in the line, which inhibits common-mode current within a sizeable fraction of a wavelength of each side of the balun.

> The fact that the balun is on the South side of the tuner
> rather than the North side of the tuner should not matter. Unless I'm
> missing the meaning of your question. Tom Rauch had little or nothing
> to say on this newsgroup for about 2 years other than a brief
> interchange about 4 months ago. I don't know that I remember the
> particualr discussion to which you are referring.

I don't remember the discussion specifically, but it was some comments Tom made to the effect that putting a balun at a tuner input wouldn't help that made me re-think the issue and ultimately to agree with him.

Roy Lewallen, W7EL

532. Re: Portable Low Power Generation ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: Jonesy <jonz@rmi.nospam.net>
Message-ID: <7kbpo8$g6q$1@news1.rmi.net>
Source record: 69273

Muck <muck@mdbs.com> wrote:
: I'm looking for a low power electrical generator.
: It needs to be mechanical, not solar.

OK, how are you _going_ to power it?

: I'm only
: looking for about 100 watts (12-15 VDC at 5-10 A).

I hope you're not planning on a person-powered generator -- like
a bicycle or the such...

An *old* automotive generator _might_ do the trick if you are
not otherwise employing a battery. It would be VERY inefficient,
though. You have to push 150 watts of mechanical power into it
to get maybe 75 watts out.

If you're employing a storage battery, then an automotive
alternator would be more efficient.

(Sounds like you do Field Day planning like we do -- two weeks
or less before The Day. :-)

Jonesy W3DHJ

--
Marvin L. Jones jonz<AT>rmi.net
Gunnison, Colorado
197 days to go until the Year 2000 -- So what!
563 days to go until the 3rd Millennium of the C.E.

533. Re: Improving/Modifying MFJ tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37696EA4.752D58A0@teleport.com>
Source record: 69274
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Robert Lay (W9DMK) wrote:
> . . .
> Now, we come to the question of how well the balun works in its
> differential mode. I maintain, as I said in my original post, that the
> Balun works FAR BETTER at the input to the tuner than when it is
> placed at the output. I say that because of one salient point that no
> one has either acknowledged or refuted, and that is that at the tuner
> input the balun sees the designed for impedance - namely, 50 + j0
> ohms. That fact and that fact alone is the bais for locating the balun
> at the input of the tuner.

An ideal 1:1 "current" or "choke" balun doesn't have any effect on the differential mode current at all, so doesn't "work" well, poorly, or any other way with the differential currents. In practice, to run both conductors of an open wire or other twinlead line through a balun requires putting them closer together for the distance of the winding. This causes a change in the characteristic impedance for a short distance. This doesn't occur with a 1:1 balun made with coax, which has virtually no effect at all on the differential mode current (which is inside the coax). However, twinlead lines are seldom run flat (1:1 SWR), so the impedance "bump" is generally unimportant. The cost of putting the balun at the input of a tuner is that the tuner case is at an elevated RF potential, so it has to be protected from touching.

An impedance-transforming (e.g., 4:1) balun is a somewhat different animal, because it's a transformer as well as a balun. This requires that an impedance (a winding) has to be connected between the two conductors. Improper design of this kind of balun can indeed have a detrimental effect on the differential mode currents, and it does "work" with differential mode currents in that it transforms them. I haven't seen anyone propose that this kind of balun be placed at the input of the tuner, however.

. . .

Roy Lewallen, W7EL

534. Re: Portable Low Power Generation ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: David Dicarlo <r14793@email.sps.mot.com>
Message-ID: <37696EA7.1DCE86B4@email.sps.mot.com>
Source record: 69275

> How about a junk yard. I am thinking of pairing a old car alternator with a
> old lawn mower engine. Should do the trick.

If you do a Deja search (www.deja.com), you will find postings
regarding that very idea. In the research I did, altenrators are
terribly inefficient and require a battery. Get a real "generator"
and mate it with an engine. It is more efficient and does not
require a working battery.

If you are bent on an alternator, I have one I can sell...
I got it thinking the same thing and the project never reached f
ruition.

--david

535. Re: Portable Low Power Generation ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: "Keith E. Spainhour" <kspainhour@wilkes.net>
Message-ID: <01beb911$9a9fd060$d02c4ace@xx>
Source record: 69276

Hello,
If you can find a C-Band satellite dealer in your are,
the small motors used in the positioner (arm) are
permanent magnet DC motors. They make great
generators. I saw one made by a friend, used a
weed-eater engine on a small stand direct coupled
to the little "generator" worked great! Output depends
on load and engine speed. Used ones of these
are usually free for the asking with most C-Band
dealers, as the hardly ever go bad. In our area,
It is usually the rest of the arm that goes bad.

--
73 DE KT4XW
Keith E. Spainhour
KSpainhour@wilkes.net

Muck <muck@mdbs.com> wrote in article <3767DBE1.6F07D8BA@mdbs.com>...
> I'm looking for a low power electrical generator.
> It needs to be mechanical, not solar. I'm only
> looking for about 100 watts (12-15 VDC at 5-10 A).
>
> I thought about extracting the generator from a
> hand-cranked flashlight or radio, but their power
> output is too low.
>
> The commercial units I've located so far are much
> too big and expensive for this homebrew project.
>
> Can anyone suggest a supplier?
>

536. Re: Improving/Modifying MFJ tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: rwclark@rwclark.seanet.com
Message-ID: <37697138.20184545@news.seanet.com>
Source record: 69277
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Thu, 17 Jun 1999 14:54:44 -0700, Roy Lewallen <w7el@teleport.com>
wrote:

>Robert Lay (W9DMK) wrote:
>> . . .
>> Now, we come to the question of how well the balun works in its
>> differential mode. I maintain, as I said in my original post, that the
>> Balun works FAR BETTER at the input to the tuner than when it is
>> placed at the output. I say that because of one salient point that no
>> one has either acknowledged or refuted, and that is that at the tuner
>> input the balun sees the designed for impedance - namely, 50 + j0
>> ohms. That fact and that fact alone is the bais for locating the balun
>> at the input of the tuner.
>
>An ideal 1:1 "current" or "choke" balun doesn't have any effect on the
>differential mode current at all, so doesn't "work" well, poorly, or any
>other way with the differential currents. In practice, to run both
>conductors of an open wire or other twinlead line through a balun
>requires putting them closer together for the distance of the winding.
>This causes a change in the characteristic impedance for a short
>distance. This doesn't occur with a 1:1 balun made with coax, which has
>virtually no effect at all on the differential mode current (which is
>inside the coax). However, twinlead lines are seldom run flat (1:1 SWR),
>so the impedance "bump" is generally unimportant. The cost of putting
>the balun at the input of a tuner is that the tuner case is at an
>elevated RF potential, so it has to be protected from touching.
>
>An impedance-transforming (e.g., 4:1) balun is a somewhat different
>animal, because it's a transformer as well as a balun. This requires
>that an impedance (a winding) has to be connected between the two
>conductors. Improper design of this kind of balun can indeed have a
>detrimental effect on the differential mode currents, and it does "work"
>with differential mode currents in that it transforms them. I haven't
>seen anyone propose that this kind of balun be placed at the input of
>the tuner, however.
>
>. . .
>
>Roy Lewallen, W7EL

Hi Roy,

There are several problems with your comments above.
> In practice, to run both

>conductors of an open wire or other twinlead line through a balun
>requires putting them closer together for the distance of the winding.
>This causes a change in the characteristic impedance for a short
>distance.
This is certainly a possibility, but not a failure of design. That is, the short run of a transmission line through a Balun should be constructed to meet the requirements of the match. What you suggest above is that what passes through the Balun as winding is an ad-hoc construction performed with no particular insight. This can certainly be true of amateur efforts (and probably of some "professional" construction techniques); but this unfortunate failure to observe the requirements does not negate them. Absolutely every construction illustrated by Sevick pays close attention to this matter. Some of his models employ twin-lead - well illustrated on the back cover of his book. For that particular illustrated model of a 1:9 Balun, he uses 300 Ohm line to match 67 Ohms to 600 Ohms. As 300 Ohm line is inappropriate to the match, it is well to note in his commentary the discussion of how the proximity of the line to itself lowers the transmission line Z to 200 Ohms. This is in fact a boon to the design as the requirement calls for this same 200 Ohm line (SQRT(67 * 600)). Thus employing existing twinlead (ad-hoc design) can present the required change in characteristic impedance needed for the Balun operation of matching two Z's (but Sevick performed this by design - not by luck). Far from presenting an impedance bump, it is serving by design in the necessary transition phase of going from 67 Ohms to 600 Ohms. For the case of a 1:9 Balun designed to match 50 Ohms to 450 Ohms, Sevick builds his own twin lead to suit the occasion. For the lengths of transmission line here, this is not a herculean task.

Again with:
>An impedance-transforming (e.g., 4:1) balun is a somewhat different
>animal, because it's a transformer as well as a balun. This requires
>that an impedance (a winding) has to be connected between the two
>conductors.
This is a very troubling statement in that it describes a condition rather haphazardly (it is true for a DC analysis, but is far different in an AC analysis). It is also a non-sequitar (that is, there is nothing that follows from this statement). To say that something connected across the lines:
>Improper design of this kind of balun can indeed have a
>detrimental effect on the differential mode currents,
is much like the old saw of the mail-lotteries "You may already be a winner!" Certainly if an amateur/professional fails to consider the requirements for Balun construction, it may well upset differential mode currents. Again, the fact that many fail to observe these requirements do not negate them.

From the AC analysis, if one is to allow this isolation (and it is the point of Balun construction and application), the combination of reactances and resistances overwhelm this supposed perturbation of differential currents (Cecil illustrated this very clearly several

postings back). In such an analysis (and literally so in Cecil's design), there are no windings across any lines for the Guanella designs. The Ruthroff model on the other hand does present some problematic connections (which I believe even Ruthroff has admitted were unnecessary).

The distinctions between the two models, Guanella and Ruthroff, are not simply those of style, but rather engineering. The Guanella model is more robust and certainly easier to examine/analyze. What is more, I get the distinct impression you had a Ruthroff design in front of you when you penned that all Balun transformers "require"
>that an impedance (a winding) has to be connected between the two
>conductors.
Needless to say, I have little pity for the failures observed in implementations of Ruthroff designs. Pick a poor example and you are sure to find poor performance. However, even a Ruthroff model will perform, somewhere - sometimes.

73's
Richard Clark, KB7QHC

537. Re: Improving/Modifying MFJ tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37699F5B.2B27933D@teleport.com>
Source record: 69278
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Richard Clark wrote:
> Hi Roy,
>
> There are several problems with your comments above.
> > In practice, to run both
> >conductors of an open wire or other twinlead line through a balun
> >requires putting them closer together for the distance of the winding.
> >This causes a change in the characteristic impedance for a short
> >distance.
> This is certainly a possibility, but not a failure of design. That
> is, the short run of a transmission line through a Balun should be
> constructed to meet the requirements of the match. What you suggest
> above is that what passes through the Balun as winding is an ad-hoc
> construction performed with no particular insight. This can certainly
> be true of amateur efforts (and probably of some "professional"
> construction techniques); but this unfortunate failure to observe the
> requirements does not negate them. Absolutely every construction
> illustrated by Sevick pays close attention to this matter. Some of
> his models employ twin-lead - well illustrated on the back cover of
> his book. For that particular illustrated model of a 1:9 Balun, he
> uses 300 Ohm line to match 67 Ohms to 600 Ohms. As 300 Ohm line is
> inappropriate to the match, it is well to note in his commentary the
> discussion of how the proximity of the line to itself lowers the
> transmission line Z to 200 Ohms. This is in fact a boon to the design
> as the requirement calls for this same 200 Ohm line (SQRT(67 * 600)).
> Thus employing existing twinlead (ad-hoc design) can present the
> required change in characteristic impedance needed for the Balun
> operation of matching two Z's (but Sevick performed this by design -
> not by luck). Far from presenting an impedance bump, it is serving by
> design in the necessary transition phase of going from 67 Ohms to 600
> Ohms. For the case of a 1:9 Balun designed to match 50 Ohms to 450
> Ohms, Sevick builds his own twin lead to suit the occasion. For the
> lengths of transmission line here, this is not a herculean task.

If you place a balun between two dissimilar impedances, and if you don't have any means of adjusting the match, then a winding with impedance equal to the square root of the product of the impedances will give the maximum bandwidth. (The improvement becomes greater as the winding length becomes a greater fraction of a wavelength.) As far as I know, this is the only benefit of using that particular characterisitic impedance for the balun winding. A particular winding impedance would be important only if you have a matched load on many bands and have no way to adjust for a slight mismatch, or perhaps are using a balun at a high

enough frequency that the winding length becomes an appreciable part of a wavelength. There's certainly no harm in making your own transmission line of the "correct" impedance. But it frequently won't make any noticeable difference, and won't impact either the efficiency or common-mode performance. Or is there some other reason this might be important which I'm not aware of?

> Again with:
> >An impedance-transforming (e.g., 4:1) balun is a somewhat different
> >animal, because it's a transformer as well as a balun. This requires
> >that an impedance (a winding) has to be connected between the two
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> connected across the lines:
> >Improper design of this kind of balun can indeed have a
> >detrimental effect on the differential mode currents,
> is much like the old saw of the mail-lotteries "You may already be a
> winner!" Certainly if an amateur/professional fails to consider the
> requirements for Balun construction, it may well upset differential
> mode currents. Again, the fact that many fail to observe these
> requirements do not negate them.
>
> From the AC analysis, if one is to allow this isolation (and it is the
> point of Balun construction and application), the combination of
> reactances and resistances overwhelm this supposed perturbation of
> differential currents (Cecil illustrated this very clearly several
> postings back). In such an analysis (and literally so in Cecil's
> design), there are no windings across any lines for the Guanella
> designs. The Ruthroff model on the other hand does present some
> problematic connections (which I believe even Ruthroff has admitted
> were unnecessary).
>
> The distinctions between the two models, Guanella and Ruthroff, are
> not simply those of style, but rather engineering. The Guanella model
> is more robust and certainly easier to examine/analyze. What is more,
> I get the distinct impression you had a Ruthroff design in front of
> you when you penned that all Balun transformers "require"
> >that an impedance (a winding) has to be connected between the two
> >conductors.
> Needless to say, I have little pity for the failures observed in
> implementations of Ruthroff designs. Pick a poor example and you are
> sure to find poor performance. However, even a Ruthroff model will
> perform, somewhere - sometimes.
>
> 73's
> Richard Clark, KB7QHC

I'm sorry but I didn't understand your comment about AC vs DC analysis. You could of course capacitively couple a winding, resulting in no DC connection between the conductors, but this isn't typically done. And of course we always strive to make the AC impedance to be so high as to be negligible, but people don't always succeed at this -- which is the point I was trying to make.

I wasn't limiting my statement to the "Ruthroff" or "voltage" balun, or the "Guanella" or "current" balun. It's true for both. I have both the first and second editions of Sevick's book. Could you please point to a diagram or page number in either one which shows an impedance-tranforming balun, of any type, which doesn't have a connection between the two transmission line conductors?

In any impedance-transforming balun, careful attention has to be paid to the impedance of the winding(s) which appear between the conductors. In a well-designed transformer, this impedance is high enough relative to the differential impedance seen across the line to make it negligible. However, there are many baluns being sold and in use for which this isn't true, particularly on the lower frequency bands. My point was that a well-designed balun shouldn't have any appreciable effect on the differential-mode currents, but the extra factor of winding impedance has to be considered in order to make this true of an impedance-transforming balun.

Roy Lewallen, W7EL

538. Re: Estimating breakdown voltage of air-variable caps.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: "Barry L. Ornitz" <ornitz@dpnet.net>
Message-ID: <w1ha3.3692$gK.84599@typ22b.nn.bcandid.com>
Source record: 69279

In a post yesterday I presented a table of breakdown voltages as a function of rotor to stator spacing for air variable capacitors. In a note to Thomas C. Sefranek, WA1RHP, I realized that a little more information would have been helpful.

The added point is that the capacitor must withstand the combined AC and DC voltages across it. If you are using a choke-fed pi-network output stage with a blocking capacitor, the input variable capacitor sees only the AC voltage on the tube plate. But if you have a directly coupled tuned circuit (like the older link coupling), you will have the DC voltage plus the AC voltage. And if the stage is amplitude modulated, the DC voltage can be as high as twice the power supply voltage.

What this all boils down to is that the minimum capacitor voltage rating must be calculated for a particular circuit. Then you should apply a safety factor to this. The final peak voltage should then be used to select the capacitor spacing.

73, Barry L. Ornitz WA4VZQ ornitz@dpnet.net

539. Re: Improving/Modifying MFJ tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: "George T. Baker" <w5yr@swbell.net>
Message-ID: <3769A063.3D2BC92C@swbell.net>
Source record: 69280
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

I think that Bob has been sneaking around my shack!

The approach he suggested of using a conventional unbalanced T tuner with ladder line is exactly what I am doing in feeding a 40-meter low horizontal loop. I use a W2DU balun between the transmitter and the tuner (an old Drake MN-4) input in the coax line. Surprisingly little trouble tuning up with very little 'body capacitance' effect noticed, at least on 40. The setup also works well up to 10 meters.

72/73, George AMA 98452 R/C since 1964
Amateur Radio W5YR, in the 53rd year and it just keeps getting better!
AutoPOWER Systems, Fairview, TX (30 mi NE Dallas) Collin County
QRP-L QRP-ARCI FISTS NORCAL ZOMBIE ARS 10-X 33.2 N 96.6 W EM13RE

"Robert Lay (W9DMK)" wrote:
>
> On Wed, 16 Jun 1999 17:56:44 -0700, Will White <wcw@asu.uswest.net>
> wrote:
>
> >OK, I am learning a bit from this thread, and archiving the posts for more
> >thorough digestion later as I am intellectually able. For the moment, can
> >Cecil, Richard, or other interested parties recommend what to do about the
> >rinky-doink balun in my tuner? I want to use the tuner with a 132' horizontal
> >loop for 40-10 (and some low power work on 80CW) and want the best setup
> >(without buying any new major pieces of gear) given what I have on hand. How
> >would I use one of those W2DU ferrite bead choke-baluns since I have no coax
> >in my antenna system? Or is there a version to use with window-line and in
> >place of the MFJ little balun-oreo?
>
> Dear Will,
>
> Here's an obvious solution that requires only a small amount of
> re-wiring and re-winding. It was written up by A Roehm, W2OBJ, but I
> don't know where it was publilshed. I'm sure he would make a copy
> available to you upon request.
>
> He uses a tuner, like yours, but lets it float (don't ground it) and
> has the ladder line going across the terminals for random or long wire
> and the chassis terminal. In other words, the T-match tuner is used as
> a balanced tuner even though it is designed as an unbalanced tuner.
>
> Having done that, the Balun is now placed at the coax line from the
> tuner to the transmitter. There are different ways to implement that -
> one is to use the W2DU balun, and another is to take the 4:1 balun out

> of the T-match circuit, re-wind it as a 1:1 current balun (voltage
> balun is acceptable but current preferred), and re-install it in a
> separate box between the coax to the transmitter and the SO-239 on the
> back panel of the tuner.
>
> It's going to be a little tricky with that latter method to keep the
> tuner chassis floating, and that's why the W2DUU choke balun is the
> preferred way to do it.
>
> Otherwise, you have to put a real short pigtail coax with a PL-259 on
> it to mate with the back panel of the tuner, and the other end of that
> pigtail goes into the little black box with the balun in it, to
> connect to the balanced output leads of the balun. I don't like that -
> it's too much of a kludge, but schematically, it looks OK.
>
> The reason that I do not like these other suggestions which place the
> balun between the T-match tuner and the ladder line is that it
> requires the balun to work into a wide range of impedances, which is
> the very reason why baluns don't work as you expect. If you use the
> balun at the transmitter side of the tuner, you have adusted the tuner
> for a 50 ohm impedance presented to the balun. That means that the
> balun ALWAYS OPERATES AT ITS DESIGN VALUE.
>
> In fact, if the balun is a 4:1 balun, and your tuner can transform the
> impedance seen lookin into the ladder line into a 200 ohm impedance at
> its input terminals, then you could stick with the 4:1 balun rather
> than re-winding it.
>
> Last but not least, DO NOT USE THE BUILT IN SWR METER, if you are
> going to use the tuner as a floating tuner. It will no longer give you
> meaningful indications. You MUST put a conventional SWR indicator into
> the coax at the transmitter output. If your transmitter has a built-in
> SWR meter, that's fine - use that.
> 73 de Bob, W9DMK, King George, VA
> Change "nobody" to "w9dmk" for e-mail
> http://www.qsl.net/w9dmk
> http://www.fortunecity.com/meltingpot/albania/784

540. Re: Improving/Modifying MFJ tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-17 00:00:00 UTC
From: "George T. Baker" <w5yr@swbell.net>
Message-ID: <3769A09A.A37B7E87@swbell.net>
Source record: 69281
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Believe it was Roy, Cecil. And they are.

72/73, George AMA 98452 R/C since 1964
Amateur Radio W5YR, in the 53rd year and it just keeps getting better!
AutoPOWER Systems, Fairview, TX (30 mi NE Dallas) Collin County
QRP-L QRP-ARCI FISTS NORCAL ZOMBIE ARS 10-X 33.2 N 96.6 W EM13RE

W6RCecilA wrote:
>
> Robert Lay (W9DMK) wrote:
> > If you use the
> > balun at the transmitter side of the tuner, you have adusted the tuner
> > for a 50 ohm impedance presented to the balun. That means that the
> > balun ALWAYS OPERATES AT ITS DESIGN VALUE.
>
> Didn't Tom, W8JI, once prove that the common mode currents were the
> same on either side of the tuner used in that configuration?
> --
> 73, Cecil, W6RCA http://www.bigfoot.com/~w6rca

541. Re: Improving/Modifying MFJ tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-18 00:00:00 UTC
From: n7ws@arrl.net
Message-ID: <37699590.351531133@news.azstarnet.com>
Source record: 69185
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Thu, 17 Jun 1999 10:52:23 -0700, Roy Lewallen
<w7el@teleport.com> wrote:

>I reviewed that paper for Al -- it's "Some Additional Aspects of the
>Balun Problem", in the _ARRL Antenna Compendium_, Vol. 2, and at the
>time agreed that it was a good idea. Since then, I've become convinced
>that putting the balun ahead of the tuner doesn't improve its operation
>at all. I wrote up why I reached this conclusion and put it on my ftp
>space as ibalun.txt, and a shortened version as ibalbrf.txt. You can
>download it from ftp.teleport.com/pub/vendors/w7el.
>
>Roy Lewallen, W7EL
[snip]

Kevin, W9CF, wrote a wonderful paper on this
topic. It ican be found at:
<http://fermi.la.asu.edu/w9cf/articles/balun/index.html>.

Wes N7WS

542. Guide to the rec.radio Newsgroups

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-18 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <7kcbub$2g7@news.Hawaii.Edu>
Source record: 69186
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Archive-name: radio/personal-intro

This message describes the rec.radio.amateur.*, rec.radio.cb, rec.radio.info, and rec.radio.swap newsgroups, as well as their Internet mailing list counterparts and complements. It is intended to serve as a guide for the new reader on what to find where. Questions and comments may be directed to Jeffrey Herman, KH6O, jeffreyh@hawaii.edu, or Paul Schleck, K3FU, pschleck@novia.net.

This message was last changed on 14 March, 1998.

History
=======

Way back when, before there was a Usenet, the Internet hosted a mailing list for hams, called (appropriately enough) INFO-HAMS. Ham radio discussions were held on the mailing list, and sent to the mailboxes of those who had signed up for it. When the Usenet software was created, and net news as we now know it was developed, a newsgroup was created for hams: net.ham-radio. The mailing list and the newsgroup were gatewayed together, eventually.

Over the years, as the net grew, the volume of discussion became progressively higher. First one by one, and then as part of two reorganizations, what was once one group became many. In the process, developments elsewhere on the net were reflected in the groups as they were created, most notably the change to place all of the ham radio groups in one hierarchy.

The collection of newsgroups continues to grow as more people join the net, and as more topics of discussion gain volume, I expect to see more groups be created as well. This follows what is happening on the rest of the net.

Nearly all of the radio newsgroups have corresponding mailing lists, the notable exception being rec.radio.swap. There are also a few mailing lists that don't have newsgroups.

The Current Groups
==================

It's important to post messages to the group that's appropriate for them, and not to the groups that aren't. The whole idea of having different newsgroups is so that folks who aren't interested in, say, homebrewing, don't have to wade through messages about homebrewing on the way to read about Field Day. Posting appropriately is just good etiquette.

The rec.radio.amateur.misc group is the catchall. It is what rec.ham-radio was renamed to during the first major reorganization. Any message that's not more appropriate in one of the other groups belongs here, from contesting to DX to ragchewing on VHF to information on becoming a ham.

The group rec.radio.amateur.digital.misc is for discussions related to (surprise!) digital amateur radio. This doesn't have to be the common two-meter AX.25 variety of packet radio, either; some of the most knowledgeable folks in radio digital communications can be found here, and anything in the general area is welcome. The name was changed to emphasize this, and to encourage discussion not only of other text-based digital modes, such as AMTOR, RTTY, and Clover, but things like digital voice and video as well. The former group, rec.radio.amateur.packet, was removed on September 21st, 1993. It is obsolete, and you should use .digital.misc instead (or the appropriate new mailing list, mentioned below). The group has .misc as part of the name to allow further specialization if the users wish it, such as .digital.tcp-ip.

The swap group is rec.radio.swap. This recognizes a fact that became evident shortly after the original group was formed: Hams don't just swap ham radio gear, and other folks besides hams swap ham equipment. If you have radio equipment, or test gear, or computer stuff that hams would be interested in, here's the place. Equipment wanted postings belong here too. Discussions about the equipment generally don't; if you wish to discuss a particular posting with the buyer, email is a much better way to do it, and the other groups, especially .equipment and .homebrew, are the place for public discussions. There is now a regular posting with information on how to go about buying and selling items in rec.radio.swap; please refer to it before you post there. To answer a frequently asked question: No, there is no mailing list that goes along with this group. If you can't read Usenet news directly, you're out of luck.

The group rec.radio.amateur.policy was created as a place for all the discussions that seem to drag on interminably about the many rules, regulations, legalities, and policies that surround amateur radio, both existing and proposed. Recent changes to the Amateur Radio Rules (FCC Part 97) have finally laid to rest the Great Usenet Pizza Autopatch Debate - it's now legal to order a pizza on the autopatch, if you're not in the pizza business - as well as complaints about now-preempted local scanner laws hostile to amateurs, but plenty of discussion about what a bunch of rotten no-goodniks the local frequency coordinating body is, as well as the neverending no-code debate, may still be found here.

The group rec.radio.cb is the place for all discussion about the Citizens' Band radio service. Such discussions have been very inflammatory in rec.ham-radio in the past; please do not cross-post to both rec.radio.cb and rec.radio.amateur.* unless the topic is genuinely of interest to both hams and CBers - and very few topics are.

The rec.radio.info group is just what its name implies: it's the place where informational messages from across rec.radio.* may be found, regardless of where else they're posted. As of this writing, information posted to the group includes Cary Oler's daily solar progagation bulletins, ARRL

bulletins, the Frequently Asked Questions files for the various groups, and radio modification instructions. This group is moderated, so you cannot post to it directly; if you try, even if your message is crossposted to one of the other groups, your message will be mailed to the moderator, who is currently David Dodell, WB7TPY. The email address for submissions to the group is rec.radio.info-moderator@primenet.com. Inquires and other adminis-trivia should be directed to rec.radio.info-request@primenet.com. For more information about rec.radio.info, consult the introduction and posting guidelines that are regularly posted to that newsgroup.

The groups r.r.amateur.antenna, .boatanchors, .dx, .equipment, .homebrew, and .space are for more specialized areas of ham radio: discussions about antennas, the older tube based amateur, military, and commercial gear, commercially-made equipment, homebrewing, and amateur radio space operations. The .equipment group is not the place for buying or selling equipment; that's what rec.radio.swap is for. Similarly, the .space group is specifically about amateur radio in space, such as the OSCAR program and SAREX, the Shuttle Amateur Radio EXperiment; other groups cover other aspects of satellites and space. Homebrewing isn't about making your own alcoholic beverages at home (that's rec.crafts.brewing), but rather construction of radio and electronic equipment by the amateur experimenter. The .dx group is devoted to long distance amateur communications. Each of these subgroups has its own charter and FAQ; please refer to the archives to find these documents.

Except for rec.radio.swap and rec.radio.cb, all of these newsgroups are available by Internet electronic mail in digest format; send a mail message containing "help" on a line by itself to listserv@ucsd.edu for instructions on how to use the mail server.

All of the groups can be posted to by electronic mail, though, by using a gateway at the University of Texas at Austin. To post a message this way, change the name of the group you wish to post to by replacing all of the '.'s with '-'s - for example, rec.radio.swap becomes rec-radio-swap - and send to that name@cs.utexas.edu (rec-radio-swap@cs.utexas.edu, for example). You may crosspost by including multiple addresses as Cc: entries (but see below). This gateway's continued availability is at the pleasure of the admins at UT-Austin, and is subject to going away at any time - and especially if forgeries and other net.abuses become a problem. You have been warned.

Mailing Lists

In addition to the mailing lists that mirror the Usenet newsgroups, there also are a few that stand alone. These cover specific areas of ham radio, and discussion is focused on just those areas. PLEASE BE SURE TO SAVE THE WELCOME MESSAGE YOU RECEIVE AFTER SUBSCRIBING -- IT WILL CONTAIN IMPORTANT INFO REGARDING UNSUBSCRIBING!

The cq-contest mailing list is for discussions of contesting in ham radio. To join, send an email to cq-contesting-request@contesting.com.

The DX mailing list covers the finer points of DXing. This one is also joined by mailing "subscribe" on a line by itself, this time to dx-request@unbc.edu.

There's also a VHF mailing list, for VHF operators of the weak signal persuasion. You can join this one be sending "subscribe vhf" on a line by itself to vhf-request@w6yx.stanford.edu.

The QRP-L list is devoted to building and operating gear at low-power outputs. To subscribe, send an email to listproc@lehigh.edu and only write: subscribe qrp-l Your Name.

The TopBand e-list is devoted to all areas of operation on 160m. To subscribe, send an email to majordomo@contesting.com and only write: subscribe topband and follow the instructions you'll be sent.
This site, contesting.com, also hosts a couple dozen other ham-related e-lists. Use the above address, and only write: lists to get the entire index.

The Boatanchors e-list is devoted to the older tube-based ham, military, and commercial communications gear. To subscribe, send an email to: listserv@listserv.tempe.gov and only write: subscribe boatanchors

For homebuilding transmitters and receivers using tube technology, there is the Glowbugs e-list; send an email to: majordomo@piobaire.mines.uidaho.edu and only write: subscribe glowbugs <your@address.here>

The VHF DX discussion list can be accessed by sending an email to: majordomo@blacksheep.org and only writing: subscribe VHF-DX-discuss.

We now have a list devoted to amateur radio history. To subscribe, send an email to: ham-radio-history-subscribe@egroups.com - leave the body of the message blank.

Qth.net hosts over 100 ham-related e-lists, including lists devoted to each state, manufacturer, mode, band - too many to state here. Send an email to majordomo@qth.net and only write: lists to get the complete index.

For one of the most complete indexes of email lists, see the excellent web site http://pw2.netcom.com/~ac6v/pageae.html

Please do NOT send subscription requests to the mailing lists themselves; that doesn't work very often, and is very annoying to those on the list. Also, please keep your electronic mail address current with any mailing lists you subscribe to, as dealing with returned email is a nuisance for the person maintaining the mailing list.

A Few Words on Crossposting
==========

Please do not crosspost messages to two or more groups unless there is genuine interest in both groups in the topic being discussed, and when you do, please include a header line of the form "Followup-To: group.name" in your article's

headers (before the first blank line). This will cause followups to your article to go to the group listed in the Followup-To: line. If you wish to have replies to go to you by email, rather than be posted, use the word "poster" instead of the name of a group. Such a line appears in the headers of this article.

One of the few examples of productive cross-posting is with the rec.radio.info newsgroup. To provide a filtered presentation of information articles, while still maintaining visibility in their home newsgroups, the moderator strongly encourages cross-posting. All information articles should be submitted to the rec.radio.info moderator so that he may simultaneously cross-post your information to the appropriate newsgroups. Most newsreaders will only present the article once, and network bandwidth is conserved since only one article is propagated. If you make regular informational postings, and have made arrangements with the moderator to post directly to the group, please cross-post as appropriate.

--
Jeffrey Herman, KH6O, and your friendly rec.radio.amateur working-group
jeffreyh@hawaii.edu
--
Fingerprint Classification Services: A personal copy of your inked finger impressions utilizing the Henry Classification Formula.

543. wanted plans for all mode rcvr 50 -500 Mhz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-18 00:00:00 UTC
From: dr.dongle@juno.com
Message-ID: <7kcfm9$6lm$1@nnrp1.deja.com>
Source record: 69187

I am looking for plans for an all mode rcvr covering 50-500 Mhz
any help is apprecated.
dr.d

--
Kiss Technologys
The more complicated the plumbing
the easer it is to stop up the pipes M. Scott

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

544. Re: JFET source

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-18 00:00:00 UTC
From: bw201@torfree.net
Message-ID: <FDI7Hx.EE2.0.sheppard@torfree.net>
Source record: 69188

StereoDoc1 (stereodoc1@aol.com) wrote:
: Need a source for the following transistors

: 2SK115
: 2SJ405

You might try
http://www.bdent.com

as they specialize in Asian semiconductors.

545. Re: Portable Low Power Generation ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-18 00:00:00 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <7kcnkm$mu@nnrp2.farm.idt.net>
Source record: 69189

Jonesy wrote in message <7kbpo8$g6q$1@news1.rmi.net>...

>An *old* automotive generator _might_ do the trick if you are
>not otherwise employing a battery. It would be VERY inefficient,
>though. You have to push 150 watts of mechanical power into it
>to get maybe 75 watts out.

That doesn't sound right, 50 percent efficient! Do you have any real test data that you can supply or a source on the web?

Leland C. Scott
KC8LDO

546. Re: FS Ft-101

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-18 00:00:00 UTC
From: "David P (D)" <pickards@SPAMBLOCKzen.co.uk>
Message-ID: <Wbma3.33$N63.363@newreader.ukcore.bt.net>
Source record: 69190
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.swap

do you speak english...
if so, please rewrite this ad!!!

David
JOHN WARD wrote in message <7kag63$rh0$1@autumn.news.rcn.net>...
>For sale ft-101 operatable a device attach to it about 8 out of 10 make me
a
>reasonable offer.
>
>

547. Re: Portable Low Power Generation ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-18 00:00:00 UTC
From: Robert Lyons <boblyons@umich.edu>
Message-ID: <376A3C10.295A9A9E@umich.edu>
Source record: 69191

David Dicarlo wrote:
>
> If you do a Deja search (www.deja.com), you will find postings
> regarding that very idea. In the research I did, altenrators are
> terribly inefficient and require a battery. Get a real "generator"
> and mate it with an engine. It is more efficient and does not
> require a working battery.

Could someone please explain the difference between an automotive
"alternator" and an automotive "generator"? To me they seem to do
the same job - generate power to charge the battery.

Bob, KI8AB

548. 200ua or better meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-18 00:00:00 UTC
From: Len Schaier <lschaier@avotec.com>
Message-ID: <376A3DC4.67D13210@avotec.com>
Source record: 69192

Need 2 meters, each 200 micramps F.S. 50 micramp movements can be used as well. The meters will be mounted in a panel opening of 2.2 inches. The older Lafayette or Radio Shack 50 microampere meters are okl. I'll use a small piece of panel material to compensate for the smaller hole requirments of those meters.

Thanks in advance.

Len

549. Re: Online Diode and Transistor Characteristics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-18 00:00:00 UTC
From: Nicholas Brown <nbrownNOT@gulfaccess.com>
Message-ID: <376A7668.E51C7A5D@gulfaccess.com>
Source record: 69193

Go to:
http://www.questlink.com
You have to register to use the site, but it's worth it. There are data sheets for 2n2222 and such from several manufacturers.
-Nick

Jim Hill wrote:

> Are there any sites that provide common diode and transistor
> characteristics (1N914, 2N2222)?
> thanks, Jim, jshillw6ivw@earthlink.net
> Delete the X before using my e-mail address.
> The X was added to stop spam.

550. Re: Improving/Modifying MFJ tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-18 00:00:00 UTC
From: rwclark@rwclark.seanet.com
Message-ID: <376a759a.38034649@news.seanet.com>
Source record: 69194
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Thu, 17 Jun 1999 18:22:35 -0700, Roy Lewallen <w7el@teleport.com>
wrote:

snip
>There's certainly no harm in making your own transmission
>line of the "correct" impedance. But it frequently won't make any
>noticeable difference, and won't impact either the efficiency or
>common-mode performance.
It won't hurt, but it can't help? A most unusual condition where
change to an element in the path of power is benign.

This seems to pivot on the meaning of:
>noticeable difference
for which there is world of interpretative meaning. In the field of
advertising cheap Baluns, this expression is a boon to sales.

To quote Sevick (Sec 3.2):
"...the highest frequency response occurs when the characteristic
impedance, Z0, of the transmission line is the geometric mean of the
input and output resistances."
Given the ample illustrations that attend his work illustrating
considerable variation in high frequency characteristics, this is no
small achievement. In fact it would challenge any meaning of:
>noticeable difference

It seems that Sevick goes to considerable pain to develop the proper
transmission line for winding Baluns. He includes considerable detail
to describe his work with twisted pair, striplines, and coax
transmission lines in a wide variety of Impedances. He discusses the
intimate details of construction for every element and the trade-off
of one method employed over another. It seems that the sobriquet of
>noticeable difference
never entered his mind given the wealth of material devoted to this
single aspect alone. I can count at least 45 tables and charts that
show the frequency response of at least as many different Balun
designs. By far and a away, his concern is found with efficiency as
it relates to this transmission line equally with the coiled reactance
of that line. In fact, he builds the 1:4 so many times it is hardly
due to a fetish; rather, it is his stated agenda to examine the
implications of all variables as they impact efficiency. In his
examination of High Impedance applications (Sec 5.2):
"Ruthroff and Guanella stated that for the maximum high-frequency
response for a 1:4 transformer, the characteristic impedance of the
coiled transmission line should be one-half the output resistance and

twice the generator resistance (figs 1-2 and 1-3)....
"At the low frequency end, design considerations focus on the
reactance of the coiled transmission line as compared to the impedance
level (and hence, the characteristic impedance of the windings)."

The second paragraph of this quote covers your area of concern, but
it doesn't dismiss the first paragraph in terms of a barely
>noticeable difference
Sevick doesn't dismiss half the equation simply because a Balun
designed with a mediocre transmission line might work at a low
frequency. If that is the standard to judge a Balun by, it remains
only half a standard.

snip
>
>In any impedance-transforming balun, careful attention has to be paid to
>the impedance of the winding(s) which appear between the conductors. In
>a well-designed transformer, this impedance is high enough relative to
>the differential impedance seen across the line to make it negligible.
>However, there are many baluns being sold and in use for which this
>isn't true, particularly on the lower frequency bands. My point was that
>a well-designed balun shouldn't have any appreciable effect on the
>differential-mode currents, but the extra factor of winding impedance
>has to be considered in order to make this true of an
>impedance-transforming balun.
>
>Roy Lewallen, W7EL

Hi Roy,

My point was that there are many Baluns sold for which there are no
supportable guarantees of performance (in this I think we agree). In
fact the marketplace takes these items for such a commonplace that
issues of performance and efficiency are dismissed too easily.

73's
Richard Clark, KB7QHC

551. ** FA: NLS MS-215 Mini OSCILLOSCOPE (It's SMALL!)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-18 00:00:00 UTC
From: ken@seemessage.com
Message-ID: <ken-1806991325000001@user-2ive85p.dialup.mindspring.com>
Source record: 69195
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hi...

I'm selling a Non-Linear Systems MS-215 Miniscope Oscilloscope
on eBay. If you want to check it out (see a picture, view
the specificiations, etc), please follow this link...

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=118087588

This is one VERY small oscilloscope...you could fit it in a
briefcase if you wanted. Battery-operated, or external
power supply (included in the package.)

Thanks for checking it out...

CUL 73 de Ken N1NEG

PS Let me know if I can answer any questions about the unit for you.

--
My real email address is almost "ken@wino!!!!!grad.com".
Just delete the exclamation points, and it's for real.
Sorry about this complication, just trying to avoid spam mail.

552. Re: Portable Low Power Generation ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-18 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <376A9781.2AEE@ixpres.com>
Source record: 69196

Robert Lyons wrote:
>
> David Dicarlo wrote:
> >
> > If you do a Deja search (www.deja.com), you will find postings
> > regarding that very idea. In the research I did, altenrators are
> > terribly inefficient and require a battery. Get a real "generator"
> > and mate it with an engine. It is more efficient and does not
> > require a working battery.
>
> Could someone please explain the difference between an automotive
> "alternator" and an automotive "generator"? To me they seem to do
> the same job - generate power to charge the battery.
>
> Bob, KI8AB

Bob OM,

A generator and an alternator are fundamentally different devices.
Look in your local library for automotive technical info, and a little
study will answer your questions. Or, taking a stab at it:
A generator's output current capability is a function of engine speed,
being lower with lower speeds, because the EMF generated by the rotating
armature supplies the current used to provide the magnetic field, so the
field increases as speed increases.
An alternator, on the other hand is, as the name suggests, an AC
GENERATOR. The output is changed to pulsating DC by a 3-phase rectifier
made up of silicon diodes. Its output current can be maintained at
fairly high levels, even at idle speed, because mostly all that changes
with speed is the frequency of the generated voltage. An alternator
requires a source of initial current (ie, from the battery) of
sufficient magnitude to provide enough field current to allow generation
of enough voltage to overcome the diode forward voltage, and thereby
start to charge an attached battery.
Yes, they both charge batteries. But a generator's small amount of
initial magnetization (remanance) in the field cores is enough to allow
the generator to start generating a voltage, without any externally
applied source of current. Thus, it can 'start from zero', and charge a
completely discharged battery, which an alternator cannot do. In an
application in which it is likely that a battery could be completely
discharged, one would prefer a generator to an alternator.
An alternator is more reliable and efficient, due mostly to the lack
of having a commutator and brushes that must pass the entire output
current. An alternator just has two slip rings which need pass only a
small field current (a few amps) to the rotating field.

Hope this helps.

73,
Don, W6JL

553. Linear amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-18 00:00:00 UTC
From: Eric Aube <e_aube@hotmail.com>
Message-ID: <376A966C.F46AF5C@hotmail.com>
Source record: 69197
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

I'm looking for plans to make a linear amp. If there is somebody that knows where I can find those, please tell me.

Thanks
Eric

554. Re: Linear amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-18 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <376A9BAA.2ABD@ixpres.com>
Source record: 69198
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Eric Aube wrote:
>
> I'm looking for plans to make a linear amp. If there is somebody that
> knows where I can find those, please tell me.
>
> Thanks
> Eric

Eric OM (Callsign??),

Here we go, "PLANS" again.
You didn't state what kind of amplifier: HF, VHF, UHF? (Illegal CB
perhaps? Just guessing here...sorry if I am wrong)

See any ARRL or RSGB handbook, for starters.

73,
Don, W6JL

555. Re: Improving/Modifying MFJ tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-18 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <376AAA1F.6DCE3FD9@teleport.com>
Source record: 69199
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Richard Clark wrote:
>. . .
> Hi Roy,
>
> My point was that there are many Baluns sold for which there are no
> supportable guarantees of performance (in this I think we agree). In
> fact the marketplace takes these items for such a commonplace that
> issues of performance and efficiency are dismissed too easily.
>
> 73's
> Richard Clark, KB7QHC

I absoultely agree. However, I've read many, many articles and papers on baluns in which the wrong criteria were used in assessing the performance of a balun. Some contain huge amounts of data, nice graphs, and the like, all of factors which have nothing at all to do with a balun's ability to achieve equal currents in the two conductors. (I can make a really efficient, broadband balun very easily if it doesn't have to actually work, that is, if it doesn't have to effect equal and opposite currents in the two conductors.) So one must intelligently choose the criteria for performance to reach a valid conclusion about usability.

Roy Lewallen, W7EL

556. Re: Estimating breakdown voltage of air-variable caps.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-18 00:00:00 UTC
From: "Al, N2NKB"
Message-ID: <7kefigbsc1@bgtnsc03.worldnet.att.net>
Source record: 69200

Check out the "Reference Book for Radio Engineer" to see that
altitude and temperature play a large role in breakdown voltage
thresholds. I am not familiar with breakdown voltage changing with
frequency, but certainly there is voltage multiplication occurring as
impedance's increase. For example, a 50 ohm filter might have
resonator voltage multiplication of 30 times in the middle resonators
at band edge. I suppose that since you are tuning for parallel resonance,
the voltage increases in the transmit path depending upon the Qu of
the tank circuit. As your query suggests, it is not trivial to estimate the
required breakdown voltage.
Al

Gray Frierson Haertig wrote in message <3769D22F.BF5@haertig.com>...
>In my experience, breakdown voltage is also somewhat frequency
>dependent. Certainly breakdown voltage at RF is markedly lower than at
>60 Hz.

557. Re: Improving/Modifying MFJ tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-18 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <376B0F01.2A32B2E3@teleport.com>
Source record: 69201
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Richard Clark wrote:

> Hi Roy,
>
> All good and well, but without further statement, it sort of condemns
> Sevick with the sins of all these contributors of statistical white
> noise (otherwise known as tarring with a wide brush).
>
> Can you provide us your assessment of his work? Is his data simply
> sophistry clouded with numbers and prettified with charts? Are his
> conclusions suspect? Are his models illusions, perfect for the page
> and useless in the air?

Sevick has done a lot of good work, but I feel that he sometimes loses track of what the purpose of a balun is.

> I am intrigued that you can design a really efficient, broadband Balun
> that doesn't work, care to share this example? I can see you
> qualified this with a requirement to balance the currents. I always
> presumed this to be in the domain of the load, but your example will
> clear this up.

A piece of transmission line a few inches long, with no core, connected as a current balun. Efficient and broadband, but poor at balancing currents.

Can you identify the genre or class of Balun, those
> that Sevick cover would be helpful, that suffer from this defect of
> character?

If I had to identify a class of balun that does a poor job, it's what I call a "voltage" balun. (I believe Sevick calls these "Ruthroff" baluns although at least some of the examples in Ruthroff's classic paper were somewhat different.) The reasons why, as well as my reason for calling them "voltage" baluns, are amplified in my article "Baluns: What They Do and How They Do It" in the _ARRL Antenna Compendium_, Vol. 1.

> This statement of yours alone is worth considerable discussion as it
> relates directly to the charade of what is offered in the marketplace.
> If we are to be intelligent buyers in that market, then it would be
> helpful to be able to distinguish between methods of construction that
> conflict with this key attribute.

Yes, although one can use the correct general topology, such as the "current" balun made of a piece of transmission line, and still end up with a poor balun.

Going back to an earlier topic, I must have missed your response to my request for an example from Sevick's book of an impedance transforming balun which has no connection between the conductors. Would you be so kind as to re-post it?

Roy Lewallen, W7EL

558. Re: S-COM model 6K

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-19 00:00:00 UTC
From: k6mhe@arrl.net
Message-ID: <376afe0e.6760985@news.mcn.org>
Source record: 69202

You can contact Bob Schultz at http://www.rmsd.com/scom/

I'm sure he help you out.

73
Danny, K6MHE

On Wed, 16 Jun 1999 23:28:10 -0800, "VE6NH" <edbve6nh@ptialaska.net>
wrote:

>I need the command list for programing the S-Com model 6K repeater
>controller. We have apparently lost the manual.
>I can accept attachments to E-mail if anyone can scan in the couple of
>pages.
>
>Thanks
>Ed Back VE6NH/KL7
>

559. Re: Improving/Modifying MFJ tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-19 00:00:00 UTC
From: rwclark@rwclark.seanet.com
Message-ID: <376cf9bb.63672660@news.seanet.com>
Source record: 69203
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Fri, 18 Jun 1999 13:20:47 -0700, Roy Lewallen <w7el@teleport.com>
wrote:

>Richard Clark wrote:
>>. . .
>> Hi Roy,
>>
>> My point was that there are many Baluns sold for which there are no
>> supportable guarantees of performance (in this I think we agree). In
>> fact the marketplace takes these items for such a commonplace that
>> issues of performance and efficiency are dismissed too easily.
>>
>> 73's
>> Richard Clark, KB7QHC
>
>I absoultely agree. However, I've read many, many articles and papers on
>baluns in which the wrong criteria were used in assessing the
>performance of a balun. Some contain huge amounts of data, nice graphs,
>and the like, all of factors which have nothing at all to do with a
>balun's ability to achieve equal currents in the two conductors. (I can
>make a really efficient, broadband balun very easily if it doesn't have
>to actually work, that is, if it doesn't have to effect equal and
>opposite currents in the two conductors.) So one must intelligently
>choose the criteria for performance to reach a valid conclusion about
>usability.
>
>Roy Lewallen, W7EL

Hi Roy,

All good and well, but without further statement, it sort of condemns
Sevick with the sins of all these contributors of statistical white
noise (otherwise known as tarring with a wide brush).

Can you provide us your assessment of his work? Is his data simply
sophistry clouded with numbers and prettified with charts? Are his
conclusions suspect? Are his models illusions, perfect for the page
and useless in the air?

I am intrigued that you can design a really efficient, broadband Balun
that doesn't work, care to share this example? I can see you
qualified this with a requirement to balance the currents. I always
presumed this to be in the domain of the load, but your example will
clear this up. Can you identify the genre or class of Balun, those
that Sevick cover would be helpful, that suffer from this defect of

character?

This statement of yours alone is worth considerable discussion as it relates directly to the charade of what is offered in the marketplace. If we are to be intelligent buyers in that market, then it would be helpful to be able to distinguish between methods of construction that conflict with this key attribute.

73's
Richard Clark, KB7QHC

560. Re: Portable Low Power Generation ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-19 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19990618230216.17960.00000723@ngol01.aol.com>
Source record: 69204

In article <3767DBE1.6F07D8BA@mdbs.com>, Muck <muck@mdbs.com> writes:

>I'm looking for a low power electrical generator.
>It needs to be mechanical, not solar. I'm only
>looking for about 100 watts (12-15 VDC at 5-10 A).
>
>I thought about extracting the generator from a
>hand-cranked flashlight or radio, but their power
>output is too low.
>
>The commercial units I've located so far are much
>too big and expensive for this homebrew project.
>
>Can anyone suggest a supplier?

QST for June, 1997, gave a practical project for mating an auto alternator to a small lawnmower engine. The result is up to several hundred watts of 12-15 VDC power. It should be used with a battery.

This is not a new idea - the same basic idea appeared in QST more than 40 years ago, and again 30 or so years ago. The 1997 article, however, uses the common vertical-shaft lawnmower engine, and almost any alternator. By using a small (3 HP) lawnmower engine and the alternator and battery from a small car, a compact and lightweight unit can be made.

I have seen new bargain lawnmowers for less than $90 in end-of-season sales, and rebuilt alternators for less than $25. Add a battery and some wire and hardware, and one might be able to build a complete unit for less than $150-160, with all parts being new.

73 de Jim, N2EY
>

561. Heater in YIG oscillator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-19 00:00:00 UTC
From: Peter Bolch <nc-bolchpe@netcologne.de>
Message-ID: <7kfkoe$f6f$1@news.netcologne.de>
Source record: 69205

Hi,

what's the purpose of the heater in some (most?) YIG oscillators? Reduction of the drift of frequency only? So do I have to use the heater if the frequency is controlled by a PLL?

Peter

562. Material for interdigital filters?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-19 00:00:00 UTC
From: Peter Bolch <nc-bolchpe@netcologne.de>
Message-ID: <7kfkof$f6f$2@news.netcologne.de>
Source record: 69206

Hi,

have the walls of interdigital filters (f around 1.5 GHz) to be made of thick metal sheets or will the 35 or 70 um copper of PCBs do as well?

I think of constructing such filters of rectangular brass rods (sidewalls) and sheet metal (bottom and cover) screwed tightly together. Will this do if utmost performance isn't needed? How about using (not anodized) aluminium instead of brass? Aluminium rods would be much easier to get.

Peter

563. Re: Heater in YIG oscillator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-19 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <376B57A7.5F56@pop.removethistomailme.net>
Source record: 69207

Peter Bolch wrote:
>
> Hi,
>
> what's the purpose of the heater in some (most?) YIG oscillators? Reduction
> of the drift of frequency only? So do I have to use the heater if the
> frequency is controlled by a PLL?
>
> Peter

YIGs get pretty hot when you leave them running all day with 400 mA or more on the main tuning coil, so the heater is probably there to maintain a reasonably constant temperature independent of the dissipation from the tuning coil.

Can't say for sure what would happen without the heater, as none of the HP/Avantek YIGs I've played with have separate heater terminals. Running one without the heater would probably result in a pronounced loss of tuning linearity, if nothing else.

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam
---

564. Baluns & OCF Dipoles

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-19 00:00:00 UTC
From: tatasadasayago <Jcrosley@mocc.com>
Message-ID: <376B4C1C.BC4D1AF5@mocc.com>
Source record: 69208

I was reading W7EL's posts in here and the subject of baluns got me to thinking about the OffCenterFed dipoles I have built.
I dont have the luxury of any ARRL or other handbooks here, or I would look for the info that way.
My question is concerning just how a balun can equalize currents in two vastly different length radiators. I read about the OCF while at the library and went home and built one for 20 meters and another for 160. I used what I assume was a 1:1 balun(Possibly a Van Gordon) that came with an 80m 1/2A dipole I receieved with my first HF rig. I ran some tests and soon the OCF's were on the air and performing great. I think the book I read reccomended that I place the feedpoint at 25% from one end. I analysed the antenna with Elnec and found that 30-35% placement worked better to bring out the cloverleaf pattern I wanted at my target TOA. I must have done something right as I worked all 50 states in the 97 160 meter contest with 100 watts. Years later I am considering OCF's again, but would like to understabd the balun more. I had assumed that the OCF worked okay by virtue of having a 1/4A and 3/4A element working together to provide a close to 50Ohm load. But at 30% or more offset, how was this working so well? Does the balun provide any sort of current lag to the short end to allow the voltages to be equal at each end at 180 and 360 degrees?
Maybe I am missing the fundamentals here. I visualised the balun to be two seperate "Loading" type coils taking my RF from the feedline and distributing it equally to each half of the dipole regardless of the length of each radiator. Can anyone attempt to explain how this works with an OCF and 1:1 balun?
Sincerely, Jim
KY7DX/QRP Montana

565. Re: Duplexer Or Cavity ????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-19 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7kg0n6$u8$1@autumn.news.rcn.net>
Source record: 69209

At 5-Mhz seperation, a bandpass cavity will have
excellent rejection. You might also consider looking into
an inexpensive "mobile" duplexer for 5-MHz operation.
Should be very inexpensive used. "Split" the duplexer
and use one section on each antenna feed.

Peter

Steve Noskow wrote in message ...
>Thomas C. Sefranek <tcs@cmcorp.com> wrote that:
>
>> Dano wrote:
>
>> > I'm gonna run 2 ant's for a repeater setup.
>> > my transmit is 152.27 megs
>> > my rec is 157.52 megs
>> >
>> > Do I need a full bp,br duplexer ???
>> > or can I just run a pair of bp cavities on the rec side??
>
>> It would depend on how much phase noise the transmitter has and what
power
>> it's running.
>> My guess is you MUST have an anti-resonant element in the band-pass
cavities
>> to notch out the other
>> frequency. (Making them duplexers...)
>
>Dano,
> Tom is correct. There are two considerations for a duplexer (or
>whatever you want to call it)
>
>1) Keep Tx power out of the RX. This requires something to stop Tx
>carrier energy from getting to the Rx. It doesn't pass the TX freq. This
>can be a band pass (cavity) tuned to the RX freq in the Rx leg which is
>narrow enough to block the Tx freq. Or it can be a notch at the Tx freq.
>in the Rx leg. (hope I got that right)
>
>2) Keep TX sideband noise out of the RX. This requires something which
>stops the RX freq (YES RX FREQ) in the Tx leg. It can be a band pass
>cavity in the TX leg tuned to the TX freq - and narrow enough to block the
>sideband noise comming from the TX whixh is on the RX freq. OR a notch
>in the TX leg tuned to the RX freq.
>
>There are some Motorola cavities for 450MHz which are band pass, but with

>a little coupling from in to out put you can also get a notch at the
>companion frequency. So you can get both types in one pair of filters
>
>The double band pass version tends to get called duplexers This is what's
>in current car phones) and the dual notch versions tend to be
>called...gee, I forgot, but they have a different term (here inside
>Motorola anyway)....A rose by any other name still can kill a receiver.
>THis type was in an older car phone by Motorola for 450 called the "MK".
>
>Regards, Steve K9DCI@arrl.org
>
>--
>I know everything, except how to be humble...a.a..and... how to stop
>e-spam. Sorry 'bout the address munge, but it has reduced much now.
> Use snoskow1 at server email here in mot in the com domain.

566. Re: 10 meter dipole with 102" whips?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-19 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <378a84c1.547283184@news.atl.bellsouth.net>
Source record: 69210
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On 12 Jun 1999 22:46:50 GMT, "Reg Edwards" <G4fgq.Regp@btinternet.com> wrote:
>Since everybody on your side of the pond quotes from them,
>out of curiosity a couple of months ago I purchased the two
>american bibles :- ARRL Handbook and the ARRL Antenna Book.
> One of the first thing I noticed was One S-unit = 6dB.
>The amount of excellent info contained between the covers
>is stupendous.

The books are fine, but it would have more meaning if there
were amateur radios whose S meters actually responded
with 6 dB per S unit over the range of their scales. The only
one I know of which repeatably does is the Kachina 505. It
auto-calibrates itself at power on across its entire range in
dBm, and then converts readings to equivalent S units in
software.

More typical amateur equipment varies from 2 to 8 dB per S unit
over the range of the S scale, and varies similarly from band to
band and radio to radio. Since the variance is as large as the unit,
it becomes basically worthless as a method of discussing signal
strength information. Until instruments are in general amateur use
which do better, using the S unit is more misleading than helpful.
It is like giving measurements in yards when the typical yardstick
in use varies in length from 1.19 to 4.75 feet.

You can suggest that amateurs should do calibration charts for
their S meters, I have done so for my radios, but few amateurs do.
It is better to give the measurements in a scale for which amateurs
typically don't have faulty instruments to measure. That way it is
less likely to mislead by association.

When amateurs report HF antenna signal strengths that differ
by 2 to 3 S units (as many do), it is virtually certain that those
antennas don't differ by 12 to 18 dB in gain. The large variance
is almost certainly mainly a function of the variance in the S
meters employed. I think it is important that we get amateurs
to disassociate their thinking from what they erroneously see
on their S meters. We do that by acknowledging that the S unit
is typically *not* 6 dB in the real world of amateur radios.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

567. Re: 10 meter dipole with 102" whips?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-19 00:00:00 UTC
From: Al Dolgosh <al.dolgosh@hamradio.org>
Message-ID: <376B93B3.84E69473@hamradio.org>
Source record: 69211
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

AMEN, Gary! This is particulary irksome when the S-meter readings are used to "measure" performance, such as the signal increase due to an amplifier or new antenna.

The S-meter (or guess-meter) has distorted the average ham's concept of the decibel!

Al - K8EUR

Gary Coffman wrote:

> On 12 Jun 1999 22:46:50 GMT, "Reg Edwards" <G4fgq.Regp@btinternet.com> wrote:
> >Since everybody on your side of the pond quotes from them,
> >out of curiosity a couple of months ago I purchased the two
> >american bibles :- ARRL Handbook and the ARRL Antenna Book.
> > One of the first thing I noticed was One S-unit = 6dB.
> >The amount of excellent info contained between the covers
> >is stupendous.
>
> The books are fine, but it would have more meaning if there
> were amateur radios whose S meters actually responded
> with 6 dB per S unit over the range of their scales. The only
> one I know of which repeatably does is the Kachina 505. It
> auto-calibrates itself at power on across its entire range in
> dBm, and then converts readings to equivalent S units in
> software.
>
> More typical amateur equipment varies from 2 to 8 dB per S unit
> over the range of the S scale, and varies similarly from band to
> band and radio to radio. Since the variance is as large as the unit,
> it becomes basically worthless as a method of discussing signal
> strength information. Until instruments are in general amateur use
> which do better, using the S unit is more misleading than helpful.
> It is like giving measurements in yards when the typical yardstick
> in use varies in length from 1.19 to 4.75 feet.
>
> You can suggest that amateurs should do calibration charts for
> their S meters, I have done so for my radios, but few amateurs do.
> It is better to give the measurements in a scale for which amateurs
> typically don't have faulty instruments to measure. That way it is
> less likely to mislead by association.
>
> When amateurs report HF antenna signal strengths that differ
> by 2 to 3 S units (as many do), it is virtually certain that those

> antennas don't differ by 12 to 18 dB in gain. The large variance
> is almost certainly mainly a function of the variance in the S
> meters employed. I think it is important that we get amateurs
> to disassociate their thinking from what they erroneously see
> on their S meters. We do that by acknowledging that the S unit
> is typically *not* 6 dB in the real world of amateur radios.
>
> Gary
> Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
> 534 Shannon Way | We break it |
> Lawrenceville, GA | Guaranteed |

568. Re: Linear amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-19 00:00:00 UTC
From: Wildcat <wildcat@tp.net>
Message-ID: <RGMa3.9653$CG.235589@typ31b.nn.bcandid.com>
Source record: 69212
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

If you go here, you'll find a nice 500 watt amp schematic, and a bunch of other great stuff. Ive known the owner of this website for about 20 years and he's never disappointed anyone yet.

http://hem2.passagen.se/sm0vpo/

569. FOR SALE: SAMS INDEX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-19 00:00:00 UTC
From: bendowers@aol.com
Message-ID: <19990619094258.11261.00001786@ng-cd1.aol.com>
Source record: 69213

For sale Sams Photofacts Annual Index for the following years. 1973, 1974, 1975, 1976, 1978, 1979, 1980, 1981, 1990.
These annuals are in what I call average condition. Pages are yellowed. They have been used, and handled.
I would like to have $125.00 plus shipping for all. But will take offers.
Thank you for your time.
Benny L Dowers

P.S. Please state where you seen my posting when replying

570. FOR SALE: TUBES

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-19 00:00:00 UTC
From: bendowers@aol.com
Message-ID: <19990619094550.11260.00001715@ng-cd1.aol.com>
Source record: 69214

5000 plus tubes. 7, 8, and 9 pin. loose not tested. I have been told, many, (some ?) of these where indeed not used. And were removed from water damaged boxes. I can not comfirm this, nor do I believe this to be true. I do know that many I've tried, for my own use have worked well. They are being sold as used, as is, not tested. They are not sorted, and I will not do so. I will not sell
singles.
I'm asking $25.00 per 100 count. Or your best offer for all 5000 plus tubes. You pay all shipping cost. I will determand shipping cost, based on how many you purchase, at time of sale.
When responding, please state where you've read my posting.
Thank you for your time.
Benny L Dowers

571. AM reception on FM receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-19 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7kgm3cdhe1@plutonium.btinternet.com>
Source record: 69215

I was recently experimenting with an FM broadcast band radio. I disconnected the mixer from the first IF transformer and connected the output of a homemade mixer to the IF amplifier for reception of other bands. I found that the IF amplifier and FM detector was able to resolve AM SW stations. I wondered why this is, and my theory is that cheap FM radios do not have a limiter stage. Can anyone confirm this?

Best wishes from John Cunningham.

572. Re: Baluns & OCF Dipoles

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-19 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <376BDE31.BEE09E4D@teleport.com>
Source record: 69216

tatasadasayago wrote:
>
> I was reading W7EL's posts in here and the subject of baluns got me to
> thinking about the OffCenterFed dipoles I have built.
> I dont have the luxury of any ARRL or other handbooks here, or I would
> look for the info that way.
> My question is concerning just how a balun can equalize currents in two
> vastly different length radiators. I read about the OCF while at the
> library and went home and built one for 20 meters and another for 160.
> I used what I assume was a 1:1 balun(Possibly a Van Gordon) that came
> with an 80m 1/2A dipole I receieved with my first HF rig. I ran some
> tests and soon the OCF's were on the air and performing great. I think
> the book I read reccomended that I place the feedpoint at 25% from one
> end. I analysed the antenna with Elnec and found that 30-35% placement
> worked better to bring out the cloverleaf pattern I wanted at my target
> TOA. I must have done something right as I worked all 50 states in the
> 97 160 meter contest with 100 watts. Years later I am considering OCF's
> again, but would like to understabd the balun more. I had assumed that
> the OCF worked okay by virtue of having a 1/4A and 3/4A element working
> together to provide a close to 50Ohm load. But at 30% or more offset,
> how was this working so well? Does the balun provide any sort of
> current lag to the short end to allow the voltages to be equal at each
> end at 180 and 360 degrees?
> Maybe I am missing the fundamentals here. I visualised the balun to be
> two seperate "Loading" type coils taking my RF from the feedline and
> distributing it equally to each half of the dipole regardless of the
> length of each radiator. Can anyone attempt to explain how this works
> with an OCF and 1:1 balun?
> Sincerely, Jim
> KY7DX/QRP Montana

You speak of equally distributing "RF" from the feedline. By this I assume you mean RF energy or power. I don't think you really want half the power going to each half of the antenna. If you do, why?

The purpose of a balun is to prevent the feedline from radiating, which is the same as saying that its job is to suppress common-mode current, because it's the common-mode current that radiates. If you have no common-mode current, then the currents in the two conductors are purely differential, that is, they're equal in magnitude and opposite in phase. So when a balun does its job, you're applying equal and opposite currents into the two halves of the antenna. The fraction of the power that each half receives is determined by their lengths and current distributions. If the feedpoint currents of the two halves are anything but equal and opposite, the feedline WILL radiate.

A radiating feedline is just as much a part of the antenna as the part that's intended to radiate, and it contributes to the overall field in proportion to its length and the current it carries. This contribution always radiates in some directions, and might allow communication that wouldn't be possible if it weren't radiating. I see this as a kind of haphazard way to communicate, but lots of people do it, and it's fine as long as the radiating feedline doesn't cause other problems like coupling to power and telephone lines and so forth.

Provided that your antenna is reasonably efficient (which most half wave or larger antennas are), essentially all the power you're applying to the antenna is being radiated. Having gross current imbalances in the wires, and having a radiating feedline, don't alter this fact (except that the radiating feedline might reduce efficiency by losing power to nearby lossy objects). So there's no reason you can't win a contest with a crazy current distribution. But your pattern sure won't be what a modeling program or the textbooks tell you, unless you've included the radiating feedline in your model. Using a balun won't increase the amount of power you radiate or increase the efficiency of your system (except possibly if the feedline is coupling to lossy objects). All it will do is reduce the fraction of that power that's radiated by the feedline. In the process of doing that, it'll also change the relative currents in the two halves of your antenna, changing its pattern somewhat.

Jack Belrose, VE2CV, wrote an article or two about off-center fed dipoles in QST a few years ago. I recall his mentioning that it's very difficult to reduce the common-mode feedline currents with these antennas. My guess is that it would take at least a couple of current baluns placed about a quarter wave apart to get a reasonably low level of common-mode current on some of these antennas.

Roy Lewallen, W7EL

573. Re: Improving/Modifying MFJ tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-19 00:00:00 UTC
From: rwclark@rwclark.seanet.com
Message-ID: <376cbe87.687448@news.seanet.com>
Source record: 69217
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Fri, 18 Jun 1999 20:31:13 -0700, Roy Lewallen <w7el@teleport.com>
wrote:

>Richard Clark wrote:
>
>> Hi Roy,
>>
>> All good and well, but without further statement, it sort of condemns
>> Sevick with the sins of all these contributors of statistical white
>> noise (otherwise known as tarring with a wide brush).
>>
>> Can you provide us your assessment of his work? Is his data simply
>> sophistry clouded with numbers and prettified with charts? Are his
>> conclusions suspect? Are his models illusions, perfect for the page
>> and useless in the air?
>
>Sevick has done a lot of good work, but I feel that he sometimes loses
>track of what the purpose of a balun is.
>
I think Phil laid the term of damning with faint praise at my feet -
Karma.
>
>> I am intrigued that you can design a really efficient, broadband Balun
>> that doesn't work, care to share this example? I can see you
>> qualified this with a requirement to balance the currents. I always
>> presumed this to be in the domain of the load, but your example will
>> clear this up.
>
>A piece of transmission line a few inches long, with no core, connected
>as a current balun. Efficient and broadband, but poor at balancing
>currents.
>
Hmm, that didn't clear it up. Except perhaps that it isn't Balun. It
provides no balanced to unbalanced transitions. There is no mention
of it conforming its extremely short transition line to "the geometric
mean" of Z between the input and output. It does no transform for
which I must presume it connects a Source Z to an identical Load Z
(which might presumably remove the last objection). It is described
as being "connected as a current Balun." I might allow that this is
the "beaded" variant, but that is unstated, and this leads to more
presumptions. It has no core and the line being a few inches long
has almost no reactance due to coiling to isolate the input from the
output (unless we are now confined to Baluns for UHF service, another

presumption).
>
> Can you identify the genre or class of Balun, those
>> that Sevick cover would be helpful, that suffer from this defect of
>> character?
>
>If I had to identify a class of balun that does a poor job, it's what I
>call a "voltage" balun. (I believe Sevick calls these "Ruthroff" baluns
>although at least some of the examples in Ruthroff's classic paper were
>somewhat different.) The reasons why, as well as my reason for calling
>them "voltage" baluns, are amplified in my article "Baluns: What They Do
>and How They Do It" in the _ARRL Antenna Compendium_, Vol. 1.
>
>> This statement of yours alone is worth considerable discussion as it
>> relates directly to the charade of what is offered in the marketplace.
>> If we are to be intelligent buyers in that market, then it would be
>> helpful to be able to distinguish between methods of construction that
>> conflict with this key attribute.
>
>Yes, although one can use the correct general topology, such as the
>"current" balun made of a piece of transmission line, and still end up
>with a poor balun.
>
Here presumptions again force me to think that this example and the
one above (described as being efficient but poor) are one in the same;
however presumptions are getting a bit thick. For the intelligent
buyer's benefit I asked for a distinguishing feature of a poor
design, to my surprise it appears to be the popular W2DU design.
However I suspect this is a combination of presumption and stated but
unidentified instances of its failure(?). In that regard, I must
pass on this being an answer in that it appears (another assumption)
to be more an issue of poor application than design.
>
>Going back to an earlier topic, I must have missed your response to my
>request for an example from Sevick's book of an impedance transforming
>balun which has no connection between the conductors. Would you be so
>kind as to re-post it?
>
>Roy Lewallen, W7EL

Hi Roy,

You missed my response? Now THIS is a presumption - there was none.

Now if you wish to resurrect that issue, fine and well, it is my
responsibility to explain it again having flubbed it earlier in terms
of DC and AC analysis.

Perhaps you missed my earlier correspondence where I describe, simply,
that a Balun's principle design considerations where to isolate the
input from the output and to provide a line Z designed for transition

per these repeated references (sorry for preaching to the converted)
>To quote Sevick (Sec 3.2):
> "...the highest frequency response occurs when the characteristic
>impedance, Z0, of the transmission line is the geometric mean of the
>input and output resistances."
Or
> (Sec 5.2):
> "Ruthroff and Guanella stated that for the maximum high-frequency
>response for a 1:4 transformer, the characteristic impedance of the
>coiled transmission line should be one-half the output resistance and
>twice the generator resistance (figs 1-2 and 1-3)....
> "At the low frequency end, design considerations focus on the
>reactance of the coiled transmission line as compared to the impedance
>level (and hence, the characteristic impedance of the windings)."

In this regard of isolation (the AC analysis spin), the far end of this transition line's connections are removed from the near end - the point of Balun construction it seems to me. However, this must be accomplished by a sufficient combination of added reactance and resistance in the coiling of the line to accomplish (your point - mine too). Having achieved this high level of Z accomplishes the removal of connections at the far end (my point & perhaps your point - I hesitate to ascribe this tho'). That these connections are still made, and that the transition line still is connected in such a configuration to achieve an impedance transform (your point) is in fact well evidenced from a DC perspective (my point).

In retrospect my assertion was perhaps too subtle. That is, having achieved isolation, I immediately dismissed the far side's connections (other than those to the load) from further consideration. A slight of hand none-the-less, and definitely not true when a formal analysis (that allows me to make this subtle distinction) requires all elements to be considered (much as you stated).

For others following this; all of this last of mine must appear to be tedious and abstract. I think however that it illustrates the chief mechanism of Balun operation. The key to both design and application is to recognize that this transition line's input and output are isolated from each other by the mechanism of either winding this line (air wound), passing it through core material (including core wound), or finally, making it 1/4 wavelength long. This isolation allows that either side of the Balun may be configured with two or more transition lines (in the common case of a Balun that also transforms Z) in parallel and series to accomplish the "step-up" or "step-down" in Z. A simple example may help.

First a failed attempt (much like Roy's efficient design example above):
Consider two transition lines that are fed (at the near end) in parallel; then these lines are re-terminated at the far (load) end in a series configuration. Fire up the transmitter and you may even fire

up the Balun (sic) - certainly no merit in this (especially when the fire spreads to the transmitter). Let's amend this faulty construction through one of the isolation mechanisms above: Consider two transition lines that are fed (at the near end) in parallel; these lines are then coiled through a core as non-interacting windings, and then re-terminated at the far (load) end in a series configuration. Bingo, we have a Guanella 1:4 Balun and with the appropriate load it presents very low loss (and a very low chance of "firing" up).

It is instructive to note that this last example can be built on the conventional single core, but more interestingly it can also be constructed from two W2DU style current Baluns. I say interestingly because it illustrates the nature of isolation and the series-parallel combinations quite clearly. The Ruthroff model of the 1:4, on the other hand, is a mind twist to analyze with its three wire construction and lacks the elegance of the simple Guanella implementation. In fact, it is this third wire that so confounds Ruthroff designs. The third wire violates the isolation of the input from the output. Now this violation does not condemn it, but it does impose constraints against some applications that the Guanella performs in quite well. The Ruthroff model may be implemented in the style of a W2DU Balun, when the third wire is added and the load shifted to bridge the input and output of the W2DU balun. The hazard of this is that if done wrong, you could find yourself with an Unun instead of a Balun (and as I have loosely described it here, that guarantees that possibility is 50% - if not worse. Sorry folks, I wish graphics weren't so bandwidth intensive, otherwise illustration would be worth 1000 words).

Now to return to the requirement for the transition lines' design Z. For my simple example above, where I employ two store bought W2DU Baluns in series/parallel, if taken as stated; then we do not have an optimal solution. It is arguable how much optimization is needed - until we attempt to apply the Balun to where its operational boundaries are crossed (an unknown hazard if one casually discards the treatment of transition line Z). As this thread was launched with the intent of construction techniques rather than buying a solution off the shelf, it follows that one may as easily construct one's own W2DU style Balun with appropriate transition lines (and cheaper too). Knowing that the load is going to be 200 Ohms means that the two transition lines must present at least 100 Ohms characteristic Z each (100 in series with 100). Knowing the source is going to be 50 Ohms means that the two transition lines must present at most 100 Ohms each (100 in parallel with 100). If we do it by the math we find the design requirement stipulates Z = SQRT(50 * 200). The design Z mandates 100 Ohms. The Guanella design thus presents rather more simple analysis and construction requirements. To make an optimal solution seems to me to involve slightly more effort (by paying attention to the Z of the transition line) than a haphazard wind of pair of handy wires.

73's
Richard Clark, KB7QHC

574. FS: Crystal Filters, 3.2 Khz bw and 200Hz bw

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-19 00:00:00 UTC
From: Bob <bmiller@calweb.com>
Message-ID: <376be7fb@calwebnnrp>
Source record: 69218
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew,rec.radio.swap

For Sale: Pair of new crystal filters.
Filter 1 is a nominal 3.2 Khz bandwidth, brick wall, 7 crystal elements, termination around 560 ohms to 1 k. 5.2 MHz corner frequency

Filter 2 is approximately 200 Hz wide centered on 5.2 MHz

Includes 5.2 Mhz injection oscillator crystal which will provide USB injection for the 3.2 Khz filter and band center injection for filter 2. These units are maintenance spares for Motorola DTL FDM multiplex modems. Great for home brew receivers and hi fi SSB generators. 200 hz filter is kind of narrow for cw, but great for nsk low speed data.

$35 for all the three items post paid conus

Thank you for the read.

73

Bob, KE6F

575. Re: Material for interdigital filters?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-19 00:00:00 UTC
From: "Al, N2NKB"
Message-ID: <7kguob$3f9$1@bgtnsc02.worldnet.att.net>
Source record: 69219

Your best bet is to have the resonators and the cavities plated with
silver, on top of aluminum plus whatever material goes inbetween for
proper plating. I understand that this might be difficult for a "home job",
but if you can get access to a plater, your losses will be minimal.
Also, be aware that interdigital filters have a tendency to have repeating
passbands at harmonics.
As you probably know, Qu= squrt(f) * D * k, where
f is frequency in GHz., D is the dominant dimension of the cavity size in
inches, and k is a constant. For silver, use about 2200 for k. So for a
2" cavity, you can expect a Qu of over 5,000 at 1.5 GHz.
Al, N2NKB

Peter Bolch wrote in message <7kfkof$f6f$2@news.netcologne.de>...
>Hi,
>
>
>have the walls of interdigital filters (f around 1.5 GHz) to be made of
>thick metal sheets or will the 35 or 70 um copper of PCBs do as well?
>
>I think of constructing such filters of rectangular brass rods (sidewalls)
>and sheet metal (bottom and cover) screwed tightly together. Will this do
if
>utmost performance isn't needed? How about using (not anodized) aluminium
>instead of brass? Aluminium rods would be much easier to get.
>
>
>Peter
>
>

576. Re: AM reception on FM receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-19 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7kh17i$86i$1@autumn.news.rcn.net>
Source record: 69220

Yes, very good assumption and probably what is
happening. Very few consumer FM receivers have
anywhere near the limiting action of good commercial
two-way radios--many of those sets have the later IF
stages running into saturation on noise alone. I even
notice the expensive Radio Shack FM receiver in my
van has a volume fade when the signal phases or in
weak reception areas--in a good receiver the noise level
would rise to equal the audio which should remain
at a constant level.

Pete

David Cunningham wrote in message <7kgm3cdhe1@plutonium.btinternet.com>...
>I was recently experimenting with an FM broadcast band radio. I
disconnected
>the mixer from the first IF transformer and connected the output of a
>homemade mixer to the IF amplifier for reception of other bands. I found
>that the IF amplifier and FM detector was able to resolve AM SW stations. I
>wondered why this is, and my theory is that cheap FM radios do not have a
>limiter stage. Can anyone confirm this?
>
>Best wishes from John Cunningham.
>
>

577. WTB: DC Hayes S-100 bus modem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-19 00:00:00 UTC
From: Alan <alan.diaz@snet.net>
Message-ID: <7kh0mj$nbj@news1.snet.net>
Source record: 69221
Cross-posted to: rec.ham-radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I'm looking for an S-100 bus modem, like DC Hayes 80-103A or whatever S-100 bus modem you may have. I'd also be interested in an acoustic coupler modem from the same era if you have one. Please reply to chipsndips@snet.net

Alan

578. Need: IC M54826P

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-19 00:00:00 UTC
From: robertc908@aol.com
Message-ID: <19990619182640.15729.00002147@ng-fp1.aol.com>
Source record: 69222

I am in need of an M54826P frequency counter chip. Please state availability
and price. Am willing to trade appropriate item for chip(s).
73's
Bob, W4RLC (formerly WA7OGU)

579. Re: >>>Ft-50R ADMS-1C<<<

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-19 00:00:00 UTC
From: n8blk@aol.com
Message-ID: <19990619193005.27460.00000818@ngol03.aol.com>
Source record: 69223

In article <3768ec1f.2234362@News.alterdial.uu.net>, KB9TFH@MichianaToday.com (Joe Humberger) writes:

>Hello, I just bought a FT-50R used w/ the Mars/cap mod done, however i
>have the ADMS-1D version. I was woundering if someone could send me a
>link to download it or send it via email...Thanks...Joe KB9TFH
>

Why can't you use The FT-50R with the ADMS-1D. It's what I use with my FT-50, if I'm not using one of the freeware implementations like the one written by a ham in Macedonia. I can't understand your question, if you have the 1D, you can use it with ADMS-1D whether it's modified or not. Personally I prefer not having the ability to transmit out of band, but for just listening, no problem.
-art clemons-

580. Re: AM reception on FM receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-19 00:00:00 UTC
From: Butch Magee <butchkay@netdoor.com>
Message-ID: <376C2F00.92B35F62@netdoor.com>
Source record: 69224

It's FM David,....freakin majic!!

David Cunningham wrote:

> I was recently experimenting with an FM broadcast band radio. I disconnected
> the mixer from the first IF transformer and connected the output of a
> homemade mixer to the IF amplifier for reception of other bands. I found
> that the IF amplifier and FM detector was able to resolve AM SW stations. I
> wondered why this is, and my theory is that cheap FM radios do not have a
> limiter stage. Can anyone confirm this?
>
> Best wishes from John Cunningham.

581. Re: FOR SALE: TUBES

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-19 00:00:00 UTC
From: Bob Headrick <bobh@proaxis.com>
Message-ID: <929837893.232.29@news.remarQ.com>
Source record: 69225

BenDowers <bendowers@aol.com> wrote in message
news:19990619094550.11260.00001715@ng-cd1.aol.com...
> 5000 plus tubes. 7, 8, and 9 pin. loose not tested. I have been told,
many,
> (some ?) of these where indeed not used. And were removed from
water
> damaged boxes. I can not comfirm this, nor do I believe this to be true

[rest of spam deleted]

Ben -

I know you know this is not a sale group. Please stop reposting this stuff
in rec.radio.amateur.homebrew, rec.radio.swap is the sales newsgroup.

- Bob

582. Re: P.O.W. "tap" code compared to Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-20 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <378eb7c3.560342804@news.atl.bellsouth.net>
Source record: 69082

On Thu, 10 Jun 1999 23:42:53 -0400, srh@iname.killspam.com (Stephen R Holmes) wrote:
>Thank you, Jim, for a very interesting post. I had always mistakenly
>assumed that a variation of "Continental Morse" (the old clicking
>telegraphy mode) was used, and have always been frustrated that despite
>reasonable skills in conventional Morse, I've never been able to train my
>ear to "hear" telegraphy. Your explanation makes it clear -- and helps
>to reduce my frustration level! :-)

Continental Morse is what we use on the radio today. American Morse was used on US landlines. Continental Morse was used on landlines in Europe. Both were originally "clicking" codes. When radio came along, Continental Morse, renamed International Morse, was adopted as the standard radio code. Some of the characters are different. For example, C, which is dahdidahdit in Continental Morse is didi<short space>dit in American Morse.

Landline sounders gave a distinctively different sound for the make and break of each element. It was a click-clack. The timing between the click and the clack determined whether a dit or dah was sent. It is necessary that the make and break have different sounds, otherwise you can confuse an intracharacter space with a dit and a letter space with a dah. On radio we use tones of different duration, and the absence of tone, to convey the code elements. The absence of tone is as important as the tone to the code, just as the click and the clack are important to the landline sounder system. You can't reliably copy code that's just clicks any more than you can copy code that's just tone. You have to be able to tell make from break.

Discerning the absence of tone against the noise background can be difficult for weak signals (or fading signals). The best way to do that is to use two tones, ie FSK. That way energy is sent for all of the code elements. In fact that was done with the old arc transmitters where the arc couldn't be conveniently broken and re-established rapidly. A reactance was switched across the tuned circuit to key it FSK, one frequency for dits and dahs, another frequency for the intracharacter, intercharacter, and word spaces. It works better than on off keying (6 dB better), and can be copied by ear by anyone who is not tone deaf.

Morse is a quintenary code, ie it has 5 distinct transmission symbols. It only voices two of them when on-off keying (OOK) is used. The other three have to be inferred against the noise background. That hurts its weak signal performance. Voicing all the symbols improves matters. Voicing them distinctly in signal space would be best, ie rather than just using two level FSK, a 5 level M-ary modulation would be even better.

If you then use uniform length transmission symbols, ie a different code, you have RTTY and all other modern methods of text transmission. Because the elements are uniform length, you can form a matched filter for them, and weak signal performance is further improved over an irregular coding like Morse.

(At least 9 dB better, more than that if you use FEC techniques too.)

We usually use that advantage to allow us to run much faster rather than to work weaker signals. But if we slow a modern code down to the speeds used by Morse operators, we can work at weaker signal levels than the Morse operator. A good example is Voyager, which works over a 9 billion mile path with less than 5 watts of power. It operates at 10 bps (about 12 WPM). OOK Morse could not be detected by ear at the signal level of Voyager. Machine methods couldn't do it either. Only changing to a different modulation and coding allows such weak signal work to occur.

I bring this up because I've been experimenting with a 10 bps QPSK system on 30m for the past couple of years that works when I can't detect the presence of a signal by ear. It is conceptually similar to PSK31, but slower, and doesn't employ varicode compression. The main drawback to such extremely weak signal methods is that very good frequency stability is required of the transmitter and receiver.

For hams, another drawback is that finding stations calling "CQ" can be difficult because they're too weak to hear. You have to depend on the signal processor to tell you a signal is present when you tune, very slowly, across the band. PSK31 is a better compromise for hams. It has to be strong enough to detect by ear, or at least on the waterfall display, to work, and the faster speed is beneficial to conversation too. We rarely have a need to work at the most extreme weak signal level.

(Sorry for the topic drift, I got carried away. Coding and modulation methods is one of my favorite topics.)

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

583. Re: Baluns & OCF Dipoles

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-20 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <378fcdd8.565997434@news.atl.bellsouth.net>
Source record: 69083

On Sat, 19 Jun 1999 08:51:56 +0100, tatasadasayago <Jcrosley@mocc.com> wrote:
>I was reading W7EL's posts in here and the subject of baluns got me to
>thinking about the OffCenterFed dipoles I have built.
>I dont have the luxury of any ARRL or other handbooks here, or I would
>look for the info that way.
>My question is concerning just how a balun can equalize currents in two
>vastly different length radiators. I read about the OCF while at the
>library and went home and built one for 20 meters and another for 160.
>I used what I assume was a 1:1 balun(Possibly a Van Gordon) that came
>with an 80m 1/2A dipole I receieved with my first HF rig. I ran some
>tests and soon the OCF's were on the air and performing great. I think
>the book I read reccomended that I place the feedpoint at 25% from one
>end. I analysed the antenna with Elnec and found that 30-35% placement
>worked better to bring out the cloverleaf pattern I wanted at my target
>TOA. I must have done something right as I worked all 50 states in the
>97 160 meter contest with 100 watts. Years later I am considering OCF's
>again, but would like to understabd the balun more. I had assumed that
>the OCF worked okay by virtue of having a 1/4A and 3/4A element working
>together to provide a close to 50Ohm load. But at 30% or more offset,
>how was this working so well? Does the balun provide any sort of
>current lag to the short end to allow the voltages to be equal at each
>end at 180 and 360 degrees?
>Maybe I am missing the fundamentals here. I visualised the balun to be
>two seperate "Loading" type coils taking my RF from the feedline and
>distributing it equally to each half of the dipole regardless of the
>length of each radiator. Can anyone attempt to explain how this works
>with an OCF and 1:1 balun?
>Sincerely, Jim
>KY7DX/QRP Montana

If you look at the current on an antenna, at any point, the current
immediately to the left of the point is the same as the current
immediately to the right of the point. Doesn't matter where you
cut it, the current has to be the same on either side of the cut.

Now when you have a transmission line inserted at the cut,
you'll have an equal current flowing into one conductor from
one side of the antenna and out of the other conductor to the
other side of the antenna. In other words, it is still purely
differential, no matter where you cut the antenna and insert
the feedline.

The purpose of the balun is to suppress common mode
currents on the coax. It does that by acting as a high impedance
for the common mode currents. Since the antenna only needs

differential currents no matter where it is cut, the balun still performs its job. (We're talking choke baluns here.) The impedance of the balun to common mode currents may need to be higher when used off-center than when used in the center of a dipole, but it performs the same job in either location.

Gary

Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

584. WTB: NOS TUBES

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-20 00:00:00 UTC
From: BlueStrat <bluestat@erols.com>
Message-ID: <376D06A1.BD25F212@erols.com>
Source record: 69084

Looking for the following NOS (preferably in
original boxes) tubes.

6V6GT, 6L6GC, 5AR4, 5Y3GT, 5R4, 6CA7/EL34, 6BQ5/EL84, 7189A, 7027,
7591A, 7581A, 12AX7A , 5751, 12AY7, 7025, 12AT7, 7199, 5881, 6550,
7868, KT-66,77,88.

Also, octal socket extenders/savers.

Please list brand, price, qty available, and whether in
original box.

Thanks,
Mike
703-430-8713
bluestat@erols.com

585. FS: HomeBrew Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-20 00:00:00 UTC
From: terryh@bayou.com
Message-ID: <Mb8b3.18$A3.176515584@news.bayou.com>
Source record: 69085

FS: HomeBrew amp with a pair of 572B's. New tubes put in the amp about 1 1/2 months ago. The amp can be wired for 220 by moving 2 jumpers. Currently is wired for 110. The amp is in good working condition and the reason I am selling is because I received a brand new AL-811H as a gift from the XYL. The amp will cover 15,17,20,30,40 80and 160 meters. If interested in seeing some pic's, contact me by e-mail at mailto:terryh@bayou.com I am asking $300.00 firm. Buyer pays shipping.

73's
Terry W1MRC
http://www.bayou.com/~terryh/

586. Re: Portable Low Power Generation ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-20 00:00:00 UTC
From: Muck <muck@mdbs.com>
Message-ID: <376D2524.3B9C895F@mdbs.com>
Source record: 69086

Jonesy wrote:

> Muck <muck@mdbs.com> wrote:
> : I'm looking for a low power electrical generator.
> : It needs to be mechanical, not solar.
>
> OK, how are you _going_ to power it?

I'm actually thinking about two different projects:
one involves a windmill, the other involves a model
airplane engine.

> : I'm only looking for about 100 watts (12-15 VDC at 5-10 A).
>
> I hope you're not planning on ... a bicycle or the such...
> An *old* automotive generator _might_ do the trick . . .
> If you're employing a storage battery, then an automotive
> alternator would be more efficient.

Yes. This is to suppliment a solar/battery system. While
that system can easily handle the 6-8 operational hours per
week it was designed for, it can not handle the demands that
field day would place.

> (Sounds like you do Field Day planning like we do -- two weeks
> or less before The Day. :-)

Actually, I'm currently planning for 2001. With my construction
skills, it will take that long to get things together. 8)

587. Need data for A60-12 transistor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-20 00:00:00 UTC
From: yu1ol@EUnet.YU
Message-ID: <376D4DD7.2A29A392@EUnet.yu>
Source record: 69087

Hi,

Need data for RF transistor from CTC. Transistor is marked like CTC
A60-12.

Best wishes de YU1OL, Batko

588. FM detector circuit required

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-20 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7kjihg$b0e$1@uranium.btinternet.com>
Source record: 69088

I am looking for a circuit of an FM detector suitable for resolving NBFM signals from a 455kHz IF. I wonderded if it would be possible to make a discriminator type detector using a standard, centre-tapped IF transformer. I do not want to use a PLL or TTL based detector.

Please email me of you can help. Best wishes from John Cunningham.
d.l.c@btinternet.com

589. Shift 600Hz and sidetone for 40-9er ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-20 00:00:00 UTC
From: Daniel <dsavel@easynet.fr>
Message-ID: <7kjjgn$45f$1@buggy.easynet.fr>
Source record: 69089

I'm looking for a shift and sidetone compact, for the 40-9er QRP rig.
Thank you
Daniel
dsavel@easynet.fr

590. Re: MMIC MAR-1 Where to Buy

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-20 00:00:00 UTC
From: Harry <WA4OFS@iag.net>
Message-ID: <376D6ABE.3A61AC68@iag.net>
Source record: 69090

TRY DOWNEAST MICROWAVE COMPONENTS,THEY HAVE PRETTY GOOD SELECTION OF MMIC'S
HARRY

John Miles wrote:

> Eric wrote:
> >
> > Does anyone know where to buy the MMIC MAR-1 AMP IC in the united
> > states? I once knew where to get these but I forgot the address and
> > phone number.
>
> You can order the MAR amps in small quantities directly from
> Mini-Circuits (http://www.minicircuits.com). They have a nifty
> designers' kit that includes an assortment of the more useful parts. I
> believe http://www.shfmicro.com also sells them (although they're
> somewhat less convenient to do business with since they don't take
> credit cards).
>
> -- jm KE5FX
>
> ----------
> Note: My E-mail address has been altered to avoid spam
> ----------

591. A little more help on duplexers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-20 00:00:00 UTC
From: Dano <webster@express-delivery.net>
Message-ID: <7kjb5k$jij@nnrp2.farm.idt.net>
Source record: 69091

O.K. , I'm on a roll. Went to the "MIT" flea market & found a
??"duplexer"???
It has 6 square tubes mounted together, about 2-1/2 ft long, rec,trans,& ant
ports.
On the other end, each tube has 1 adjustment screw.
So I'm told by one of our local hams, I should go back and buy the bridge
the guy was selling also, cause what I bought is "JUNK".
My question is > will it work good enough for a business band repeater with
5 mhz split.
Dano
P.S>
in case anyone wondering, the factory tag was marked for 154 mhz in, 159mhz
out.
& the make is a Phelps dodge.

592. Re: FOR SALE: TUBES

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-20 00:00:00 UTC
From: bendowers@aol.com
Message-ID: <19990620184439.25156.00001455@ng-ff1.aol.com>
Source record: 69092

bob wrote:>Ben -
>
>I know you know this is not a sale group. Please stop reposting this stuff
>in rec.radio.amateur.homebrew

Shame on you Bob. Did you just post a out of subject posting? You know you are
to handle this type of thing via e-mail.

I'm sorry it bothers you. But. As long as I get replies, I can only assume I am
posting in a correct area. Bottom line. No replies, no interest, postings will
stop. Your buddies in this group can truley stop this if they desire. I will
again be reposting in 3 to 4 days.
Have a good day.
Your freind always.
Benny L Dowers

593. A little more help with duplexers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-20 00:00:00 UTC
From: Dan O'Sullivan <webmaster@northshoreonline.net>
Message-ID: <7kjqo0$8c0$1@news.iptransit.com>
Source record: 69093

O.K. , I'm on a roll. Went to the "MIT" flea market & found a
??"duplexer"???
It has 6 square tubes mounted together, about 2-1/2 ft long, rec,trans,& ant
ports.
On the other end, each tube has 1 adjustment screw.
So I'm told by one of our local hams, I should go back and buy the bridge
the guy was selling also, cause what I bought is "JUNK".
My question is > will it work good enough for a business band repeater with
5 mhz split.
Dano
P.S>
in case anyone wondering, the factory tag was marked for 154 mhz in, 159mhz
out.
& the make is a Phelps dodge.

594. Japanese transistor model codes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-20 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19990620164024704 32@zetnet.co.uk>
Source record: 69094

Perhaps a very silly question .
I have many ex-equipment Japanese transistors with model codes like
A1012 ,D880 , D549 , B383, C805, etc.
With known Jap. models in the 1SA -----2SB --------3SC range ,can
I take it that in the above codes the 1S or 2S or 3S part has been
deleted , or are the codes not related to the S -series designations.

Would appreciate being informed about a site where the said
semiconductors are cross referenced with other (almost) equivalent types .

TIA

Frank GM0CSZ / KN6WH

Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland UK
e-mail : gm0csz.kn6wh@ukrs.org

595. Re: A little more help with duplexers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-20 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7kk191rtc1@autumn.news.rcn.net>
Source record: 69095

It will work fine on a five MHz split. It will not work on amateur 600 KHz splits. Phelps Dodge is now Celewave. If you have a model number, Celewave might be able to help you with technical specs. Based on the size of the unit, it sounds more like a repeater than a mobile duplexer, and probably has some good isolation specs at 5-MHz spacing. It sounds like a full-sized base repeater unit according to your information. It is not junk.

Peter

Dan O'Sullivan wrote in message <7kjqo0$8c0$1@news.iptransit.com>...
>O.K. , I'm on a roll. Went to the "MIT" flea market & found a
>??"duplexer"???
>It has 6 square tubes mounted together, about 2-1/2 ft long, rec,trans,&
ant
>ports.
>On the other end, each tube has 1 adjustment screw.
>So I'm told by one of our local hams, I should go back and buy the bridge
>the guy was selling also, cause what I bought is "JUNK".
>My question is > will it work good enough for a business band repeater with
>5 mhz split.
>Dano
>P.S>
>in case anyone wondering, the factory tag was marked for 154 mhz in, 159mhz
>out.
>& the make is a Phelps dodge.
>
>
>
>
>

596. FT-101 processor installation

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-20 00:00:00 UTC
From: Jacquis <jaclyn@tiac.net>
Message-ID: <7kk4n5$c5j@news-central.tiac.net>
Source record: 69096

Just picked up a processor board for my FT-101. There seems to be a discrepancy between the wires on the board and the wiring harness in the radio. Anyone have info on this installation? Is there anything about it in the service manual ? Thanks in advance for any help ! Jacqui Swenson N1DVE email to: jaclyn@tiac.net

597. Transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-20 00:00:00 UTC
From: Norm Melick <henmel@worldnet.att.net>
Message-ID: <376DB513.53FF0135@worldnet.att.net>
Source record: 69097

I need a H.V transformer for the TEK 556. The part # is
120-0432-00.
If any one has one of these, I'd appreciate an e-mail.

Thanks much.

Norm/KQ6SD

598. F9368PC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-20 00:00:00 UTC
From: Norm Melick <henmel@worldnet.att.net>
Message-ID: <376DB5C3.1911E5BB@worldnet.att.net>
Source record: 69098

I need 2, F9368PC IC's. If anyone has these, I'd really
appreciate an e-mail.

Thanks much,

Norm/KQ6SD

599. MNFAT ATV WEB PAGE

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-20 00:00:00 UTC
From: kable guy minn <n0mnb@minn.net>
Message-ID: <7kmhgngtn1@news.minn.net>
Source record: 69099
Cross-posted to: alt.comp.hardware.homebuilt,alt.comp.hardware.pc-homebuilt,alt.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanne

ANY COMMENTS WELCOMED.

http://come.to/amateurtv.mn

600. Re: Improving/Modifying MFJ tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-20 00:00:00 UTC
From: rwclark@rwclark.seanet.com
Message-ID: <376c3283.12419841@news.seanet.com>
Source record: 69226
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Sat, 19 Jun 1999 18:34:45 GMT, rwclark@rwclark.seanet.com (Richard Clark) wrote:

>A simple example may help.
>
>First a failed attempt (much like Roy's efficient design example
>above):
>Consider two transition lines that are fed (at the near end) in
>parallel; then these lines are re-terminated at the far (load) end in
>a series configuration. Fire up the transmitter and you may even fire
>up the Balun (sic) - certainly no merit in this (especially when the
>fire spreads to the transmitter). Let's amend this faulty
>construction through one of the isolation mechanisms above:
>Consider two transition lines that are fed (at the near end) in
>parallel; these lines are then coiled through a core as
>non-interacting windings, and then re-terminated at the far (load) end
>in a series configuration. Bingo, we have a Guanella 1:4 Balun and
>with the appropriate load it presents very low loss (and a very low
>chance of "firing" up).
>
>It is instructive to note that this last example can be built on the
>conventional single core, but more interestingly it can also be
>constructed from two W2DU style current Baluns. I say interestingly
>because it illustrates the nature of isolation and the series-parallel
>combinations quite clearly. The Ruthroff model of the 1:4, on the
>other hand, is a mind twist to analyze with its three wire
>construction and lacks the elegance of the simple Guanella
>implementation. In fact, it is this third wire that so confounds
>Ruthroff designs. The third wire violates the isolation of the input
>from the output. Now this violation does not condemn it, but it does
>impose constraints against some applications that the Guanella
>performs in quite well. The Ruthroff model may be implemented in the
>style of a W2DU Balun, when the third wire is added and the load
>shifted to bridge the input and output of the W2DU balun. The hazard
>of this is that if done wrong, you could find yourself with an Unun
>instead of a Balun (and as I have loosely described it here, that
>guarantees that possibility is 50% - if not worse. Sorry folks, I
>wish graphics weren't so bandwidth intensive, otherwise illustration
>would be worth 1000 words).
>
>Now to return to the requirement for the transition lines' design Z.
>For my simple example above, where I employ two store bought W2DU
>Baluns in series/parallel, if taken as stated; then we do not have an

>optimal solution. It is arguable how much optimization is needed -
>until we attempt to apply the Balun to where its operational
>boundaries are crossed (an unknown hazard if one casually discards the
>treatment of transition line Z). As this thread was launched with the
>intent of construction techniques rather than buying a solution off
>the shelf, it follows that one may as easily construct one's own W2DU
>style Balun with appropriate transition lines (and cheaper too).
>Knowing that the load is going to be 200 Ohms means that the two
>transition lines must present at least 100 Ohms characteristic Z each
>(100 in series with 100). Knowing the source is going to be 50 Ohms
>means that the two transition lines must present at most 100 Ohms each
>(100 in parallel with 100). If we do it by the math we find the
>design requirement stipulates Z = SQRT(50 * 200). The design Z
>mandates 100 Ohms. The Guanella design thus presents rather more
>simple analysis and construction requirements. To make an optimal
>solution seems to me to involve slightly more effort (by paying
>attention to the Z of the transition line) than a haphazard wind of
>pair of handy wires.
>
>73's
>Richard Clark, KB7QHC

Hi Will & my e-mail correspondents,

Having gone so far, I have been asked to go further (that is with construction ideas and details).

Will, I believe you were intending to work with 450 Ohm transmission line. I doubted that you would find a load that large, but on reflection observed that you were going for a one antenna fits all bands approach where yes, you would encounter huge R's presented to your system.

Sevick presents an entire (actually several) chapter(s) devoted to Hi Z loads, and specifically provides design details for Baluns that transform to loads of 300 Ohms, 450 Ohms, 600 Ohms and 800 Ohms (my interest is in his designs for loads of 3.125 Ohms, 5.56 Ohms, and 12.5 Ohms). I can't respond to my correspondents clamor for design specifics for all of their needs without denying the author his due insofar as royalties. Simply put, order his book "Transmission Line Transformers" in spite of the tepid response evidenced in this thread for his work. As such I must point out to these individuals that I have already discussed the cogent details of construction (less the actual, literal recitation of items used - trust Sevick to be VERY complete in this regard). Further, this is the point of amateur radio (or at least one of the points) do it yourself!

Now, that is not to cast you all adrift with fond wishes of success. So again the cogent points are (again from Sevick):
"Ruthroff and Guanella stated that for the maximum high-frequency response for a 1:4 transformer, the characteristic impedance of the coiled transmission line should be one-half the output resistance and

twice the generator resistance (figs 1-2 and 1-3)....
"At the low frequency end, design considerations focus on the reactance of the coiled transmission line as compared to the impedance level (and hence, the characteristic impedance of the windings)."

These are NOT rocket science requirements. If you reflect on the description of my simple example quoted above, you will observe that common sense prevails and that there are actually very few stumbling blocks to building your own Balun to your own requirements. The hardest part is the transition line (as I have taken to calling it, to distinguish it from those transmission lines (or source/load Z's) that interface to the Balun from either side. As Roy suggests, even here we may be forgiven the transgression of lacking exact implementation. However, I would point out that Sevick also relaxes this requirement, BUT he also provides a rule of thumb that should satisfy even the faintest of heart. That relaxation consists of an equally simple rule: if you cannot (or don't have the heart to) build a specific impedance transition line; then at least build (or use an existing) transmission line that MATCHES THE LOAD (OK, so I guess that means that the faint of heart may as well trust to luck and that pimply sales clerk's recommendation if that line isn't available - or he can't find it behind the counter).

So, to add a third rule: wind that transition winding in the transmission line that you will use to feed the load.

For those hearty adventurers that are willing to invest their effort in building their own transition line, I offer BRAVO! Unfortunately I cannot offer the services of a qualified bench assessment of those lines in the confines found in winding this line around a core. Please observe that Sevick found that his 300 Ohm line acted like 200 Ohms in service. I offer this as a hallmark, but cannot foresee how your design will be delimited in service. I do hope that his experience will serve to encourage you though.

More to the matter, Sevick does provide a way to measure the success of your design. It is not remarkable, but it is (like his other work) serviceable and achievable. It is called the "soak test." Simply put it requires you to build TWO of your designs, connect them back-to-back-to-50 Ohms and key down. As I stated in other postings, you may measure (roughly) the efficiency of your design by the amount of heat generated by it. The "soak test" is exactly this. Presumably (and I am aware how loaded that word is), your two models will either pass the test coolly or provide you entertainment in advance of the 4th of July.

So, buck up and observe the few, but significant keystones to building a serviceable Balun. There is no pedantic requirement for absolute efficiency (as long as you take responsibility for testing its service). About the only topic that remains is that of the core material (unless you are going the air-wound or 1/4 wave route). Here I will back off and suggest you visit Amidon's VENDOR page (at

http://bytemark.com I believe) as this is another variable that I cannot anticipate for all of you. However, even here, you have been offered clues by other contributors to this thread (type 77 comes to mind from Cecil's excellent posting - but again, this is frequency dependant).

The "book larned" requirements are myriad in regard to selection of all parts of a Balun, but keep in mind they devolve to few when you define your needs and this makes the challenge manageable. Again, to recite the key points:
1) select a core material that fits the range of frequency for your service;
2) determine the Z ratio you wish to transform (highly dependant upon your source and load in their application);
3) determine the combination of series and parallel arrangements of a suitable number of transition lines to achieve this ratio (more about this below);
4) select, or build those transition lines employing the simple math of either twin lead or co-axial line Z's (please consult a good reference in this regard - or ask me);
5) determine the number of windings that will "swamp" (or what I called isolate) the load (generally, treating the coiled transition line as a single wire inductor is sufficient to determine this X and R), the rule of thumb is that X+R should exceed the load by at least 5 times (better if 10 times);
6) do the winding, the soldering, and the final soak test.

As for ratios other than 1:4 for a 50 Ohm transformed to 200 Ohms consider how simple it is to achieve 1:9 with the same example found above. Three individual transition lines of Z = 150 Ohms, when isolated by the prescribed methods above, can be put into service with the same simple parallel/series configuration. You may note in my recitation of Sevick's provided examples, that he has some rather odd Load or Source Z specifications (why 5.56 Ohms? why not simply 6 Ohms?). The answer lies in the method of series and parallel combinations being integral (as in Integer) combinations of these same lines (that is 5.56 is 1/9th of 50). Don't let this limit you. Sevick also provides what are called combination designs. Simply put these are cascaded Baluns that when we transform Z we do it again through a second Balun to render yet another Z.

As I've said before, Sevick provides quite a few different models. However he provides only a few different ratios in comparison. His goal was to investigate the variables involved, not provide a cookbook for timid souls. I am sure he also considered his readership to be of high enough calibre to both originate AND TEST their own work. I cannot in this short monograph serve with completeness to this regard - buy the book, or experiment on your own. There is undoubtedly much that I have left unsaid - I will leave those as specifics of implementation rather than design generalities. I have purposely ignored those designs that are Ruthroff models, not because they are

less robust, but because their discussion would bloat this posting beyond belief (and yes, they are less robust, but serviceable for the amateur of high calibre). Again the suggestion of "Buy his book" serves this shortfall (and others).

Do it!

73's
Richard Clark, KB7QHC

601. Vhf antennas...Yagis and jpoles...CHEAP

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-20 00:00:00 UTC
From: n8wwm@aol.com
Message-ID: <19990619221024.14562.00000908@ng-fl1.aol.com>
Source record: 69227

I custom build <1 at a time> some darn nice 2 meter antennas!

3 EL Yagi-30.00 These are all aluminum, gamma fed, nice looking and
working
yagis...The Jpole is all aluminum, goes together
in 2 shakes,
4 EL Yagi-37.00 and is 3/4 wavelength long. These are excellent antennas,

and have sold out at local fests and club
meetings each
5 EL Yagi- 43.00 time I bring 'em.

Jpole<3/4 wave length>-23.00

Each antenna comes with an instruction sheet and all hardware to have it up and running in minutes. The yagis have gamma rod assembled and attached to the driven element. The Jpoles come with pre-drilled set points for tuning at 3 points in the band.

I am not some web scammer, I just like building antennas. You can reach me by this email address, by my call book address, or by sending a note to my call sign at PO Box 2189 Schiller Park, Il 60176.
Chicago area hams may arrange for local pickup.
SHIPPING IS $8.50, regardless of antenna. I will ship 2 of any one for $11.00.

INCLUDE YOUR EMAIL ADDRESS IF YOU ORDER BY MAIL...Checks or Money order payable to Doug Adair only...this is not a big business...I am just having fun and helping new hams not GET RIPPED OFF!

Thanks guys...73 and CU on 6 METERS!!!!!!!!!!!!

602. ERIE caps where on Ebay?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-20 00:00:00 UTC
From: k9sqg@aol.com
Message-ID: <19990619221843.15719.00002280@ng-fp1.aol.com>
Source record: 69228

Just looking and couldn't find them.

603. Re: Material for interdigital filters?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-20 00:00:00 UTC
From: Dennis Sweeney <dsweeney@vt.edu>
Message-ID: <376C96EF.2A2098D7@vt.edu>
Source record: 69229

I have successfully built a number of interdigitated filters between 900 and 2400 MHz using PCB material and aluminum for the side walls. The end bars and the resonator bars were made of brass. My 3 element 1% bandwidth filters at 2400 MHz have approximately 1 dB of loss. This has proven to be more than adequate for amateur applications.

As the frequency increases, the majority of the current flows in a thin layer at the surface of the conductor. This is called the "skin effect" and as long as the metal is a few skin depths thick, it might as well be sold. Tubing will work just as well as solid bars for the resonators and the metal foil on PCB material is plenty thick. Silver (or gold) plating is used to reduce the surface resistance and prevent the formation of high resistance oxides. While lower loss might be obtained with silver plating, it doesn't seem like it is worth the extra effort.

A better indicator of loss is the enclosed volume of the filter. The bigger the filter, the lower the loss. I typically build my filters with 0.5" ground plane spacing and 0.25" diameter rods. Some might argue that lower loss can be obtained with slightly smaller rods. They are probably correct, but again it is probably not worth the effort. Half inch bar and quarter inch rod stock are easy to come by. Also narrowband filters tend to have higher loss and the loss goes up with the number of resonators.

When I build filters with solid resonator bars, I use a screw through the end wall into the end of the resonator. This will work with either aluminum or brass. When I make filters with tubing, I often solder the tubes into the end bars. The brass can be easily solder.

Have fun making filters,

Dennis Sweeney
WA4LPR

Peter Bolch wrote:
>
> Hi,
>
> have the walls of interdigital filters (f around 1.5 GHz) to be made of
> thick metal sheets or will the 35 or 70 um copper of PCBs do as well?
>
> I think of constructing such filters of rectangular brass rods (sidewalls)
> and sheet metal (bottom and cover) screwed tightly together. Will this do if
> utmost performance isn't needed? How about using (not anodized) aluminium
> instead of brass? Aluminium rods would be much easier to get.
>

> Peter

604. Heathkit Mohican Rx info required

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-20 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7kin2c$fi5$1@uranium.btinternet.com>
Source record: 69230

I recently bought a Heathkit mohican HF receiver and am looking for any info
such as circuit diagrams, etc.
Please email me if you can help. d.l.c@btinternet.com

Best wishes from john cunningham.

605. Re: MFJ 40 meter QRP rig

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-20 00:00:00 UTC
From: kilroy <kilroy@SPAMTRAPfuse.net>
Message-ID: <929882644.499.85@news.remarQ.com>
Source record: 69231

The MFJ 40 meter rig was my first 'real' ham setup. I talked (well, cw'ed) for a couple of years with it. Contacts from S. Ohio to Ca, Tx, Mi, and one broken QSO to a ham in the UK.
I had a lot of fun with that rig and still take it along when I'm travelling.
kilroy
KC8HPG

--
NOTE: Email address is bogus!
Remove SPAMTRAP for valid address
Jspiker wrote in message <19990615225441.17332.00000016@ng-ff1.aol.com>...
>Anyone using the MFJ 40 meter QRP rig?
>I'm considering purchasing one and would like your feedback on this!
>Is it worth the money? Can you make contacts on it?
>
>Jspiker@aol.com

606. Re: Cortland NY Hamfest 6/12/99

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-21 00:00:00 UTC
From: barryo@fastlink.com.au
Message-ID: <376d976a.2008325@genenews.acay.com.au>
Source record: 69100
Cross-posted to: ithaca.marketplace,cornell.marketplace,alt.ham-radio.marketplace,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Talk about advance warning. :)

Barry
==========
Please send me an email copy if you reply to this post.
Web page: http://www.acay.com.au/~barryo

607. WTB: Junk DX-302 or IC M54826P

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-21 00:00:00 UTC
From: robertc908@aol.com
Message-ID: <19990620214718.04334.00000821@ngol04.aol.com>
Source record: 69101

I am in need of a junk DX-302 receiver, as long as the frequency counter (the khz display) works. Or will purchase any M54826P frequency counter chips you may have. Please e-mail direct.

73's
Bob, W4RLC
73's
Bob, W4RLC (formerly WA7OGU)

608. HW101 RIT Mod.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-21 00:00:00 UTC
From: k8bvj@webtv.net
Message-ID: <7100-376DD2DE-107@newsd-231.iap.bryant.webtv.net>
Source record: 69102

Hi Fellas----Does ayone have that RIT mod available (schematic) tnx Jack
K8BVJ

609. converting cd-rom to audio cd player

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-21 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7kkni0$7kl$1@uranium.btinternet.com>
Source record: 69103

I have an old SCSI cd rom, the type which is an external mains powered unit rather than one which fits into a spare slot in a computer, and wish to use it to play audio cds without having to connect it to the computer. There are 2 RCA sockets on the back for audio output, and 2 SCSI connectors. I am assuming that I will be able to make cd-rom drive perform functions such as play, skip,stop etc. by feeding a 5v pulse to the appropriate pin on the SCSI connector.

Can anyone confirm this, and provide a pinout for the SCSI connector?

610. Re: A little more help on duplexers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-21 00:00:00 UTC
From: paul <paul@greenrover.demon.co.uk>
Message-ID: <8A8Z2PAncfb3EwKy@greenrover.demon.co.uk>
Source record: 69104

>Further up the thread, Dano <webster@express-delivery.net> wrote:
>O.K. , I'm on a roll. Went to the "MIT" flea market & found a
>??"duplexer"???
>It has 6 square tubes mounted together, about 2-1/2 ft long, rec,trans,& ant
>ports.
>On the other end, each tube has 1 adjustment screw.
>So I'm told by one of our local hams, I should go back and buy the bridge
>the guy was selling also, cause what I bought is "JUNK".
>My question is > will it work good enough for a business band repeater with
>5 mhz split.

>in case anyone wondering, the factory tag was marked for 154 mhz in, 159mhz
>out.
>& the make is a Phelps dodge.

First off, Phelps never made Junk :-)

OK I'm not sure what you want to use this duplexor for, but assuming you want to re tune it to your desired frequency you will need a tracking generator and analyser. I presume you haven't got one or you would already know this.

You *can* use a receiver and signal generator to tune the filter but you need practice and in truth the results are rarely as good as a properly aligned filter.

You can set the notches as best as you can by putting the signal generator into the opposite port and tuning the notch for best rejection. (i.e. minimum signal)

What you are trying to achieve is rejection of the TX frequency on the RX port and a hole in the TX filter tuned to the RX frequency.

If you tune it like this and the filter isn't duff, the pass band will look after itself.

Don't forget to terminate any un used ports in 50R whilst tuning.

Typically 60-70 db of isolation is possible and the band pass section insertion loss will be about 1db.

If you can't achieve these figures DON'T try to use the filter on the radio.

I would recommend that you find a local PMR technician who will have the required gear in the back of his van, ask him nicely for help and watch how he tunes the filter. Once you have done a few they are easy but the first ones you might need guidance....

HTH

Regards
--
Paul G8IZR

http://www.greenrover.demon.co.uk

611. Re: P.O.W. "tap" code compared to Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-21 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <376e3d4a.170063179@news.erols.com>
Source record: 69105

Gary: Thanks for the very interesting posting. The click and clack explanation clarified something I've been wondering about for a while.

You mention the 5 distinct symbols of Morse. Let's see: dot, dash, space between dot/dash, space between letters.... What's the fifth one?

73 Bill N2CQR
http://www.erols.com/wmeara

On Sun, 20 Jun 1999 13:15:34 GMT, ke4zv@bellsouth.net (Gary Coffman) wrote:

>On Thu, 10 Jun 1999 23:42:53 -0400, srh@iname.killspam.com (Stephen R Holmes) wrote:
>>Thank you, Jim, for a very interesting post. I had always mistakenly
>>assumed that a variation of "Continental Morse" (the old clicking
>>telegraphy mode) was used, and have always been frustrated that despite
>>reasonable skills in conventional Morse, I've never been able to train my
>>ear to "hear" telegraphy. Your explanation makes it clear -- and helps
>>to reduce my frustration level! :-)
>
>Continental Morse is what we use on the radio today. American Morse was
>used on US landlines. Continental Morse was used on landlines in Europe.
>Both were originally "clicking" codes. When radio came along, Continental Morse,
>renamed International Morse, was adopted as the standard radio code. Some of
>the characters are different. For example, C, which is dahdidahdit in Continental
>Morse is didi<short space>dit in American Morse.
>
>Landline sounders gave a distinctively different sound for the make and
>break of each element. It was a click-clack. The timing between the click
>and the clack determined whether a dit or dah was sent. It is necessary
>that the make and break have different sounds, otherwise you can confuse
>an intracharacter space with a dit and a letter space with a dah. On radio
>we use tones of different duration, and the absence of tone, to convey the
>code elements. The absence of tone is as important as the tone to the code,
>just as the click and the clack are important to the landline sounder system.
>You can't reliably copy code that's just clicks any more than you can copy
>code that's just tone. You have to be able to tell make from break.
>
>Discerning the absence of tone against the noise background can be difficult
>for weak signals (or fading signals). The best way to do that is to use two tones,
>ie FSK. That way energy is sent for all of the code elements. In fact that was done
>with the old arc transmitters where the arc couldn't be conveniently broken and
>re-established rapidly. A reactance was switched across the tuned circuit to key it

>FSK, one frequency for dits and dahs, another frequency for the intracharacter,
>intercharacter, and word spaces. It works better than on off keying (6 dB better),
>and can be copied by ear by anyone who is not tone deaf.
>
>Morse is a quintenary code, ie it has 5 distinct transmission symbols. It only
>voices two of them when on-off keying (OOK) is used. The other three have to be
>inferred against the noise background. That hurts its weak signal performance.
>Voicing all the symbols improves matters. Voicing them distinctly in signal
>space would be best, ie rather than just using two level FSK, a 5 level M-ary
>modulation would be even better.
>
>If you then use uniform length transmission symbols, ie a different code, you
>have RTTY and all other modern methods of text transmission. Because the
>elements are uniform length, you can form a matched filter for them, and weak
>signal performance is further improved over an irregular coding like Morse.
>(At least 9 dB better, more than that if you use FEC techniques too.)
>
>We usually use that advantage to allow us to run much faster rather than to
>work weaker signals. But if we slow a modern code down to the speeds used
>by Morse operators, we can work at weaker signal levels than the Morse operator.
>A good example is Voyager, which works over a 9 billion mile path with less than
>5 watts of power. It operates at 10 bps (about 12 WPM). OOK Morse could not be
>detected by ear at the signal level of Voyager. Machine methods couldn't do
>it either. Only changing to a different modulation and coding allows such weak
>signal work to occur.
>
>I bring this up because I've been experimenting with a 10 bps QPSK system
>on 30m for the past couple of years that works when I can't detect the presence
>of a signal by ear. It is conceptually similar to PSK31, but slower, and doesn't
>employ varicode compression. The main drawback to such extremely weak
>signal methods is that very good frequency stability is required of the transmitter
>and receiver.
>
>For hams, another drawback is that finding stations calling "CQ" can be difficult
>because they're too weak to hear. You have to depend on the signal processor
>to tell you a signal is present when you tune, very slowly, across the band. PSK31
>is a better compromise for hams. It has to be strong enough to detect by ear, or
>at least on the waterfall display, to work, and the faster speed is beneficial to
>conversation too. We rarely have a need to work at the most extreme weak signal
>level.
>
>(Sorry for the topic drift, I got carried away. Coding and modulation methods
>is one of my favorite topics.)
>
>Gary
>Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
>534 Shannon Way | We break it |
>Lawrenceville, GA | Guaranteed |

612. Re: Homebrewing scope probes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-21 00:00:00 UTC
From: Will White <wcw@asu.uswest.net>
Message-ID: <376E1B2A.DF1D311@asu.uswest.net>
Source record: 69106
Cross-posted to: sci.electronics.design,Rec.radio.amateur.homebrew

```
--
Will White, KD7BFX

to reply, please click this link mailto:wcw@asu.uswest.net
```

613. Best books to get on a solid footing homebrewing with tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-21 00:00:00 UTC
From: Will White <wcw@asu.uswest.net>
Message-ID: <376E1E2B.EFCA94D3@asu.uswest.net>
Source record: 69107

Well, I seem to have exhausted the WWW in searching for written material on glowbugs. Harry's Homebrew Page seems to be the best, at least fairly large, orderly, and with a friendly host. So, what I need is a list of about 10 or so solid books introducing principles of tubes and RF, presenting a few circuits for construction and study, and giving heavy info on troubleshooting and modifications (say I start with a MOPA crystal-controlled TX and want to add a VFO, that sort of thing). I know about the Radiotron Designer's Handbook {sic} and Bill Orr's Radio Communications Handbook (still looking for both of those at a price a grad. student can afford, in any complete condition), but there *must* be many more, of 40's and 50's editions especially, that I need to know about. So, what are they?
--
Will White, KD7BFX

to reply, please click this link mailto:wcw@asu.uswest.net

614. FT-101 help proc. install

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-21 00:00:00 UTC
From: Jacquis <jaclyn@tiac.net>
Message-ID: <7kl8rk$tg@news-central.tiac.net>
Source record: 69108

Got a processor board for my FT101EE. I can match up the colors from the harness to the board, simple enough ! After doing this there were two pairs of wires on the radio harness (white/yellow & white/gray soldered together the other pair white & red soldered together) Looked like the bypass loop for the rig when it ran without the processor option. Unsoldering these resulted in matching up the white/yellow, white/grey and red wires to those from the board. Now I have a white wire left ! There was no white wire from the board I bought and I was wondering where this wire will call its new home on the board. With just the operators manual I am a little lost since it does not mention the upgrade proc. option installation. It seems the white wire has around +12v on it and the board has a white/orange going to the +12v terminal on the board. The way it is now the unit allows the rig to modulate but without any processing so It must be ok for the most part (since the op-manual describes the circuit as an amplifier in the proc/off position). It does this (but with increased ALC sensitivity) so I am close but no better than without the board. Has anyone installed one of these or can see where the white wire goes to on the pro. bd. in their rig? There is that white wire with a very faint yellow marker connected so don't let this be confused with the plain white. Appreciated any help ! Jacqui N1DVE jaclyn@tiac.net

615. Re: P.O.W. "tap" code compared to Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-21 00:00:00 UTC
From: Jonesy <jonz@rmi.nospam.net>
Message-ID: <7klfa8fjm1@news1.rmi.net>
Source record: 69109

Bill Meara <wmeara@erols.com> wrote:

: You mention the 5 distinct symbols of Morse. Let's see: dot, dash,
: space between dot/dash, space between letters.... What's the fifth
: one?

Well , now , could it be spacing between words?

And, trim your followups, please. We thank you.

Jonesy W3DHJ

--
Marvin L. Jones
Gunnison, Colorado
193 days to go until the Year 2000 -- So what!
559 days to go until the 3rd Millennium of the C.E.

616. Want to build a repeater

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-21 00:00:00 UTC
From: John Wheeler <kd5bcu@nospam.sydcom.net>
Message-ID: <929973060.074.80@news.remarQ.com>
Source record: 69110

My brother is a member of a Volunteer Fire Dept. The Powers-That-Be, in all of their infinite wisdom, have decided to move the repeater that the VFD used to a better location. Better for who? Obviously not the VFD. Anyway, on to the meat of the problem. Since the repeater has been moved, the handheld radios that the VFD uses can't reach the new location. They have a number of old single channel mobil radios ranging from 100-140 watt output. They also have a couple of towers that they can use. The question is this: What all would be involved in building a repeater? Keep in mind that this is a volunteer organization and whatever they do, needs to be done as cheaply as possible, but also needs to be done in a reliable manner.

Any suggestions are greatly appreciated.
Remove Nospam from my email to respond directly.

John
kd5bcu

617. WTB: looking for a dead HP86290B p.i.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-21 00:00:00 UTC
From: ik1osg <b.sacco@rai.it>
Message-ID: <7klgibpmi1@serv1.iunet.it>
Source record: 69111
Cross-posted to:
it.hobby.elettronica.riparazioni,it.hobby.radioamatori,rec.radio.amateur.homebrew,sci.electronics.repair,uk.radio.amateur

.. to fix the one I have!
Please e-mail me your offer.

ik1osg

b.sacco@rai.it

618. Re: Best books to get on a solid footing homebrewing with tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-21 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19990621123152.26265.00002354@ng-ba1.aol.com>
Source record: 69112

>Subject: Best books to get on a solid footing homebrewing with tubes
>From: Will White <wcw@asu.uswest.net>
>Date: Mon, 21 June 1999 07:12 AM EDT
>Message-id: <376E1E2B.EFCA94D3@asu.uswest.net>
>
>Well, I seem to have exhausted the WWW in searching for written material on
>glowbugs. Harry's Homebrew Page seems to be the best, at least fairly large,
>orderly, and with a friendly host. So, what I need is a list of about 10 or
>so
>solid books introducing principles of tubes and RF, presenting a few circuits
>for construction and study, and giving heavy info on troubleshooting and
>modifications (say I start with a MOPA crystal-controlled TX and want to add
>a
>VFO, that sort of thing). I know about the Radiotron Designer's Handbook
>{sic}
>and Bill Orr's Radio Communications Handbook (still looking for both of those
>at a price a grad. student can afford, in any complete condition), but there
>*must* be many more, of 40's and 50's editions especially, that I need to
>know
>about. So, what are they?

Hello Will,

Here are some suggestions:

- The ARRL Handbook - Issues from about 1952 to 1966 are the prime ones for hollowstate stuff.

- Understanding Amateur Radio - An ARRL book from the early '60s meant for the beginner. Good explanations.

- A Course in Radio Fundamentals - An ARRL book on radio basics.

- Reference Data for Radio Engineers - An IEEE/IRE book in various editions. '50s versions are the best.

- Radio Engineering (I think that's the title) by Fred Terman.

- RCA Receiving Tube Manual and RCA Transmitting Tube Manual - Late '50s and early '60s editions are the best.

Radiotron is available on CD-ROM, I'm told.

A collection of old QSTs is invaluable, too, or get the CD-ROMs.

What sort of pojects are you looking to build? Perhaps I can help with questions.

73 de Jim, N2EY

.

619. Re: P.O.W. "tap" code compared to Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-21 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <37786a44.162059397@news.atl.bellsouth.net>
Source record: 69113

On Mon, 21 Jun 1999 13:29:47 GMT, wmeara@erols.com (Bill Meara) wrote:
>Gary: Thanks for the very interesting posting. The click and clack
>explanation clarified something I've been wondering about for a
>while.
>
>You mention the 5 distinct symbols of Morse. Let's see: dot, dash,
>space between dot/dash, space between letters.... What's the fifth
>one?

Word space.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

620. Re: FS: HomeBrew Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-21 00:00:00 UTC
From: Alan Price <career1@home.com>
Message-ID: <376E7748.45954C43@home.com>
Source record: 69114

I could be interested. Please send me some pictures.
73
Alan
W1HYV

TH wrote:
>
> FS: HomeBrew amp with a pair of 572B's. New tubes put in the amp about
> 1 1/2 months ago. The amp can be wired for 220 by moving 2 jumpers.
> Currently is wired for 110. The amp is in good working condition and
> the reason I am selling is because I received a brand new AL-811H as a
> gift from the XYL. The amp will cover 15,17,20,30,40 80and 160 meters.
> If interested in seeing some pic's, contact me by e-mail at
> mailto:terryh@bayou.com I am asking $300.00 firm. Buyer pays
> shipping.
>
> 73's
> Terry W1MRC
> http://www.bayou.com/~terryh/

621. What Impeadance is this coax

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-21 00:00:00 UTC
From: mike@corn2.freeserve.co.uk
Message-ID: <376e79af.1234878@news.freeserve.net>
Source record: 69115

Hi There Folks, I bought a load of 'rather nice' coax at a flea
market on sunday. I thought it was 75R stuff but now I'm not too sure.

My chart for approximating coax impeadance seems to indicate about
100R , what do you think?

diameter of inner core - .021"
diameter of ptfe inner insulation - 0.142"
outside dia of sleeve - 0.225"

The inner seems to be either hard drawn copper, or copper coated steel
the inner insulation is a solid ptfe
the outer braid is firstly a copper coloured sheetmetal of 0.0015"
thick , followed by very fine braiding on top.
and the outer sheath is some sort of hard grey plastic

any idea's what it is, either type number or approx spec would be
useful.

Many Thanks.. Mike W G8NXD
mike@corn2.freeserve..co.uk

622. - 78 turns/minute records - RIAA correction?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-21 00:00:00 UTC
From: on5wv@RadioLink.net
Message-ID: <376e90b4.23046137@news.skynet.be>
Source record: 69116

Anyone knows if RIAA-correction was used for old 78 turns per minute records?

623. Re: What Impeadance is this coax

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-21 00:00:00 UTC
From: Dieter Mayr <d.mayr@salzburg.co.at>
Message-ID: <376E92B5.33AA0ABF@salzburg.co.at>
Source record: 69117

Mike W wrote:

> Hi There Folks, I bought a load of 'rather nice' coax at a flea
> market on sunday. I thought it was 75R stuff but now I'm not too sure.
>
> My chart for approximating coax impeadance seems to indicate about
> 100R , what do you think?
>
> diameter of inner core - .021"
> diameter of ptfe inner insulation - 0.142"
> outside dia of sleeve - 0.225"
>
> The inner seems to be either hard drawn copper, or copper coated steel
> the inner insulation is a solid ptfe
> the outer braid is firstly a copper coloured sheetmetal of 0.0015"
> thick , followed by very fine braiding on top.
> and the outer sheath is some sort of hard grey plastic
>
> any idea's what it is, either type number or approx spec would be
> useful.
>
> Many Thanks.. Mike W G8NXD
> mike@corn2.freeserve..co.uk

Hi Mike

I put your data in the program "Hamcalc" (by G. Murphy, VE3ERP)
and get the follwing results:
Impedance 79 Ohm
Capacitance 18.62 pF/ft.
Inductance 0.116 ï¿½H/ft.
Velocity Factor 0.69

Hope this will help

73 de OE2CDM
Dieter

624. Re: What Impeadance is this coax

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-21 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <376E932D.F52755C2@teleport.com>
Source record: 69118

From the dimensions you give, the Z0 works out to 79 ohms. (Perhaps you neglected the effect of the dielectric in your calculations.) So it's probably 75 ohm cable. I didn't find anything like it in the Belden catalog, but you might check their web site, and those of other cable manufacturers if you want a part number.

Copper-clad steel is commonly used for the inner conductor of small 75 ohm cable. You can cut a piece off and check it with a magnet, but it won't make any difference from an electrical standpoint except at very low frequencies (probably low MF and below) unless the inner conductor is stranded. (If it's stranded, the copper may be thin enough to cause increased loss at lower HF and below.)

Roy Lewallen, W7EL

Mike W wrote:
>
> Hi There Folks, I bought a load of 'rather nice' coax at a flea
> market on sunday. I thought it was 75R stuff but now I'm not too sure.
>
> My chart for approximating coax impeadance seems to indicate about
> 100R , what do you think?
>
> diameter of inner core - .021"
> diameter of ptfe inner insulation - 0.142"
> outside dia of sleeve - 0.225"
>
> The inner seems to be either hard drawn copper, or copper coated steel
> the inner insulation is a solid ptfe
> the outer braid is firstly a copper coloured sheetmetal of 0.0015"
> thick , followed by very fine braiding on top.
> and the outer sheath is some sort of hard grey plastic
>
> any idea's what it is, either type number or approx spec would be
> useful.
>
> Many Thanks.. Mike W G8NXD
> mike@corn2.freeserve..co.uk

625. ComFocus Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-21 00:00:00 UTC
From: stoskopf@tri.NET
Message-ID: <376E9B06.7540D853@tri.net>
Source record: 69119

I bought one of the ComFocus radios at Dayton in 1994. This was a RX only Kachina with similar bells and whistles. The company seems to have quickly gone belly up so support is gone. I just dumped the Win 3.1 box I used on the workbench and now find that I can't run the software under Win98. Can't get it to load some of the files to Windows.

Anyone have a clue where the assets went? Anyone have the install disks that I can get a copy of in case mine are corrupted.

Perils of buying a low SN device.

Thanks,

N0UU

626. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-21 00:00:00 UTC
From: Butch Magee <butchkay@netdoor.com>
Message-ID: <376E9FA7.8644B80C@netdoor.com>
Source record: 69120
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

> I think the tube rigs will stand a better chance of survival from EMP than
> transistors. I recall some of the engineers and physicists betting on the
> survivability of each. On the tests I was part of none of the electronics
> sufferred, but then we didn't hit 'em with 4-500 amps either.

Butch

> >-John S., W3IKG
>
> My understanding was that a nuclear explosion in free space yeilded
> mostly EMP or hugh ammounts of energy as an electromagnetic pulse.
> This was supposedly the idea behind the Soviet plan for a high
> altitude burst over the US of a single (or a few widly spaced) warheads
> prior to a main attack. It may also have been influenced by the fact
> that
> felt a single projectile could be 'talked through' before the US went to
> a retaliate mode. In any case, the EMP was supposedly able to burn
> out a lot of electrical systems for hundreds of miles. Even car
> alternators
> and such.
>
> But technology has changed a lot since the 60's. Back then, tube
> technology (which was pretty much 'voltage' amps and high
> impedance) wasn't as protected as a lot of todays technology. Would
> most devices bite the big one? Probably, but they would also be a lot
> of survivabilty that you wouldn't expect. Today the power grid is
> probably
> LESS sensitive to a massive overload. The technology for handling
> 'events' such as lightning strikes is much improved. In that regard
> alone
> it might be a neat idea to just contact a power company and ask them
> how they have changed since the 60's.
>
> I was told a ground busrt doesn't yield near the EMP of an air burst.
> But that's not to say it still won't knock out tons of equipment.
>
> Mike

627. Re: - 78 turns/minute records - RIAA correction?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-21 00:00:00 UTC
From: "Mogens Kristiansen, OZ1CXX" <gribben@post.tele.dk>
Message-ID: <7kmc9f$fk0$1@news.inet.tele.dk>
Source record: 69121

Dear Kawaya.
I don't think they made 78's after the RIAA curve was invented.
Read more at:
http://www.tanker.se/lidstrom/riaa.htm

73 de OZ1CXX, Mogens
mmk@esb-amu.dk

Kawaya skrev i meddelelsen <376e90b4.23046137@news.skynet.be>...
>
>Anyone knows if RIAA-correction was used for old 78 turns per minute
>records?

628. FS:Tubes Tubes and more Tubes!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-21 00:00:00 UTC
From: Meadowlands Communications <meadowcomm@erols.com>
Message-ID: <7kmdqtkiv1@autumn.news.rcn.net>
Source record: 69122
Cross-posted to: alt.ham-radio.marketplace,att.ham-radio,aus.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave

The following tubes are new and in boxes. Best offer for any or all accepted. Quantity is one (1) unless noted. $1.00 will be added to any order for shipping. 73 de Chris 201-896-8770 meadowcomm@erols.com.

HAZELTING CORP
5726/6AL5W (5)

RCA
0A2
0B2
2E26 (6)
5R4GY
5Y3GT (5)
5Y3GTG (VT197A) (13)
6AK6
6AL5 (2)
6AN8A
6AQ5A
6AQ6
6AW8A
6AX5GT
6BA6/EF93 (3)
6BJ7 (USED)
6BQ7A/6BZ7/6BS8
6BY6 (3)
6BZ8 (2)
6C4
6CB6A
6CG8A
6CL6
6DZ7
6EA8
6H6
6K6GT
6L6
6SA7 (2)
6SC7
6SG7 (2)
6SJ7
6SK7
6V6GTG (VT107A) (6)
809
826 (223A) (5)

12AB5
12AU7A
12AT7 (3)
12BE6
12BW4
12BY7A (2)
1614
6146 (USED - TESTS OK)
6360
7054
7061
9006 (3)

SYLVANIA
6AU6
JAN-CHS-3ADP1
JAN-CHS-6L6GA (2)
JAN-CKR-6SN7GT (VT231) (6)

WESTERN ELECTRIC
276-A (263403)

629. Need info on Kay 4430BHA Attenuator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-21 00:00:00 UTC
From: owens@ale.atd.ucar.edu
Message-ID: <7kmcud$sq2$1@ncar.ucar.edu>
Source record: 69123

I found a Kay 4430BHA attenuator in the local surplus store.
It has a 15 pin connector for controlling the internal relays.
I'm looking for info on this unit-especially the control format
for controlling the internal relays. It does have 120v AC on the
DB-15 connector. Anyone have any info on this unit?

Thanks! Chip NW0O
--
Chip Owens (owens@atd.ucar.edu)

630. Re: P.O.W. "tap" code compared to Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-21 00:00:00 UTC
From: Elisa Meara <wmeara@erols.com>
Message-ID: <376EB926.36EC@erols.com>
Source record: 69124

Gary Coffman wrote:
>
> On Mon, 21 Jun 1999 13:29:47 GMT, wmeara@erols.com (Bill Meara) wrote:
> >Gary: Thanks for the very interesting posting. The click and clack
> >explanation clarified something I've been wondering about for a
> >while.
> >
> >You mention the 5 distinct symbols of Morse. Let's see: dot, dash,
> >space between dot/dash, space between letters.... What's the fifth
> >one?
>
> Word space.
>
> Gary
> Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
> 534 Shannon Way | We break it |
> Lawrenceville, GA | Guaranteed |

Thanks Gary. It was early in the morning!
On the same subject, there was an interesting letter to the editor in today's Wall Street Journal. A follow-up to their front page article on the great Morse debate. Fellow described how Morse was used by prisoners sending messages via the plumbing. In this system there were no clicks and clacks to distinguish, so the dot was a single tap and the dash was a scrape along the pipe. Interesting.

73 Bill N2CQR

631. Re: Portable Low Power Generation ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-21 00:00:00 UTC
From: Muck <muck@mdbs.com>
Message-ID: <376EBE87.AFE2A078@mdbs.com>
Source record: 69125

"Keith E. Spainhour" wrote:
>
> . . .
> the small motors used in the positioner (arm) are
> permanent magnet DC motors. They make great
> generators. . . .

Are you saying that "any" permanent magnet DC motor can be used
as a generator?

The lawnmower engine with alternator idea (that several have
suggested) is good, but too bulky and heavy for what I'm working
on. I'm looking for something smaller than a car alternator, but
bigger than a bicycle light generator.

A motorcycle alternator might be closer, but I think most of those
run 6V when I need more than 12V.

632. Re: What Impeadance is this coax

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-21 00:00:00 UTC
From: Dale Parfitt <parinc@bellsouth.net>
Message-ID: <376EC954.6C62AF10@bellsouth.net>
Source record: 69126

Mike W wrote:

> Hi There Folks, I bought a load of 'rather nice' coax at a flea
> market on sunday. I thought it was 75R stuff but now I'm not too sure.
>
> My chart for approximating coax impeadance seems to indicate about
> 100R , what do you think?
>
> diameter of inner core - .021"
> diameter of ptfe inner insulation - 0.142"
> outside dia of sleeve - 0.225"
>
> The inner seems to be either hard drawn copper, or copper coated steel
>
> the inner insulation is a solid ptfe
> the outer braid is firstly a copper coloured sheetmetal of 0.0015"
> thick , followed by very fine braiding on top.
> and the outer sheath is some sort of hard grey plastic
>
> any idea's what it is, either type number or approx spec would be
> useful.
>
> Many Thanks.. Mike W G8NXD
> mike@corn2.freeserve..co.uk

I get 76 Ohms assuming The dielectric constant of ptfe=2.5- that's close I don't have that memorized. We don't need to know the outside diameter of the shield.

Dale W4OP

633. Re: Heater in YIG oscillator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-21 00:00:00 UTC
From: rick@area.com
Message-ID: <7kmn1s$oa2$1@vax.area.com>
Source record: 69127

In article <376B57A7.5F56@pop.removethistomailme.net>,
John Miles <jmiles@pop.removethistomailme.net> wrote:
>Peter Bolch wrote:
>>
>> Hi,
>>
>> what's the purpose of the heater in some (most?) YIG oscillators? Reduction
>> of the drift of frequency only? So do I have to use the heater if the
>> frequency is controlled by a PLL?
>>
>> Peter

That is part of it, but there are other reasons for heating.
Spurious modes can occur at certain temperatures. By choosing an
oven temperature that does not support these modes eliminates the
problem. Turning off the oven makes the oscillator vulnerable to
these modes. If you want to go heaterless you should tune the
oscillator over its whole range as you slowly warm it up from say
60 degrees F to 80 degrees F, or whatever ambient range you will
be using. See if it behaves itself in all cases.

Rick Karlquist N6RK
rick@area.com

634. Re: Portable Low Power Generation ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-21 00:00:00 UTC
From: Wineteer Family <wz7w@inteliport.com>
Message-ID: <7kldo9$f5$1@jaffa.itower.net>
Source record: 69128

The alternator plan mentioned is pretty viable. To simplify your project
you can get a chevy one-wire alternator. V-reg is built in, not too great
to work on, but initial setup would go a little quicker. The model a/c
engine sounds interesting because the glowplug won't make spark noise.
Cooling might be a problem though

In article <376D2524.3B9C895F@mdbs.com>, Muck <muck@mdbs.com> wrote:

> Jonesy wrote:
>
>> Muck <muck@mdbs.com> wrote:
>> : I'm looking for a low power electrical generator.
>> : It needs to be mechanical, not solar.
>>
<snip>

635. Re: Japanese transistor model codes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-22 00:00:00 UTC
From: Paul <pmartin@bright.net>
Message-ID: <376F308B.84AC5EC6@bright.net>
Source record: 69129

The Japanese numbers I've looked up in the past always have cross referenced
to the same as a 2S prefix. On that experience I always assumed they just
dropped the 2S to save space or whatever. 73.

Frank Dinger wrote:

> Perhaps a very silly question .
> I have many ex-equipment Japanese transistors with model codes like
> A1012 ,D880 , D549 , B383, C805, etc.
> With known Jap. models in the 1SA -----2SB --------3SC range ,can
> I take it that in the above codes the 1S or 2S or 3S part has been
> deleted , or are the codes not related to the S -series designations.
>
> Would appreciate being informed about a site where the said
> semiconductors are cross referenced with other (almost) equivalent types .
>
> TIA
>
> Frank GM0CSZ / KN6WH
>
> Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland UK
> e-mail : gm0csz.kn6wh@ukrs.org
>
>
>

636. Re: FS: HomeBrew Amp/SOLD

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-22 00:00:00 UTC
From: terryh@bayou.com
Message-ID: <CICb3.24$A3.187914240@news.bayou.com>
Source record: 69130

SOLD

terryh@bayou.com (TH) wrote:

>FS: HomeBrew amp with a pair of 572B's. New tubes put in the amp about
>1 1/2 months ago. The amp can be wired for 220 by moving 2 jumpers.
>Currently is wired for 110. The amp is in good working condition and
>the reason I am selling is because I received a brand new AL-811H as a
>gift from the XYL. The amp will cover 15,17,20,30,40 80and 160 meters.
>If interested in seeing some pic's, contact me by e-mail at
>mailto:terryh@bayou.com I am asking $300.00 firm. Buyer pays
>shipping.

>73's
>Terry W1MRC
>http://www.bayou.com/~terryh/

637. Radio CAS location

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-22 00:00:00 UTC
From: John <webmaster@express-delivery.net>
Message-ID: <7kn67s$ae7$1@news.iptransit.com>
Source record: 69131

I'm looking in a couple radio's to use for a reciever in a repeater.
Can anyone give me an idea where to look for the sourse that a controler is
hooked up to. Im not much for knowing the terms used, so telling me what
stage to look for wont help.
thank you

638. ��� ⊠ ��. ⊠ ERICSSON

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-22 00:00:00 UTC
From: Fyodor Bundurin <fyodor@bundurin.tranzit.donetsk.ua>
Message-ID: <01bebc72$26e83b80$b4c2b8c3@ed>
Source record: 69132
Cross-posted to: donbass.commerce,donbass.commerce.fido,rec.radio.amateur.homebrew,relcom.commerce,relcom.commerce.chemical,relcom.commerce.communications,relcom.commerce.computers,relcom.commerce.computers.ctrlsystems,relcom.commerce.construction,relcom.commerce

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⊠ (06232) 984-17
E-mail fyodor@bundurin.tranzit.donetsk.ua
www.tranzit.donetsk.ua/ii

639. ������ ������ - 3 ����, ���. ��. ���

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-22 00:00:00 UTC
From: Fyodor Bundurin <fyodor@bundurin.tranzit.donetsk.ua>
Message-ID: <01bebc72$aa5148e0$b4c2b8c3@ed>
Source record: 69133
Cross-posted to: donbass.commerce,donbass.commerce.fido,rec.radio.amateur.homebrew,relcom.commerce,relcom.commerce.chemical,relcom.commerce.communications,relcom.commerce.computers,relcom.commerce.computers.ctrlsystems,relcom.commerce.construction,relcom.commerce

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640. 10GHz modules and a tractor!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-22 00:00:00 UTC
From: Dave Bullock <daveb@ihr.mrc.ac.uk>
Message-ID: <376F7DD9.1025B2DD@ihr.mrc.ac.uk>
Source record: 69134

There are a lot of rumours here in the UK about some 10GHz modules used
in the USA in conjunction with GPS and a tractor for keeping tally of
crop spraying, gallons per acre, seeds per drill etc.
The rumours are that the modules are good for Amateur use.
Any substance to these rumours??
If so where do we get them??
--
* * * * * * * * * * * * * * * * * * * *
* Dave Bullock *
*
* daveb@ihr.mrc.ac.uk *
* * * * * * * * * * * * * * * * * * * *

641. Re: Portable Low Power Generation ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-22 00:00:00 UTC
From: Robert Lyons <boblyons@umich.edu>
Message-ID: <376F8C3C.CFC02150@umich.edu>
Source record: 69135

Muck wrote:
>
> "Keith E. Spainhour" wrote:
> >
> > . . .
> > the small motors used in the positioner (arm) are
> > permanent magnet DC motors. They make great
> > generators. . . .
>
> Are you saying that "any" permanent magnet DC motor can be used
> as a generator?

Every time I've ever given a small, permanent-magnet DC motor
a spin, it's acted as a generator, as determined by voltmeter,
light bulb etc. I don't know if it's safe to extrapolate to
"any" such motor, but it certainly wouldn't surprise me.

Bob, KI8AB

642. Siemens (?) PMB2312-T - no data to be found on web :(

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-22 00:00:00 UTC
From: rjburden@bigpond.com
Message-ID: <376f9486.58088265@news.bigpond.com>
Source record: 69136

Hi,

does anyone know what the divide ratio is for this prescaler?

Many thanks,
Richard VK5OO

643. Ham-Homebrew Digest V99 #156

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-22 00:00:00 UTC
From: DrBingo@compuserve.COM
Message-ID: <199906220938_MC2-7A41-B89F@compuserve.com>
Source record: 69137

looking for a source for those motorola car radio plugs and jacks. Both the standard size and the smaller GM size. The local audio and electronic stores carry various adapters and cables, but not the individual connectors.

Grant Bingeman
KM5KG

644. WTB low power ant. tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-22 00:00:00 UTC
From: w8irq@aol.com
Message-ID: <19990622102035.07646.00002636@ng-ck1.aol.com>
Source record: 69138

Hi: i would like to buy an antenna tuner suitable for qrp type operation.Homebrew would be fine, if nicely built. Nick, w8irq@aol.com

645. Re: 10GHz modules and a tractor!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-22 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <376FC7ED.E6BBF904@teleport.com>
Source record: 69139

Someone might be able to give you a more direct path to what you're looking for, but unless you get it, I'd start with a company named Navtech. (http://www.navtechgps.com). They sell a very wide range of GPS-related equipment.

Roy Lewallen, W7EL

Dave Bullock wrote:
>
> There are a lot of rumours here in the UK about some 10GHz modules used
> in the USA in conjunction with GPS and a tractor for keeping tally of
> crop spraying, gallons per acre, seeds per drill etc.
> The rumours are that the modules are good for Amateur use.
> Any substance to these rumours??
> If so where do we get them??
> --
> *
> * Dave Bullock *
> *
> * daveb@ihr.mrc.ac.uk *
> *

646. Re: 10GHz modules and a tractor!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-22 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <3780c89a.251746587@news.atl.bellsouth.net>
Source record: 69140

On Tue, 22 Jun 1999 13:13:13 +0100, Dave Bullock <daveb@ihr.mrc.ac.uk> wrote:
>There are a lot of rumours here in the UK about some 10GHz modules used
>in the USA in conjunction with GPS and a tractor for keeping tally of
>crop spraying, gallons per acre, seeds per drill etc.
>The rumours are that the modules are good for Amateur use.
>Any substance to these rumours??
>If so where do we get them??

Check out http://www.deere.com/greenstar/ for information on
precision farming systems.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

647. Re: Siemens (?) PMB2312-T - no data to be found on web :(

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-22 00:00:00 UTC
From: brians@opus.hpl.hp.com
Message-ID: <7koh3unsr1@hplms2.hpl.hp.com>
Source record: 69141

It appears that the PMB 2313 replaced the PMB 2312. (The PMB 2313 is now also listed as an obsolete product.) The 2313 data sheet has some applications information for replacing a PMB 2312 with a PMB 2313.

The PMB 2313 will do either 1:64/65 or 1:128/129, depending on the state of a mode pin.

More information is available at:

http://www.infineon.com/products/archive/archive.htm#P

Good luck,

Brian N7FMF

rjburden@bigpond.com wrote:
: Hi,

: does anyone know what the divide ratio is for this prescaler?

: Many thanks,
: Richard VK5OO

648. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-22 00:00:00 UTC
From: Kevin Hoult <mudshark@ricochet.net>
Message-ID: <376FC4E6.7EB8367B@ricochet.net>
Source record: 69142
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

>

Someone had asked about other alternate sources of power for amplification of Xtal radio audio - here is a delightful little project that really looks like fun - It's called the Pico Turbine, and it is a "table top" version of a vertical shaft Savonius design.

http://www.homepower.com/bonus.htm

"PicoTurbine stands less than 8 inches (20 cm) tall but don't let its size fool you. This version
of PicoTurbine produces about one-third of a watt of power from a direct-drive, single-phase, brushless, permanent magnet alternator. More advanced versions the same

size can produce a full watt, but are more challenging to build."

"The design is naturally self-limiting for over-speed protection. I've left mine out all night
during a windstorm with 50 mile per hour (22 m/s) gusts that made my brick house shake. In
the morning, I looked out my windowï¿½fully expecting to see it "shredded" only to find

PicoTurbine still spinning at top speed in the early morning gale!"

"PicoTurbine is a vertical axis wind turbineï¿½VAWT for short. More specifically, it is a Savonius
design, named after its inventor, S. I. Savonius, who patented it in the 1920s. There has
been much controversy surrounding the Savonius design, as compared to the traditional,
horizontal axis wind turbine (HAWT) for electricity production."

http://www.homepower.com/bonus.htm

649. Re: What Impeadance is this coax

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-22 00:00:00 UTC
From: &RETIRED0 <&retired0@hotmail.com>
Message-ID: <376F3679.936EAC42@hotmail.com>
Source record: 69143

Dale Parfitt wrote:
>
> Mike W wrote:
>
> > Hi There Folks, I bought a load of 'rather nice' coax at a flea
> > market on sunday. I thought it was 75R stuff but now I'm not too sure.
> >
> > My chart for approximating coax impeadance seems to indicate about
> > 100R , what do you think?
> >
> > diameter of inner core - .021"
> > diameter of ptfe inner insulation - 0.142"
> > outside dia of sleeve - 0.225"
> >
> > The inner seems to be either hard drawn copper, or copper coated steel
> >
> > the inner insulation is a solid ptfe
> > the outer braid is firstly a copper coloured sheetmetal of 0.0015"
> > thick , followed by very fine braiding on top.
> > and the outer sheath is some sort of hard grey plastic
> >
> > any idea's what it is, either type number or approx spec would be
> > useful.
> >
> > Many Thanks.. Mike W G8NXD
> > mike@corn2.freeserve..co.uk
>
> I get 76 Ohms assuming The dielectric constant of ptfe=2.5- that's
> close I don't have that memorized. We don't need to know the outside
> diameter of the shield.
>
> Dale W4OP

Or you could just take a pulse generator and a scope and TDR
it to
learn exactly what the impedance is....
miker
--
Big list of WANTS and FORSALES at link below.
Return Address is Bogus. Click below to reply
http://www.geocities.com/SiliconValley/Monitor/4710/
Or you can DELETE the & in the "from" address.

650. Re: What Impeadance is this coax

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-22 00:00:00 UTC
From: "Al, N2NKB"
Message-ID: <7kp3sq$b7v$1@bgtnsc03.worldnet.att.net>
Source record: 69144

I am pleased that Dieter, Roy, Dale, & Retiredo gave you good responses, Mike. Unfortunately , it appears that your coax might be more useful for your home cable system rather than for amateur radio transmission lines.
Al, N2NKB

&RETIRED0 <&retired0@hotmail.com> wrote in message
<376F3679.936EAC42@hotmail.com>...
>Dale Parfitt wrote:
>>
>> Mike W wrote:
>>
>> > Hi There Folks, I bought a load of 'rather nice' coax at a flea
>> > market on sunday. I thought it was 75R stuff but now I'm not too sure.
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>> > thick , followed by very fine braiding on top.
>> > and the outer sheath is some sort of hard grey plastic
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>> > any idea's what it is, either type number or approx spec would be
>> > useful.
>> >
>> > Many Thanks.. Mike W G8NXD
>> > mike@corn2.freeserve..co.uk
>>
>> I get 76 Ohms assuming The dielectric constant of ptfe=2.5- that's
>> close I don't have that memorized. We don't need to know the outside
>> diameter of the shield.
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>> Dale W4OP
>
>Or you could just take a pulse generator and a scope and TDR
>it to
>learn exactly what the impedance is....
>miker

>--
>Big list of WANTS and FORSALES at link below.
>Return Address is Bogus. Click below to reply
>http://www.geocities.com/SiliconValley/Monitor/4710/
>Or you can DELETE the & in the "from" address.
>

651. INFO: Toroid Coil Forms

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-22 00:00:00 UTC
From: lencas0135@aol.com
Message-ID: <19990622193800.15427.00000077@ng-fh1.aol.com>
Source record: 69145

Does anyone know where I can get, CHEAPLY:

Square-Loop, tape-wound, 1 mil., toroids used to make DC/DC Converters?

I am looking for 3.5" O.D., by 0.5" cross section for a 12 to 500 volt two transistor DC/DC converter. I know that I can get them at Arnold Engineering but the one that I want is $109. each.

I want to wind the transformer myself...I have wound many before, but back in the 1960s the toroids were only about $5 each. Amidon does NOT have this type of coil form but they have cheap prices for other toroids...Does anybody know where this particular type of toroid is sold at Amidon prices?

Thanks, Len, WA6ELK

652. Re: What Impeadance is this coax

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-22 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37702B56.6AE34929@teleport.com>
Source record: 69146

Al, N2NKB wrote:
>
> I am pleased that Dieter, Roy, Dale, & Retiredo gave you good responses,
> Mike. Unfortunately , it appears that your coax might be more useful for
> your home cable system rather than for amateur radio transmission lines.
> Al, N2NKB

I'm missing something here. Why wouldn't it be useful for an amateur
radio transmission line? Sounds just fine to me.

Roy Lewallen, W7EL

653. ramsey 40 meter kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-22 00:00:00 UTC
From: zopp@webtv.net
Message-ID: <16738-37702896-54@newsd-253.iap.bryant.webtv.net>
Source record: 69147

I just built a ramsey 40 meter kit for CW. I have been trying to tune it to 7.00-7.08 using a National NC-270. My problem is the shortwave stations are so loud I can barely hear the CW. In fact wherever I tune on the band these stations are there. Did I do somethng wrong or is this normal for these kits to have this problem. When I tune to these freqs. on the National, I hear only CW and no shortwave. Any ideas why this might be happening? Thanx Yukon

654. Re: What Impeadance is this coax

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-22 00:00:00 UTC
From: "Al, N2NKB"
Message-ID: <7kpe7tnjc1@bgtnsc01.worldnet.att.net>
Source record: 69148

I was sort of hoping that someone would bring your point up.
(50 ohms vs. 75 ohms for amateur radio transmission lines).

Most people are in the frame of reference that since a 50 ohm transmitter is terminated into a 50 ohm antenna, the "only" way to go is to use a 50 ohm transmission line. However, one can work with balun transformers, taps, and all sorts of neat stuff to use 75 ohm transmission lines. In theory,
a 72 ohm coaxial resonator has minimal loss.
Co-phasing antennas is also interesting to do with a 50 ohm line split into two 75 ohm lines. Thanks Roy,
Al

Roy Lewallen wrote in message <37702B56.6AE34929@teleport.com>...
>Al, N2NKB wrote:
>>
>> I am pleased that Dieter, Roy, Dale, & Retiredo gave you good responses,
>> Mike. Unfortunately , it appears that your coax might be more useful for
>> your home cable system rather than for amateur radio transmission lines.
>> Al, N2NKB
>
>I'm missing something here. Why wouldn't it be useful for an amateur
>radio transmission line? Sounds just fine to me.
>
>Roy Lewallen, W7EL

655. Re: ramsey 40 meter kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-22 00:00:00 UTC
From: "Al, N2NKB"
Message-ID: <7kpfep$6a$1@bgtnsc01.worldnet.att.net>
Source record: 69149

It sounds like the rig does not have great selectivity. Unfortunately, there
are commercial short-wave broadcast stations that transmit in this
amateur band. I have the same problem with my old Heathkit 101 and
Swan 260 rigs. It is difficult to find a clear spot without crystal filtering or
some kind of special circuit (digital filtering?) to allow a very small
bandwidth to pass. My guess is that your National has a good selectivity,
and your kit can't perform the same way without a major modification. And
sometimes the Ramsey kits don't attenuate the image frequency, which makes the
matter twice as worse. Check to see if the same short-wave frequencies
show up two places. I have no reference material in front of me right now,
but the CHU Canadian time signal might be in this band for you to make
comparisons with.
Al, N2NKB

Yukon wrote in message <16738-37702896-54@newsd-253.iap.bryant.webtv.net>...
I just built a ramsey 40 meter kit for CW. I have been trying to tune it
to 7.00-7.08 using a National NC-270. My problem is the shortwave
stations are so loud I can barely hear the CW. In fact wherever I tune
on the band these stations are there. Did I do somethng wrong or is this
normal for these kits to have this problem. When I tune to these freqs.
on the National, I hear only CW and no shortwave. Any ideas why this
might be happening? Thanx Yukon

656. diversity reception

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-22 00:00:00 UTC
From: inagaddadavida@webtv.net
Message-ID: <26134-3770453A-1@newsd-113.bryant.webtv.net>
Source record: 69150

hey, who has any ideas or plans for a diversity set up for mw am radio.
any info is more than i have now. my intentions are to minimise fading
on distant am channels, if there are other tricks to accomplish this
they are also welcome

657. Re: ramsey 40 meter kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-22 00:00:00 UTC
From: "William F. Hagen" <whagen@inreach.com>
Message-ID: <37704B15.8F20AA44@inreach.com>
Source record: 69151

sounds like sensitivity but not selectivity in the front end. try an
inductive coupling to your antenna instead of a direct coupling, or
tightening up the if fliters or something like that.

Yukon wrote:

> I just built a ramsey 40 meter kit for CW. I have been trying to tune it
> to 7.00-7.08 using a National NC-270. My problem is the shortwave
> stations are so loud I can barely hear the CW. In fact wherever I tune
> on the band these stations are there. Did I do somethng wrong or is this
> normal for these kits to have this problem. When I tune to these freqs.
> on the National, I hear only CW and no shortwave. Any ideas why this
> might be happening? Thanx Yukon

--
Please remove the word 'NOREPLY' from the email address, sorry for the
inconvenience, but it helps keep down the spam.

658. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-22 00:00:00 UTC
From: snoskow11woksons@liame.tom.com
Message-ID: <snoskow11woksons-2206991530290001@il75-fc-mac1-16.acpg.cig.mot.com>
Source record: 69152
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Kevin Hoult wrote:

I have an old
> horn tweeter with a blown voice coil!!!!!

> Sombody wrote:
> > > > The first place to start is acoustic efficiency, ie a tapered horn

I had a "speakered' crystal set in the mid '50's, but lived quite
close to WGN and WBBM near Chicago. I did have to do some modification to
the set, but don't remember what and besides, I probably didn't know what
I was doing anyway. I was probably matching impedances.

Steve, K9DCI@arrl.com

--
I know everything, except how to be humble...a.a..and... how to stop
e-spam. Sorry 'bout the address munge, but it has reduced much now.
Use snoskow1 at server email here in mot in the com domain.

659. Re: converting cd-rom to audio cd player

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-22 00:00:00 UTC
From: Will Sparks <willy@home.com>
Message-ID: <7kpn5b$2j9@chronicle.concentric.net>
Source record: 69153

Matt Mendenhall <ke6alm.loop@nospam.com> wrote in message
news:SbFb3.215$ij.13619@news2.randori.com...
> In article <7kkni0$7kl$1@uranium.btinternet.com>, "David Cunningham"
<D.L.C@btinternet.com> wrote:
> >I have an old SCSI cd rom, the type which is an external mains powered
unit
> >rather than one which fits into a spare slot in a computer, and wish to
use
> >it to play audio cds without having to connect it to the computer. There
are
> >2 RCA sockets on the back for audio output, and 2 SCSI connectors. I am
> >assuming that I will be able to make cd-rom drive perform functions such
as
> >play, skip,stop etc. by feeding a 5v pulse to the appropriate pin on the
> >SCSI connector.
> >
> >Can anyone confirm this, and provide a pinout for the SCSI connector?
>
> In a word, no. SCSI is a messaging protocol. It does not provide pins for
> Play, FF, REW, etc. It expects to have messages sent to it by a computer,
to
> which it will provide completion status.
>
> In other words, if it doesn't have front panel controls for play, etc.,
you
> will not be able to make it a stand-alone player without a LOT of work.
>
> de KE6ALM
> Matt Mendenhall

On the other hand, you can probably buy an old 286/386 with monitor and SCSI
card for less than the cost of a cheap CD player...

660. Re: What Impeadance is this coax

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-22 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19990622222231270432@zetnet.co.uk>
Source record: 69154

> Hi There Folks, I bought a load of 'rather nice' coax at a flea
> market on sunday. I thought it was 75R stuff but now I'm not too sure.
> My chart for approximating coax impeadance seems to indicate about
> 100R , what do you think?
==========
I thought the easy way finding out is to connect the coax via a SWR meter to a transmitter on one end and the other end to a non-inductive resistor (carbon) or perhaps a 100 Ohm carbon potmeter.

At lowest possible power allowing for full scale deflection of SWR meter change resistor to a value whereby there is no power reflected (SWR=1) . The value of that resistor is the coax characteristic impedance.

SWR meters are more sensitive at higher freqs ,hence if you have a HF SWR meter use a freq in the 28 MHz band at lowest power level possible. You then likely won't fry a carbon potmeter.

Ensure that coax cable has a good quality soldered connector at the SWR meter end and keep coax connection inner core/screen as short as possible at the resistor /potmeter.

Slogan : KISS

73 Frank GM0CSZ / KN6WH

Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland UK
e-mail : gm0csz.kn6wh@ukrs.org

661. Re: INFO: Toroid Coil Forms

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-23 00:00:00 UTC
From: "Mr. Muckle" <jdwalton@home.com>
Message-ID: <37707553.4CC24655@home.com>
Source record: 69155

try looking at: www.bytemark.com/amidon/content0.htm

Lencas0135 wrote:

> Does anyone know where I can get, CHEAPLY:
>
> Square-Loop, tape-wound, 1 mil., toroids used to make DC/DC Converters?
>
> I am looking for 3.5" O.D., by 0.5" cross section for a 12 to 500 volt two
> transistor DC/DC converter. I know that I can get them at Arnold Engineering
> but the one that I want is $109. each.
>
> I want to wind the transformer myself...I have wound many before, but back in
> the 1960s the toroids were only about $5 each. Amidon does NOT have this type
> of coil form but they have cheap prices for other toroids...Does anybody know
> where this particular type of toroid is sold at Amidon prices?
>
> Thanks, Len, WA6ELK

662. Re: What Impeadance is this coax

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-23 00:00:00 UTC
From: &RETIRED0 <&retired0@hotmail.com>
Message-ID: <37704854.5D0588AA@hotmail.com>
Source record: 69156

Al, N2NKB wrote:
>
> I was sort of hoping that someone would bring your point up.
> (50 ohms vs. 75 ohms for amateur radio transmission lines).
>
> Most people are in the frame of reference that since a 50 ohm transmitter is
> terminated into a 50 ohm antenna, the "only" way to go is to use a
> 50 ohm transmission line. However, one can work with balun transformers,
> taps, and all sorts of neat stuff to use 75 ohm transmission lines. In
> theory,
> a 72 ohm coaxial resonator has minimal loss.
> Co-phasing antennas is also interesting to do with a 50 ohm line split
> into two 75 ohm lines. Thanks Roy,
> Al

Or you could just not worry about it. Unless you're using a
fixed
frequency with highly optimized tuning, your antenna swr is
likely to
be higher than what you'd get from 75 ohm coax.
miker
>
> Roy Lewallen wrote in message <37702B56.6AE34929@teleport.com>...
> >Al, N2NKB wrote:
> >>
> >> I am pleased that Dieter, Roy, Dale, & Retiredo gave you good responses,
> >> Mike. Unfortunately , it appears that your coax might be more useful for
> >> your home cable system rather than for amateur radio transmission lines.
> >> Al, N2NKB
> >>
> >I'm missing something here. Why wouldn't it be useful for an amateur
> >radio transmission line? Sounds just fine to me.
> >
> >Roy Lewallen, W7EL

--
Big list of WANTS and FORSALES at link below.
Return Address is Bogus. Click below to reply
http://www.geocities.com/SiliconValley/Monitor/4710/
Or you can DELETE the & in the "from" address.

663. Ebay- All Sorts of Mica Caps!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-23 00:00:00 UTC
From: rlucch2098@aol.com
Message-ID: <19990622232759.18283.00003057@ng-ft1.aol.com>
Source record: 69157

Hi all you homebrewers, Here are 4 batches of Mica Caps on Ebay.
So far they have two (2) days and only around $12, some lots have over 60 pieces.
Heres the Link to one lot with picture. You can then click on "see other auctions by this seller" to list the rest! URL>>
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=119313241

Thanks es 73...........RICH-WA2RQY RLUCCH2098@aol.com
Web-Page URL> HTTP://members.aol.com/rlucch2098/index.html

664. Re: EMP phenomena (was: Morse code)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-23 00:00:00 UTC
From: sphinx@world.std.com
Message-ID: <FDrK81.10B@world.std.com>
Source record: 69158
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <7k3iic$i8e$1@fir.prod.itd.earthlink.net>,
Mike Yetsko <joe@user.com> wrote:
>
>My understanding was that a nuclear explosion in free space yeilded
>mostly EMP or hugh ammounts of energy as an electromagnetic pulse.
> ... In any case, the EMP was supposedly able to burn
>out a lot of electrical systems for hundreds of miles. Even car
>alternators and such.

That's true. NUDETS (Washington-speak for Nuclear Detonations) inside the atmosphere mainly produce the kinds of ionospheric effects I mentioned. (From a radio communication point of view, that is.) They alter the ionosphere in much the same way that a Solar flare does, though more locally. But it can still play havoc with normal skip propagation for awhile.

OTOH "exoatmospheric" bursts (ones outside the atmosphere) are the ones that produce primarily the EMP effect (unless, of course, an important satellite happens to be nearby). What happens here is very interesting. The so-called "prompt radiation" from the burst arrives at the upper layers of the atmosphere at essentially the speed of light. As it encounters substantial density of air, it knocks loose electrons in what as I recall is called the Compton Effect, the electrons sometimes being called Compton electrons. Being in a magnetic field, they don't follow straight lines away from the point of impact but rather fly around and around in a helical path, as a result of the odd fact that the force on a moving charge due to a magnetic field is always at right angles both to the velocity and to the magnetic field lines. This high-speed motion in a helix of course generates radio waves, which travel at the speed of light. But what makes the EMP so nasty is that the incoming Compton electrons are also ARRIVING at the speed of light. So the point at which the waves start getting generated moves downward at the same speed as the waves are propagating. The practical effect is that the energy buildup in the wave continues to be RIGHT AT THE WAVEFRONT! Which means that the wave takes the form of a very sharp pulse wavefront that has a bandwidth of perhaps hundreds of megahertz, and LOTS and LOTS of energy in it.

It is this very sharp pulse wavefront that causes all the trouble. First of all, it can generate many kiloamperes of RF current in a conductor, for a brief moment, and kilovolts or even megavolts of peak voltage, depending on the circuit impedance of course.

Also, the fact that the bandwidth goes out to the VHF/UHF region means that equipment designed for lower frequencies may not have

adequate "bypassing" to deal with the sharp peak. Even HF (3 -30 MHz) radios need to have bypass capacitors with very short leads, as if they were VHF / UHF radios, in order to tame the kind of pulses in an EMP. Not to mention unusually good shielding, parasitic chokes on leads entering the shielding, and a lot of techniques that just aren't normally used in equipment not specifically designed to be EMP-resistant.

For hams, keeping a spare radio in the trunk of your car, or in an underground shelter, or in a metal storage cabinet, might be one of the better ways to have equipment survive.

According to the FEMA consultant whose lecture on EMP I heard some years ago, the peak of the EMP spectrum is estimated to fall at AM Broadcast type frequencies, despite the very sharp risetime. I think this relates to the dynamics of the electrons' helical motion in the Earth's magnetic field that I mentioned earlier. But anyway, any piece of conductor that resonates in the low MHz region, say 0.5 to 3 or so MHz, will pick up the biggest spikes. Short conductors, like the one on your 2-meter HT, may only see a few hundred volts peak. However, even that much could well wipe out the front end of your radio.

>But technology has changed a lot since the 60's. Back then, tube
>technology (which was pretty much 'voltage' amps and high
>impedance) wasn't as protected as a lot of todays technology. Would
>most devices bite the big one? Probably, but they would also be a lot
>of survivabilty that you wouldn't expect.

Most analyses I saw seemed to conclude that tube equipment was MORE likely to survive, simply because tubes are inherently less prone to failure from high-voltage pulses than solid state devices are.

Failures of solid-state devices would probably be quite widespread, but erratic. Indeed some radios would get lucky and survive, perhaps just because the standing wave pattern didn't hit them with as high a signal level as some other radio received, maybe even in the same room.

My impression is that the phone company would come out fairly well because they have historically put so much emphasis on protection against lightning. However, the lead lengths they use from the line to the varistor devices they use for protection would probably be so inductive at VHF / UHF that sizeable spikes would remain. Old-fashioned phones should be fine, but solid-state phones and modems might well get zapped. There would doubtless probably be quite a few "ESS" failures (telco switch computers).

Today the power grid is probably LESS sensitive to a massive overload. The technology for handling 'events' such as lightning strikes is much improved. In that regard alone it might be a neat idea to just contact a power company and ask them how they have changed since the 60's.

Indeed, that would make a fascinating topic for a radio club meeting.
I bet they'd be surprised, though, that you were asking about EMP
rather than Y2K !!!

Incidentally, you might be surprised to find that FEMA themselves would
be happy to send someone out to talk to a ham radio club on both of these
subjects, particularly one located in a large metropolitan area that
would publicize the talk widely.

>I was told a ground busrt doesn't yield near the EMP of an air burst.
>But that's not to say it still won't knock out tons of equipment. Mike

The "exoatmospheric" burst generates the EMP as its main effect.
The less atmosphere between you and the burst, the less of an EMP effect
it would generate because the pileup of the wavefront described above
would have less time to develop. However, rumor has it that there
are now also weapons designed to produce EMP-like effects at ground
level, without using nukes.

If so, I think that's a step forward, sort of the opposite of the
neutron bomb, which kills all the people without hurting the equipment!
Wouldn't it be nice if the human race could learn how to do warfare in
the future by killing all the computers and weapons systems without
harming the people!

Or even better, if we could somehow learn to do WITHOUT warfare at all!

-John S., W3IKG

665. Re: FOR SALE: TUBES

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-23 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <37708328.3DA61909@corecomm.net>
Source record: 69159

BenDowers wrote:
> bob wrote:
> >Ben -
> >I know you know this is not a sale group. Please stop reposting this stuff
> >in rec.radio.amateur.homebrew
>
> Shame on you Bob. Did you just post a out of subject posting? You know you are
> to handle this type of thing via e-mail.
>
> I'm sorry it bothers you. But. As long as I get replies, I can only assume I am
> posting in a correct area. Bottom line. No replies, no interest, postings will
> stop. Your buddies in this group can truley stop this if they desire. I will
> again be reposting in 3 to 4 days.

Thanks for confirming that your net abuse is deliberate and premeditated.

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

666. Re: EMP phenomena (was: Morse code)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-23 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <379e8a05.1111469388@news.sci.fi>
Source record: 69160
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Wed, 23 Jun 1999 04:52:48 GMT, sphinx@world.std.com (SPHINX Technologies) wrote:

: My impression is that the phone company would come out fairly well
: because they have historically put so much emphasis on protection
: against lightning.

To put it into perspective, how close should a lightning hit in order to produce a similar EMP as an ionospheric nuclear blast ?

In the days when the NEMP was a hot topic of discussion, you could easily get the feeling that nothing would survive, but from the equipment that I have seen that have been designed to be NEMP resistant, the protection is not that exotic.

Paul OH3LWR

667. 12 pin compactron tube sockets needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-23 00:00:00 UTC
From: n8wwm@aol.com
Message-ID: <19990623045452.25908.00002953@ng-da1.aol.com>
Source record: 69161

Anyone know where I can find some? While I am at it, how bout some cheap transformers with 12.6 and about 700V secondaries???

I wanna build a 150-200 watt boatanchor for 6 meters...
JUST FOR FUN! Hey, we are AMATEURS, right??? I mean building is FUN right,,,,sure it is...til ya cant find parts...
73 Doug

668. Re: Linear amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-23 00:00:00 UTC
From: n8wwm@aol.com
Message-ID: <19990623045710.25908.00002954@ng-da1.aol.com>
Source record: 69162

>
>From: Eric Aube <e_aube@hotmail.com>
>Date: Fri, 18 June 1999 02:56 PM EDT
>Message-id: <376A966C.F46AF5C@hotmail.com>
>
>I'm looking for plans to make a linear amp. If there is somebody that
>knows where I can find those, please tell me.
>
>Thanks
>Eric
>
>Eric...are you a ham?
>
>
>
>

669. Re: EMP phenomena (was: Morse code)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-23 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01bebdb2$b1f1e140$3ef1abc3@default>
Source record: 69163
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Those who plan for war are sure to get it.

670. FS: Bird Wattmeter Model 43 - Ebay Link

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-23 00:00:00 UTC
From: tbaddley@my-deja.com
Message-ID: <7kr4lh$cl1$1@nnrp1.deja.com>
Source record: 69164

I have a Bird Wattmeter Model 43 in great shape
for sale. The link is:

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?
ViewItem&item=120495689

Tom Baddley

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

671. Web Site Updated

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-23 00:00:00 UTC
From: G0GNF <uphill.gardener@warwick.school>
Message-ID: <NL7c3.3942$mK3.118910@nnrp3.clara.net>
Source record: 69165
Cross-posted to: aus.radio.amsat,nl.radio.amateur,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,tnn.radio.amateur,uk.radio.amateur

I have just been mass-emailed by the despicable G8ASO about his stupid club and even worse web site, although it does appear to have been slightly improved over the last few months.

See what you think, try http://www.laughingpoliceman.com

Some of the new links are quite good and rather unusual.

Gerbil

672. Re: What Impeadance is this coax

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-23 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.990623093744.20436A-100000@oso.slonet.org>
Source record: 69166

It is far easier to find a simple L/C meter----even the little ones for
determining small capacitors and inductors, then go to all the trouble to
find a TDR or other exotic test equipment. Simply measure the capacitance
of any length of coax. Then short the end and measure the inductance.
Use any simple instrument you might have on hand or can borrow.
Then take the square root of L divided by C. This will give you the
cable impedance close enough for any practical ham application. Cliff K7RR

On Tue, 22 Jun 1999, &RETIRED0 wrote:

> Dale Parfitt wrote:
> >
> > Mike W wrote:
> >
> > > Hi There Folks, I bought a load of 'rather nice' coax at a flea
> > > market on sunday. I thought it was 75R stuff but now I'm not too sure.
> > >
> > > My chart for approximating coax impeadance seems to indicate about
> > > 100R , what do you think?
> > >
> > > diameter of inner core - .021"
> > > diameter of ptfe inner insulation - 0.142"
> > > outside dia of sleeve - 0.225"
> > >
> > > The inner seems to be either hard drawn copper, or copper coated steel
> > >
> > > the inner insulation is a solid ptfe
> > > the outer braid is firstly a copper coloured sheetmetal of 0.0015"
> > > thick , followed by very fine braiding on top.
> > > and the outer sheath is some sort of hard grey plastic
> > >
> > > any idea's what it is, either type number or approx spec would be
> > > useful.
> > >
> > > Many Thanks.. Mike W G8NXD
> > > mike@corn2.freeserve..co.uk
> >
> > I get 76 Ohms assuming The dielectric constant of ptfe=2.5- that's
> > close I don't have that memorized. We don't need to know the outside
> > diameter of the shield.
> >
> > Dale W4OP
>
> Or you could just take a pulse generator and a scope and TDR
> it to

> learn exactly what the impedance is....
> miker
> --
> Big list of WANTS and FORSALES at link below.
> Return Address is Bogus. Click below to reply
> http://www.geocities.com/SiliconValley/Monitor/4710/
> Or you can DELETE the & in the "from" address.
>
>
>

673. Re: What Impeadance is this coax

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-23 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37712466.1C419020@teleport.com>
Source record: 69167

Al, N2NKB wrote:
>
> I was sort of hoping that someone would bring your point up.
> (50 ohms vs. 75 ohms for amateur radio transmission lines).
>
> Most people are in the frame of reference that since a 50 ohm transmitter is
> terminated into a 50 ohm antenna, the "only" way to go is to use a
> 50 ohm transmission line. However, one can work with balun transformers,
> taps, and all sorts of neat stuff to use 75 ohm transmission lines. In
> theory,
> a 72 ohm coaxial resonator has minimal loss.
> Co-phasing antennas is also interesting to do with a 50 ohm line split
> into two 75 ohm lines. Thanks Roy,
> Al

Let's look at what would happen if you used 75 ohm line with a 50 ohm load.

The line would have a 1.5:1 SWR. If the length of the run were such that you had 3 dB of loss if the line were matched, then having a 1.5:1 SWR would result in only an additional 0.14 dB of loss. If the matched loss is 6 dB, the additional loss due to the 1.5:1 SWR is 0.19 dB. So even with a long, lossy, run, the increased loss due to SWR is negligible. (You can find the equations for this calculation in the Transmission Lines chapter of the _ARRL Antenna Book_.)

The impdance seen by the transmitter depends on the length of the line. If the line is an integral number of half wavelengths, the impdance seen by the transmitter would be 50 + j0. The "SWR" (referenced to 50 ohms) the rig sees would be 1:1. On the other hand, if the line is an odd number of quarter wavelengths long, the impedance seen by the rig would be 112.5 + j0, for an "SWR" of 2.25:1. (Don't confuse this "SWR" with the actual SWR on the line. The SWR on the line is 1.5:1 regardless of the line length. The "SWR", with quotes, is the value reported by a 50 ohm SWR meter at the line input. If the line Z0 isn't 50 ohms, as in this example, the "SWR" indicated by the meter isn't the actual SWR on the line, and it will vary with line length.) Other lengths of transmission line will result in values of "SWR" between 1 and 2.25 at the line input, and the impedance will generally include some reactance. A 1.5:1 transformer at the output end of the line would result in the input end always seeing 75 + j0 ohms, or a 1.5:1 "SWR". A transformer at only the input end of the line is as likely to degrade the "SWR" as to improve it. A 1.5:1 transformer at both ends of the line would make the line look like it has a 50 ohm impedance, provided that the transformers are properly designed and constructed (which many aren't). But unless

your rig can't tolerate even a very modest "SWR", there's absolutely no point in using them. Of course, a tuner at the input will also fix the input "SWR" if it's a problem. Or if you're operating on a single band, you can lower the "SWR" to 1:1 simply by changing the feedline length.

A carefully-matched antenna will present an impedance of 50 + j0 ohms only at a single frequency. Also, many antennas, like dipoles, have only one degree of adjustment freedom. That is, you have only one thing you can adjust, such as length. If you adjust to obtain resonance, the impedance at resonance is just as likely to be 75 as 50 ohms, so the 75 ohm line might have even less effect on input "SWR" than in the example. And again, once you move off resonance, both a 50 and 75 ohm line transform the load impedance to some other value, modifying the "SWR" seen at the input. So fussing about what a line will do with a precisely 50 ohm load is often more of an academic exercise than a representation of reality.

The bottom line is that in most applications, you'll hardly notice the difference between a 50 an 75 ohm line. In many real cases, you're just as likely to end up with a lower "SWR" using a 75 ohm cable as a 50 ohm cable.

Roy Lewallen, W7EL

674. Plate Voltage, Compactron Tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-23 00:00:00 UTC
From: technolad@webtv.net
Message-ID: <12234-37711FF5-51@newsd-231.iap.bryant.webtv.net>
Source record: 69168

I am modifying an old cb linear for portable 10 meter use, I replaced
two Sprague "Atom" 450
volt caps @ 12 mfd, with two 6 microfarad caps rated at 650volts ac
(reads on the side of the can "ac, and no pcbs"), (what is the dc
rating?.... peak secondary volts?),
Tube is a Compactron 8950, what is the plate voltage of this tube?
I assume it's around 800 volts, since the caps appeared to be hooked in
series.
I bought three MJ2955 pnp transistors from RS
they have the same ratings as 3055, but I don't know ,....with RS,
caveat emptor!,
all mounted on a grounded heat sink.
the original transistors were 2N1522 transistors
and were not even heat sinked! what are these things?
I've hooked the center transistor as a bias control for the feedback
winding to the other two transistors , going to ground through a 25 ohm
(RS) reostadt, should I hook this up as a shunt with a power resistor?
it's only rated at 2 watts, what would be the base current through two
power transistors? I think I need a bigger rheostadt!
Lastly but not leastly where can I find an outboard low-pass filter the
size of a cigarrete pack and able to handle 100 watts?

675. Re: What Impeadance is this coax

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-23 00:00:00 UTC
From: mike@corn2.freeserve.co.uk
Message-ID: <37711a23.1799782@news.freeserve.net>
Source record: 69169

On Mon, 21 Jun 1999 18:24:42 GMT, mike@corn2.freeserve.co.uk (Mike W)
wrote:

> Hi There Folks, I bought a load of 'rather nice' coax at a flea
>market on sunday. I thought it was 75R stuff but now I'm not too sure.
>
Thankyou Everyone for your responses, both on e-mail and through this
medium. I'm now waiting for a free day when I will be 'playing'
antenna's.
I would be interested in your comments though on feeding a gamma
matched yagi with this 75R coax. What can I do to transform the 50R
load, required by the commercial tranciever, to the 75R of the coax
and aerial. Its for operaton on 50Mhz at max power of approx 45 watts,
with activity between 50.050 and 50.200.
Obviously the gamma match will accomodate the 75R matching. but I
don't want too much loss in the shack end transformation.

thanks once again everyone 73 Mike W G8NXD
mike@corn2.freeserve.co.uk

676. PIN DIODE COIL SWITCHING

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-23 00:00:00 UTC
From: Finlay MacLeod Fraser <ceefmf@cee.hw.ac.uk>
Message-ID: <377129C4.E4C68ECD@cee.hw.ac.uk>
Source record: 69170

Hi,
Are there any books or web pages that show how to use pin diodes to switch radio tuning coils with a microcontroller. It would have to be done in a way that does not reduce the tuned circuit Q factor as this would affect selectivity. If a pin diode is not suitable are there any other methods.

Thanks

677. WTB: NJ QRP Club Rainbow Tuner + other QRP stuff

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-23 00:00:00 UTC
From: BamBam <kl0an@my-deja.com>
Message-ID: <7krg0n$hl3$1@nnrp1.deja.com>
Source record: 69171

Looking to set up a Fireball 40 qrp rig from the NJWRP club and I'm looking for the antenna tuner kit, the amplifier kit and whatever other add-ons they sold. I don't mind it in kit form.

Also looking for a 40 meter reciever kit along the same lines as the Fireball 40 transmitter... Something that fits in an Altoids can would be perfect. Anyone have any ideas??

Drop me an e-mail and thanks in advance.

73
Paul Jordan
KL0AN
Fairbanks, AK

--
There never seems to be enough time to do the
things you want to do once you find them...

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

678. FREE:5' Satellite dish

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-23 00:00:00 UTC
From: John Williams <ac6tsXX@n2.net>
Message-ID: <37712dcf.0@wagner.n2.net>
Source record: 69172

Escondido, CA
>Free portable Satellite dish with ring stand. 5' diam.Fiberglass Blank
>ready for LNB/LNA. Rooftoop RV or ground. Folds flat. E-mail for
>location. Curbside easy load. Escondido REMOVE "X"s from my address to
>reply <ac6ts@n2.net>
>-- John
>
--

---/---
---/---
----/----
-----/-----

AC6TS John Williams
LAT. 33.06.15 LON. -117.03.36 7.030Mhz CW
DM13KC 14.030Mhz CW

679. Re: What Impeadance is this coax

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-23 00:00:00 UTC
From: Mike Silva <mjsilva@jps.net>
Message-ID: <7krgng$ae7$1@its.hooked.net>
Source record: 69173

Clifford Buttschardt wrote in message ...
>It is far easier to find a simple L/C meter----even the little ones for
>determining small capacitors and inductors, then go to all the trouble to
>find a TDR or other exotic test equipment. Simply measure the capacitance
>of any length of coax. Then short the end and measure the inductance.

Will this actually work (shorting the end and measuring inductance)? Seems like the setup is similar to a noninductive resistor winding (but with the coax it's not entirely symmetrical).

73,
Mike, KK6GM

>Use any simple instrument you might have on hand or can borrow.
> Then take the square root of L divided by C. This will give you the
>cable impedance close enough for any practical ham application. Cliff K7RR

680. Re: What Impeadance is this coax

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-23 00:00:00 UTC
From: Jim <jdport@xoommail.com>
Message-ID: <7krhgd$bas@chronicle.concentric.net>
Source record: 69174

Heh, I hesitate to crank up this flame-troll again, but you CAN just
go ahead and USE the stuff... If you are worried about it's loss,
it can be closely approximated with a transmitter on one end and a watt
meter and load on the other end...
Even if it's 75 ohm stuff, the mismatch will be minimal even if you're
using 50 ohm devices on the ends.
Speaking directly from years of experience, here, as well as
a FEW years testing such concepts with cheesy equipment such as H-P
network analyzers, etc, etc..... minor impedance mismatches are much
overblown in the real world of using what ya got.
Jim W5AOX

681. Re: P.O.W. "tap" code compared to Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-23 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <37714E59.7FED3D00@corecomm.net>
Source record: 69175

Gary Coffman wrote:
> I bring this up because I've been experimenting with a 10 bps QPSK system
> on 30m for the past couple of years that works when I can't detect the presence
> of a signal by ear. It is conceptually similar to PSK31, but slower, and doesn't
> employ varicode compression. The main drawback to such extremely weak
> signal methods is that very good frequency stability is required of the transmitter
> and receiver.

Sounds like a fun project. My limited understanding of below-the-noise
signal reception tells me there has to be some sort of correlator involved;
what are you using to implement this? (While you're at it, any tidbits you
want to include on how correlators work will help. :-)

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+

682. Yaesu Help FT-101 Processor Installation

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-23 00:00:00 UTC
From: Jacquis <jaclyn@tiac.net>
Message-ID: <7krvbe$8ok@news-central.tiac.net>
Source record: 69176

Got a processor board for my FT101EE. I can match up the colors from the harness to the board, simple enough ! After doing this there were two pairs of wires on the radio harness (white/yellow & white/gray soldered together the other pair white & red soldered together) Looked like the bypass loop for the rig when it ran without the processor option. Unsoldering these resulted in matching up the white/yellow, white/grey and red wires to those from the board. Now I have a white wire left ! There was no white wire from the board I bought and I was wondering where this wire will call its new home on the board. With just the operators manual I am a little lost since it does not mention the upgrade proc. option installation. It seems the white wire has around +12v on it and the board has a white/orange going to the +12v terminal on the board. The way it is now the unit allows the rig to modulate but without any processing so It must be ok for the most part (since the op-manual describes the circuit as an amplifier in the proc/off position). It does this (but with increased ALC sensitivity) so I am close but no better than without the board. Has anyone installed one of these or can see where the white wire goes to on the pro. bd. in their rig? There is that white wire with a very faint yellow marker connected so don't let this be confused with the plain white. Appreciated any help ! Jacqui N1DVE jaclyn@tiac.net

683. HAM-KEY question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-23 00:00:00 UTC
From: "Tom V." <TVAC@postoffice.worldnet.att.net>
Message-ID: <377191F7.599D@postoffice.worldnet.att.net>
Source record: 69177

Anyone know where I can get a thumb screw/nut for a Ham-key straight key? Is this company still in business? Is there a better place to post this question? Not specifically homebrew, but most of the other groups seem to be FS/FT/FA...
Thanks!
Tom WA2CRG

684. Re: 10GHz modules and a tractor!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-23 00:00:00 UTC
From: Tim Wilson <tim@cmwave.com>
Message-ID: <377186DC.2C5E95B7@cmwave.com>
Source record: 69178
Body handling: Binary attachment payload not displayed: vcard.vcf

Check out shfmicro.com
great prices on 10 and 24 gig units. They make great radar
detector/jammers

Tim Wilson

[One or more binary attachments are retained only in the source text.]

685. Siemens (?) PMB2312-T - no data to be found on web :(

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-24 00:00:00 UTC
From: rjburden@bigpond.com
Message-ID: <3774229f.7810931@news.bigpond.com>
Source record: 69032

Hi,

does anyone know what the divide ratio is for this prescaler?

Many thanks,
Richard VK5OO

686. Re: Siemens (?) PMB2312-T - no data to be found on web :(

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-24 00:00:00 UTC
From: rjburden@bigpond.com
Message-ID: <377728b9.9373485@news.bigpond.com>
Source record: 69033

On 22 Jun 1999 17:28:30 GMT, brians@opus.hpl.hp.com (Brian Setterberg)
wrote:
<snip>

Thankyou Brian,

I had previously tried this site but I was unfortunately unable to
access it. I shall keep perserving.

Once again,
many thanks

687. Re: Siemens (?) PMB2312-T - no data to be found on web :(

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-24 00:00:00 UTC
From: rjburden@bigpond.com
Message-ID: <377a2a73.9815291@news.bigpond.com>
Source record: 69034

On Thu, 24 Jun 1999 12:50:19 GMT, rjburden@bigpond.com (Hmmmmmn)
wrote:

>On 22 Jun 1999 17:28:30 GMT, brians@opus.hpl.hp.com (Brian Setterberg)
>wrote:
><snip>
>
>Thankyou Brian,
>
>I had previously tried this site but I was unfortunately unable to
>access it. I shall keep perserving.
>
>Once again,
>many thanks

Low and behold, now it works :)))

Thanks Brian.

Regards,
Richard VK5OO
VK5OO @ yahoo.com.au

"Nothing better than home-brew, except perhaps an absence of Spam"

688. Re: Portable Low Power Generation ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-24 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <377224BC.EF957BC8@fallschurch.esys.com>
Source record: 69035

The reciprocity of motors and generators is based on a fundamental principle of electricity - the interaction between electromagnetic field and electric current in a conductor. It is pretty safe to say that motors and generators are basically the same machine design, notwithstanding some possible optimization in their design and manufacture.
73 de W1AEL
--
The contents of this message are non-proprietary. I do not speak for the company. Never did.
Allan H. Kaplan, Staff Engineer, Raytheon Systems Company 'till 30 June 1999
7700 Arlington Boulevard, MS A404, Falls Church, Virginia 22042
703-560-5000, x4717 voice-mail. 703-208-1259 facsimile

689. Re: Heater in YIG oscillator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-24 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <37722864.39D9E7E3@fallschurch.esys.com>
Source record: 69036

I believe what will happen without the YIG heater depends on whether the PLL has enough capture range to acquire lock on start up. If the equipment runs constantly in a benign environment you might get away with it.

--
The contents of this message are non-proprietary. I do not speak for the company. Never did.
Allan H. Kaplan, Staff Engineer, Raytheon Systems Company 'till 30 June 1999
7700 Arlington Boulevard, MS A404, Falls Church, Virginia 22042
703-560-5000, x4717 voice-mail. 703-208-1259 facsimile

690. Re: Older Heathkit AA-21c-Stereo Amp.-Treble Control

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-24 00:00:00 UTC
From: fmgst+@pitt.edu
Message-ID: <7kt9am$hf4$1@usenet01.srv.cis.pitt.edu>
Source record: 69037
Cross-posted to: sci.electronics.repair,rec.radio.amateur.homebrew

In Article <Pine.GSO.3.96.990624000426.7999D-100000@cluster2>, through puissant locution, dana <dana@randomc.com> soliloquized:
>well, that leaves blind people out on that page, we use lynx

It sure does. Also keeps out the search-engines' indexers... which is prolly why that page isn't as popular as it should be. So... I ran an old awk/sed script on his page and after a minute or two of manual editing (with vi, naturally :-) it's **FULLY** lynx accessible.

Just imagine, you can access all links on a Commodore 64 with 40x24 screen over a 300 baud connection to a dialup. You *CAN* at URL:

http://www.pitt.edu/~fmgst/heathkit.html

Cheers.

>On Sun, 20 Jun 1999, Don wrote:
>> Here is a link to a web page. Look down near the bottom of the page and
>> youll find a way to subscribe to the heath reflector. Its mostly hams,
>> but lots of them also collect and mess with just about anything heath
>> ever made. You ought to subscribe and put your querry on that list. I
>> bet youll get lots of info and advice.
>> Also check the page for any audio stuff. I think there is a little
>> there, and if I remember, there are some links to a few heath audio
>> pages.
>>
>> To make the buttons work on the page, you need to have javascript
>> enabled.

*** NOT ANYMORE ***

>> http://members.accessus.net/~dwentz/kb9jja/heathkit/

--
Filip "I'll buy a vowel" Gieszczykiewicz | http://www.repairfaq.org/

Always and everything for the better!
Now exploring whatever, life, and the meaning of it all... and 'not' :-)

691. Re: EMP phenomena (was: Morse code)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-24 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <378d4905.395681507@news.atl.bellsouth.net>
Source record: 69038
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Wed, 23 Jun 1999 08:16:14 GMT, keinanen@sci.fi (Paul Keinanen) wrote:
>To put it into perspective, how close should a lightning hit in order
>to produce a similar EMP as an ionospheric nuclear blast ?

About 8 miles. The inverse square law is still our friend, even with
NEMP.

>In the days when the NEMP was a hot topic of discussion, you could
>easily get the feeling that nothing would survive, but from the
>equipment that I have seen that have been designed to be NEMP
>resistant, the protection is not that exotic.

It isn't. It just has to be done *right*. Same with lightning protection.

Gary

Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

692. Re: EMP phenomena (was: Morse code)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-24 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <378e49dc.395896971@news.atl.bellsouth.net>
Source record: 69039
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Wed, 23 Jun 1999 04:52:48 GMT, sphinx@world.std.com (SPHINX Technologies) wrote:
>OTOH "exoatmospheric" bursts (ones outside the atmosphere) are the ones
>that produce primarily the EMP effect (unless, of course, an important
>satellite happens to be nearby). What happens here is very interesting.
>The so-called "prompt radiation" from the burst arrives at the upper
>layers of the atmosphere at essentially the speed of light. As it
>encounters substantial density of air, it knocks loose electrons in
>what as I recall is called the Compton Effect, the electrons sometimes
>being called Compton electrons. Being in a magnetic field, they don't
>follow straight lines away from the point of impact but rather fly around
>and around in a helical path, as a result of the odd fact that the force
>on a moving charge due to a magnetic field is always at right angles
>both to the velocity and to the magnetic field lines. This high-speed
>motion in a helix of course generates radio waves, which travel at the
>speed of light. But what makes the EMP so nasty is that the incoming
>Compton electrons are also ARRIVING at the speed of light. So the
>point at which the waves start getting generated moves downward at the
>same speed as the waves are propagating. The practical effect is that
>the energy buildup in the wave continues to be RIGHT AT THE WAVEFRONT!
>Which means that the wave takes the form of a very sharp pulse wavefront
>that has a bandwidth of perhaps hundreds of megahertz, and LOTS and LOTS
>of energy in it.

This isn't quite correct. When the nuclear device detonates, it generates large amounts of prompt gamma radiation. Gamma is electromagnetic radiation of an extremely high frequency (higher than X-rays), so it travels at the speed of light the same as any other EM. If the detonation occurs in atmosphere, the gammas are rapidly absorbed over a short distance by the atmosphere, generating an incredible heat pulse. The rapid expansion of this superheated air is the primary blast effect of a nuclear device. Relatively little NEMP is produced.

But when the device is detonated at high altitude, there is little sensible atmosphere to absorb the gammas. Instead they encounter the free electrons in the ionosphere. These are accelerated by the gammas, just as they are accelerated by any radio wave encountering the ionosphere (or as the free electrons in your antenna are accelerated by a passing radio wave). But since the gammas are so energetic, and are available in copious amounts, the acceleration produced is *much* stronger, and the reradiated energy as the free electrons decelerate is also much greater.

The free electrons do *not* travel down to the surface, nor do they travel at the speed of light (though they book right along after the initial

acceleration). As they approach the sensible atmosphere, they encounter sufficient air density to be stopped while still many miles above the surface.

Because of inverse square spreading, the gamma wave front will impinge on a large segment of the ionosphere, so the effect is spread over a large area. The reradiation as the free electrons are decelerated is also over a wide area, but bunched vertically in the upper stratosphere as air density becomes greater. This produces a sharp wavefront extended in area. We can treat this the same way as we would a uniform current in an infinitely long wire, so this reradiated field falls off only with the inverse of distance rather than as the inverse square of distance as would be the case if it were a point source. That's what makes NEMP potentially dangerous to our equipment on the ground.

A 20 MT device exploded at an altitude of 100 miles will produce a field strength on the ground roughly equal to that produced by a lightning bolt 8 miles away. But because the NEMP effect occurs over an extended area, the effect is as if there were a lightning bolt 8 miles away in every direction at the same time. The induction will strongly energize extended conductors along their entire length. That's why NEMP is such a threat to the power grid and the phone system.

For the comparatively short conductors we use for antennas and other wiring in our stations, the effect isn't much different from a lightning near miss except that the wave front is steeper, ie the risetime of the induced pulse is faster. So we have to use suppression devices which clamp the pulse much quicker than what we'd need for induced lightning surge. Fortunately, there are gas tubes available which fire in under 2 nS, and that's adequate.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

693. Re: EMP phenomena (was: Morse code)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-24 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <378f5506.398755910@news.atl.bellsouth.net>
Source record: 69040
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On 23 Jun 1999 12:00:51 GMT, "Reg Edwards" <G4fgq.Regp@btinternet.com> wrote:
>Those who plan for war are sure to get it.

The appropriate aphorism goes like this,

"Those who beat their swords into plowshares
will wind up plowing for those who do not."

Those who do not plan for war will certainly be attacked
by those who do. Appeasers like your Chamberlain learned
that to their sorrow.

The only defense against war is to be ready to make it so
costly to your potential opponents that they don't dare attack.
The Swiss have understood this for 700 years. The rational
among us in the rest of the world have come to realize it in
the last 50 years.

Readiness to carry the fight to any potential aggressor has
kept the peace in the latter half of this century while lack of
preparation for war caused two major world wars in the former
half of the century. 50 million dead was a high cost to pay to
learn this lesson. People like you would have us repeat it
again and again.

The price of freedom is eternal vigilance. Those who would
have us disarm are fools, or worse. When the lamb lies down
with the lion, the lion gets up with a full belly.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

694. Re: Older Heathkit AA-21c-Stereo Amp.-Treble Control

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-24 00:00:00 UTC
From: Don <bjmcpher@usit.net>
Message-ID: <377269A6.30D3E8F0@usit.net>
Source record: 69041
Cross-posted to: sci.electronics.repair,rec.radio.amateur.homebrew

Thanks, Filip:

I looked at the first page of the site, but didnt try any of the links.
I just use netscape, but I like to keep the java stuff disabled to
prevent problems that it creates. Some pages force the use of java for
some odd reason. When I need that page, I will go to the link you
provided...I think it will be easier and faster for me.

Don

Filip M. Gieszczykiewicz wrote:
>
> In Article <Pine.GSO.3.96.990624000426.7999D-100000@cluster2>, through puissant
locution, dana <dana@randomc.com> soliloquized:
> >well, that leaves blind people out on that page, we use lynx
>
> It sure does. Also keeps out the search-engines' indexers... which is
> prolly why that page isn't as popular as it should be. So... I ran
> an old awk/sed script on his page and after a minute or two of manual
> editing (with vi, naturally :-) it's **FULLY** lynx accessible.
>
> Just imagine, you can access all links on a Commodore 64 with 40x24
> screen over a 300 baud connection to a dialup. You *CAN* at URL:
>
> http://www.pitt.edu/~fmgst/heathkit.html
>
> Cheers.
>
> >On Sun, 20 Jun 1999, Don wrote:
> >> Here is a link to a web page. Look down near the bottom of the page and
> >> youll find a way to subscribe to the heath reflector. Its mostly hams,
> >> but lots of them also collect and mess with just about anything heath
> >> ever made. You ought to subscribe and put your querry on that list. I
> >> bet youll get lots of info and advice.
> >> Also check the page for any audio stuff. I think there is a little
> >> there, and if I remember, there are some links to a few heath audio
> >> pages.
> >>
> >> To make the buttons work on the page, you need to have javascript
> >> enabled.
>
> *** NOT ANYMORE ***
>
> >> http://members.accessus.net/~dwentz/kb9jja/heathkit/

>
> --
> Filip "I'll buy a vowel" Gieszczykiewicz | http://www.repairfaq.org/
>
> Always and everything for the better!
> Now exploring whatever, life, and the meaning of it all... and 'not' :-)

695. Re: EMP phenomena (was: Morse code)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-24 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01bebeaa$e5486fc0$58e6abc3@default>
Source record: 69042
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

M.A.D.

696. Re: Portable Low Power Generation ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-24 00:00:00 UTC
From: greenking8@aol.com
Message-ID: <19990624133721.01734.00003235@ng-fz1.aol.com>
Source record: 69043

o.k. i want to build a mower engine/car alternator set up , the building i
have no problem with , its the wiring, the alt i want to use is from a skoda (
east europe) i have about 4 whole cars & about 10 in bits so
i have plenty of spares !!!! the alt is tough and large but has a seperate
regulator
do i need this ?? i want to use a battery
and use this set up to jump start cars with flat batterys , run 12v accessories
, but also long term in a power out to power my
shack , (couple of radios) or perhaps a 12v t.v. for the kids etc, etc, i
have i wiring
diagram if i use the regulator if not what then?? i have 1 main feed to the
battery
the other 2 go to the regulator , i suppose
if i do not use the regulator then i run the risk of "battery boiling" but
lot of power
anyway any help would be great
regards jerry

697. Regen question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-24 00:00:00 UTC
From: John Mock <kd6pag@qsl-nojunk.net>
Message-ID: <87yah9to8f.fsf@mongrel.kd6pag.ampr.org>
Source record: 69044

This probably falls into the 'naive question' category, but do regen's receive CW and/or SSB? Or are they basically AM-only devices that are no longer very relevant in this day and age? I ask because i am curious and my intent is not to spark or revisit a long discussion. Let's not get into the re-radiation issue here as i'm assuming a modern design with a pre-amp and suitable construction to isolate the antenna from the partially quenched oscillator.

-- KD6PAG (Networking Old-Timer, "RF newbie")

698. Re: Regen question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-24 00:00:00 UTC
From: bkizerian@my-deja.com
Message-ID: <7ku590got1@nnrp1.deja.com>
Source record: 69045

> This probably falls into the 'naive question' category, but do regen's
> receive CW and/or SSB?

A stable well designed regen does a very nice job of receiving CW and
SSB signals. All you do is turn up the regeneration just a bit beyond
where the detector starts to oscillate. They work just fine this way.

Bruce kk7zz

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

699. Re: Portable Low Power Generation ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-24 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19990624170417.01732.00003648@ng-fz1.aol.com>
Source record: 69046

>Subject: Re: Portable Low Power Generation ?
>From: greenking8@aol.com (GreenKing8)
>Date: Thu, 24 June 1999 01:37 PM EDT
>Message-id: <19990624133721.01734.00003235@ng-fz1.aol.com>

wrote:
>
>o.k. i want to build a mower engine/car alternator set up , the building i
>have no problem with , its the wiring, the alt i want to use is from a skoda
>(
>east europe) i have about 4 whole cars & about 10 in bits so
>i have plenty of spares !!!! the alt is tough and large but has a seperate
>regulator
>do i need this ??

Yes!

>i want to use a battery
>and use this set up to jump start cars with flat batterys , run 12v
>accessories
>, but also long term in a power out to power my
> shack , (couple of radios) or perhaps a 12v t.v. for the kids etc, etc,

A multi-use device. A battery is needed with this sort of setup.

> i
>have i wiring
>diagram if i use the regulator if not what then??

Blown up battery and maybe burned out alternator.

> i have 1 main feed to the
>battery
>the other 2 go to the regulator , i suppose
> if i do not use the regulator then i run the risk of "battery boiling" but
>lot of power
> anyway any help would be great

The simplest approach is to duplicate the basic electrical system of the alternator as used in a car. Usually it works like this: Alternator case, battery negative, and regualtor case are all grounded and connected together, by means of wires and/or being mounted to the metal car body and engine. Alternator output goes through a heavy lead to battery positive. There are also one or two leads from the regulator to the alternator. Usually there is some sort of switching arrangement with the ignition switch so that the regulator is cut off when the engine is not running. You can replace this with a simple toggle switch, but remember to turn it off when not in use.

73 de Jim, N2EY

700. Re: EMP phenomena (was: Morse code)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-24 00:00:00 UTC
From: No-Censorship <spam@nospam.com>
Message-ID: <7ku69f$th@dfw-ixnews17.ix.netcom.com>
Source record: 69047
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

>>Those who plan for war are sure to get it.
>
>The appropriate aphorism goes like this,
>
>"Those who beat their swords into plowshares
>will wind up plowing for those who do not."
>
>Those who do not plan for war will certainly be attacked
>by those who do. Appeasers like your Chamberlain learned
>that to their sorrow.
>
>The only defense against war is to be ready to make it so
>costly to your potential opponents that they don't dare attack.
>The Swiss have understood this for 700 years. The rational
>among us in the rest of the world have come to realize it in
>the last 50 years.
>
>Readiness to carry the fight to any potential aggressor has
>kept the peace in the latter half of this century while lack of
>preparation for war caused two major world wars in the former
>half of the century. 50 million dead was a high cost to pay to
>learn this lesson. People like you would have us repeat it
>again and again.
>
>The price of freedom is eternal vigilance. Those who would
>have us disarm are fools, or worse. When the lamb lies down
>with the lion, the lion gets up with a full belly..
>
>

I am sorry, but THIS subject I simply can't ignore.....

There is something about all this EXPENSIVE nonsense
about "STAR WARS" and similar methods of Anti-Ballistic Missile
defenses that grates on me.

WHY are we spending who know how many BILLIONS of
dollars on this ???

There are so many ways the money can be used for helping
people......

OK, here is my reasoning:

1.0 The MISSILE'S function is to deliver the bomb to it's
destination and detonate it when the aggressor nation
want's to kill somebody.

2.0 The purpose of these defense systems is to stop the
missiles BEFORE they can get to their destinations and
detonate their warheads.

OK, fine.

BUT, if I were in charge of being the aggressor, I'd spend a tiny
fraction of the cost of the Ballistic Missile and smuggle the bombs
to it's destination some years prior to the war.

This way, I wouldn't have to develop expensive and delicate
missile systems, just use the same methods drug smugglers have
used for many years.

All that fancy "STAR WARS" garbage means absolutely nothing,
since the bombs are already at their destinations.

SO, why are we wasting our money trying to develop a useless
system ?

I suspect it's due, in part, to the reluctance of the politicians
in charge of military projects to admit to the public that there
IS no defense against this tactic. Well, that, and a tenancy
to want to keep money flowing into programs that help
keep them employed.

Things would be simpler if all the major nations admit that they
have done this smuggling in of weaponry and that there is no
practical defense against it other than the knowledge that the entire
world would go up in smoke if ANY of them started a major offense.

Yep, "MUTUALLY ASSURED DESTRUCTION"

If they all admit to this obvious tactic, then we can stop wasting
money on useless "defensive" programs and use the money
for something constructive.

Like, for example, helping the large starving parts of the world...

Yeah, true, it WOULD require politicians and military types to admit
to reality.... That seems to be a problem with some people.

701. Re: Regen question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-24 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7ku9ji$6n$1@plutonium.btinternet.com>
Source record: 69048

a regen receiver will also copy NBFM signals if you slightly off-tune the
rx('slope detection')
It may be worth connecting a zener diode across the power supply to the
regen detector stage to increase the stability, otherwise SSB reception may
be difficult.

702. Re: What Impeadance is this coax

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-24 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7ku9v6$57b$1@neptunium.btinternet.com>
Source record: 69049

I have some nice looking coax cable which was originally used as networking cable for computers. Does anyone know what impedance this is?

703. Re: 11 Meter Direction Finding Loop Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-24 00:00:00 UTC
From: la8ak@online.no
Message-ID: <376b669b.479733078@news.online.no>
Source record: 69050

On 11 Jun 1999 01:23:43 GMT, w4pqwhs@aol.com (W4pqw HS) wrote:

>Terry
>I use 1/4 " copper tubing abt 12" dia., split at top ,the var cap 50pf
>goes at top.at bottom of loop connect coax sh to center of copper loop,

RG8/U works fb

Jan-Martin
LA8AK

704. Re: Plate Voltage, Compactron Tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-24 00:00:00 UTC
From: technolad@webtv.net
Message-ID: <14315-3772B1BF-12@newsd-231.iap.bryant.webtv.net>
Source record: 69051

I've been a ham for over 20 yrs,don't you think i'd know about these
things?

705. Re: AM reception on FM receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-24 00:00:00 UTC
From: Tim Wilson <tim@cmwave.com>
Message-ID: <3772B500.A8A729BA@cmwave.com>
Source record: 69052
Body handling: Binary attachment payload not displayed: vcard.vcf

This is known as slope detection.

Tim

[One or more binary attachments are retained only in the source text.]

706. Re: Bi-band mobile antenna ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-24 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.990624170505.16691D-100000@oso.slonet.org>
Source record: 69053

Simply put your effort on antenna built for SATELLITE use. That should
solve your problem. Cliff K7RR

On Thu, 24 Jun 1999, J-P. Scherrer wrote:

> Hi...
> I'm looking for a bi-band 2m./70cm. mobile antenna (to
> buil or buy) !
> The problem is that ALL the antennas I've tried were tailored
> for the AMERICAN bands, and, as you know, in France our bands are :
> 144.000 to 146.000 with the center at 145.000 Mhz. and
> 430.000 to 440.000 with the center at 435.ooo Mhz.
> ...so, the commercial antennas (made from US bands) ARE TOO
> SHORT !!! ...and the whips are too shorts too to compensate for to
> resonate on our mid-band !!!
> Have you got an idea, or drawings of homebrew antennas, or any
> EUROPEAN FIRM who build antennas ?
> Please let me know via E-Mail...
> 73's QRO de F4JOC
> **********
> J-P. Scherrer - Geneva (SWITZERLAND)
> E-Mail: scherrer@infomaniak.ch - ICQ # 6232732
> **********
>
>
>
>

707. Re: What Impeadance is this coax

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-24 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.990624170744.16691E-100000@oso.slonet.org>
Source record: 69054

Yes the proceedure works just fine. Cliff K7RR

On Wed, 23 Jun 1999, Mike Silva wrote:

>
> Clifford Buttschardt wrote in message ...
> >It is far easier to find a simple L/C meter----even the little ones for
> >determining small capacitors and inductors, then go to all the trouble to
> >find a TDR or other exotic test equipment. Simply measure the capacitance
> >of any length of coax. Then short the end and measure the inductance.
>
> Will this actually work (shorting the end and measuring inductance)? Seems
> like the setup is similar to a noninductive resistor winding (but with the
> coax it's not entirely symmetrical).
>
> 73,
> Mike, KK6GM
>
> >Use any simple instrument you might have on hand or can borrow.
> > Then take the square root of L divided by C. This will give you the
> >cable impedance close enough for any practical ham application. Cliff K7RR
>
>
>
>
>

708. Re: EMP phenomena (was: Morse code)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-24 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7kujqqmdr1@autumn.news.rcn.net>
Source record: 69055
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Simple. Whether the "Star Wars" defense system was
ever technically achievable or not did one thing. It
bankrupted the former USSR.

No-Censorship wrote in message <7ku69f$th@dfw-ixnews17.ix.netcom.com>...
-
>
> I am sorry, but THIS subject I simply can't ignore.....
>
> There is something about all this EXPENSIVE nonsense
>about "STAR WARS" and similar methods of Anti-Ballistic Missile
>defenses that grates on me.
>
> WHY are we spending who know how many BILLIONS of
>dollars on this ???
>
> There are so many ways the money can be used for helping
>people......
>

709. Re: EMP phenomena (was: Morse code)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-24 00:00:00 UTC
From: NOamradioSPAM@thebizlink.com
Message-ID: <NOamradioSPAM-2406992115170001@207-172-132-181.s181.tnt5.col.md.dialup.rcn.com>
Source record: 69056
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <378d4905.395681507@news.atl.bellsouth.net>,
ke4zv@bellsouth.net (Gary Coffman) wrote:
Ultimately it depends on the size of the nuke and the severity of the
lightning strike. I assume you are using some "standard" or average
values.

On Wed, 23 Jun 1999 08:16:14 GMT, keinanen@sci.fi (Paul Keinanen) wrote:
>To put it into perspective, how close should a lightning hit in order
>to produce a similar EMP as an ionospheric nuclear blast ?

About 8 miles. The inverse square law is still our friend, even with
NEMP.

>In the days when the NEMP was a hot topic of discussion, you could
>easily get the feeling that nothing would survive, but from the
>equipment that I have seen that have been designed to be NEMP
>resistant, the protection is not that exotic.

It isn't. It just has to be done *right*. Same with lightning protection.

Gary

Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

710. Re: AM reception on FM receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-24 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <7kum6c$9l3$1@autumn.news.rcn.net>
Source record: 69057

Slope detection is how you receive an FM signal on an AM receiver....

Tim Wilson <tim@cmwave.com> wrote in message
news:3772B500.A8A729BA@cmwave.com...
> This is known as slope detection.
>
> Tim
>

711. re: Program for calculating toroids windings

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-24 00:00:00 UTC
From: joel <joel2@hotmail.com>
Message-ID: <UzBc3.745$G81.89220@newsgate.direct.ca>
Source record: 69058

There are many Bill. Some are just java or Visual Basic
code running on a web page. You wanted a free one;
there is one in the programs section of this web site:

http://www.qrp.pops.net/qrp/default.htm

hope you find what your looking for
Joel

712. Re: AM reception on FM receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-24 00:00:00 UTC
From: Tim Wilson <tim@cmwave.com>
Message-ID: <3772D859.7EB6059C@cmwave.com>
Source record: 69059
Body handling: Binary attachment payload not displayed: vcard.vcf

Damned if it isn't!! O.K. so he has a cheap receiver.

Tim

[One or more binary attachments are retained only in the source text.]

713. Re: What Impeadance is this coax

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-24 00:00:00 UTC
From: Doug Smith <nospam@nospam.org>
Message-ID: <01Cc3.88524$_m4.722284@news2.giganews.com>
Source record: 69060

David Cunningham wrote in message <7ku9v6$57b$1@neptunium.btinternet.com>...
>
>I have some nice looking coax cable which was originally used as networking
>cable for computers. Does anyone know what impedance this is?

What kind of network?

Ethernet is 50 ohms. It's usually marked either RG-58 (if thin, about 1/4"
diameter) or RG-8. (if about 1/2" diameter) It'll work fine.

714. Bi-band mobile antenna ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-24 00:00:00 UTC
From: "J-P. Scherrer" <scherrer@infomaniak.ch>
Message-ID: <7ksscc$ab5$1@news1.sunrise.ch>
Source record: 69179

Hi...
I'm looking for a bi-band 2m./70cm. mobile antenna (to
buil or buy) !
The problem is that ALL the antennas I've tried were tailored
for the AMERICAN bands, and, as you know, in France our bands are :
144.000 to 146.000 with the center at 145.000 Mhz. and
430.000 to 440.000 with the center at 435.ooo Mhz.
...so, the commercial antennas (made from US bands) ARE TOO
SHORT !!! ...and the whips are too shorts too to compensate for to
resonate on our mid-band !!!
Have you got an idea, or drawings of homebrew antennas, or any
EUROPEAN FIRM who build antennas ?
Please let me know via E-Mail...
73's QRO de F4JOC
****
J-P. Scherrer - Geneva (SWITZERLAND)
E-Mail: scherrer@infomaniak.ch - ICQ # 6232732
****

715. ADI AT600HP Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-24 00:00:00 UTC
From: oldgear@aol.com
Message-ID: <19990624060511.01980.00003533@ng-cc1.aol.com>
Source record: 69180

Are there any Mods available to open the cell block on this rig. Please respond to my email address.
Thanks

716. Siemens (?) PMB2312-T - no data to be found on web :(

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-24 00:00:00 UTC
From: rjburden@bigpond.com
Message-ID: <377221ab.7567554@news.bigpond.com>
Source record: 69181

Hi,

does anyone know what the divide ratio is for this prescaler?

Many thanks,
Richard VK5OO

717. Re: WTB: Reciever kit for 40 meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-25 00:00:00 UTC
From: "Tom V." <TVAC@postoffice.worldnet.att.net>
Message-ID: <37742B35.6267@postoffice.worldnet.att.net>
Source record: 68982

Just noticed vectronics rx and tx kits on sale in tech-america flyer.
Don't know how good they are but they have a 40M reciever kit for $20
(+$10 for case.) Interested if anyone has built any of these and what
their impression was. Good luck, Paul.
Tom WA2CRG

BamBam wrote:
>
> Looking for a reciever kit for QRP rig. I am going to build a Fireball
> 40 transmitter and would like to build a reciever along the same
> lines.. i.e. fits inside an altoids tin. Anybody have any ideas??
>
> Paul Jordan
> KL0AN
> Fairbanks, AK
>
> --
> There never seems to be enough time to do the
> things you want to do once you find them...
>
> Sent via Deja.com http://www.deja.com/
> Share what you know. Learn what you don't.

718. Re: What was XR-1468?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-25 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <3774294D.1DB4@pop.valley.net>
Source record: 68983
Cross-posted to: rec.radio.amateur.homebrew,sci.electronic.repair

pierretr@collegebdeb.qc.ca wrote:
>
> Quite a few years ago I built a power supply using a XR-1468 tracking
> regulator. The thing doen't work and I can't seem to find my spec sheets for it.
>
> Can anyboby help?

Hello--
This may have been Exar's second-sourced equivalent of Motorola's
MC1468; check for the MC1468, and see if it's identical in packaging.
73,
Brad AA1IP

719. Re: Core dope for Torroids???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-25 00:00:00 UTC
From: Norm Melick <henmel@worldnet.att.net>
Message-ID: <37743780.1BE842C6@worldnet.att.net>
Source record: 68984

Hi Tom,

I've used clear finger nail polish for years, and it works
great.

Just my 2 cents.

72,

Norm/KQ6SD

720. Re: What Impeadance is this coax

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-25 00:00:00 UTC
From: pierretr@collegebdeb.qc.ca
Message-ID: <MrBc3.62$ya2.8657@wagner.videotron.net>
Source record: 69061

In <7ku9v6$57b$1@neptunium.btinternet.com>, "David Cunningham" <D.L.C@btinternet.com>
writes:
>
>I have some nice looking coax cable which was originally used as networking
>cable for computers. Does anyone know what impedance this is?
>
>
I would just mesure the outside diameter of the cable and test for a match
in any Handbook. In a nutshell, if it's a little bigger than Cable TV coax, it is
92 ohm Arcnet or IBM mainframe coax, if the same it's 75 ohm, and if smaller
it's 50 ohm.

721. What was XR-1468?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-25 00:00:00 UTC
From: pierretr@collegebdeb.qc.ca
Message-ID: <FCBc3.66$ya2.8657@wagner.videotron.net>
Source record: 69062
Cross-posted to: rec.radio.amateur.homebrew,sci.electronic.repair

Quite a few years ago I built a power supply using a XR-1468 tracking
regulator. The thing doen't work and I can't seem to find my spec sheets for it.

Can anyboby help?

722. Trouble with CAS signal for a repeater

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-25 00:00:00 UTC
From: Dan <express@fastdial.net>
Message-ID: <7kuvlvafh1@news.iptransit.com>
Source record: 69063

I'm trying to wire in a controller using a couple of old radios. on both, I found the signal that changes when the proper tone is encoded & the squelch is opened.
The problem is, both sourses have a voltage present untill the squelch is opened, & the controller I'M using needs an active high to activate. ????
any suggestions ???
dan

723. Azimuth control for HF antennas?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-25 00:00:00 UTC
From: Patrick Stickler <patrick.stickler@nokia.com>
Message-ID: <37733070.9277CB62@nokia.com>
Source record: 69064
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.homebrew

Hey folks,

I've been reading "The Joy of QRP" (*great* book) and after reading about strategies
for ideal MUF, radiation angle, skip distance, etc. I began wondering why no'one
(in the HF world, sattelite operation being the exception) seems to be experimenting
with HF antennas where the azimuth is adjustible along with the direction (or maybe
I've just not looked in the right place...).

I.e., what kinds of antennas could be tilted at varying degrees with a rotator to
adjust the skip of HF signals? E.g., if a ground plane for 40M has too low a
radiation angle for the target area one is trying to contact, tilt it back to raise
the radiation angle and get a shorter skip zone???

I've played around a bit with some simulation software, and apparently, the
angle of the vertical radiator of a GP doesn't have much effect in the overall
radiation angle, so the above example wouldn't work too well -- but there
surely must be a number of antenna designs where azimuth control would effect the radiation angle. A 40m Helical?

Being the neophyte that I am, I'd very much like to hear any comments and
ideas that others would care to offer.

Cheers,

Patrick

OH2LUV, KC4YYY
Suolahti, FINLAND
patrick.stickler@nokia.com

724. computer parts dirt cheap by ham who works for a BIG wholesaler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-25 00:00:00 UTC
From: n8wwm@aol.com
Message-ID: <19990625034935.12852.00004912@ng-cb1.aol.com>
Source record: 69065
Body handling: HTML body converted to readable text

Hi all....

This is a NO BS NO SCAM DEAL....AND IT IS FOR HAMS ONLY!

My company is 20 years old and we sell computer parts and Microsoft products at
wholesale to re-sellers. There is an even chance you have a product from Amax
if you patronize your local computer shop.

I am a salesman for Amax and I am offering to sell either built systems or
components to hams at the price we sell them in quantity 50 lots to resellers.
This is for real, and so am I.
I am offering this not to make money but as a way to repay the ham community for the TONS
of help I have gotten since I got in this hobby.

Go to www.amax.com and check out the stuff there....

Then call me in the Chicago office at 888-810-2629. I am at extension 106.

Our Illinois location has some pricing at http://people.ce.mediaone.net/amaxil
but it is kinda old pricing. You can call me for deals, but an email to
Doug_Adair@amax.com is best.

73 and CU ON 6 METERS!!!!!!!!!!!!!!!!!!!!!!!!!!!!

Doug N8WWM

725. modifying radio firmware

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-25 00:00:00 UTC
From: Hamish Moffatt <hamish@rising.com.au>
Message-ID: <7kve95$25g1$1@arachne.labyrinth.net.au>
Source record: 69066

I had a browse through the archives of this newsgroup for the past few
years and didn't see much about modifying the firmware of radios.
I'm not interested in extending the receive/transmit coverage but
rather adding some new features.

For example I have just bought a Kenwood TR-9000 2m allmode receiver,
which is about 20 years old. The VFO dial offers 100 Hz steps in all modes,
and 10kHz steps as well in FM mode. I think it would be nice to select
the step size (eg 1kHz steps would be useful); the memory selector switch
(5 position rotary) could be used in VFO mode to select the step size.
The schematics shows all these switches go straight into the micro.
The micro is a "uPD650C-021".. is that a real 6500, or is it a 6502?
Since the ROM seems to be built in to the micro, that's going to make
things a bit harder though. I don't want to write firmware from scratch.

Similarly my Icom IC-726 HF/6m rig would be enhanced (IMHO) if you could
make the VFOs track when in split mode, eg moving one would move the other
by the same amount. This would be useful for 10m and 6m repeater operation,
perhaps satellite too. The 726 contains an "HD63A01Y0RK10P", which also
appears to have the program built in.

So has anyone done anything like this before? It looks like a bit of
a dead-end to me at present, since I doubt there's any way to read the code
out of the micros, and probably no way to obtain a replacement chip to
program up (especially for the TR-9000). I don't suppose ICOM or Kenwood
are likely to want to give me the source code, either.

I suspect the micro in the 9000 could be replaced with an FPGA (custom
PCB required etc, of course) but I don't think I'm that keen.

Hamish VK3SB
--
Hamish Moffatt Mobile: +61 412 011 176 hamish@rising.com.au

Rising Software Australia Pty. Ltd.
Developers of music education software including Auralia & Musition.
31 Elmhurst Road, Blackburn, Victoria Australia, 3130
Phone: +61 3 9894 4788 Fax: +61 3 9894 3362 USA Toll Free: 1-888-667-7839
Internet: http://www.rising.com.au/

726. Re: What Impeadance is this coax

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-25 00:00:00 UTC
From: &RETIRED0 <&retired0@hotmail.com>
Message-ID: <3772C527.DF28585B@hotmail.com>
Source record: 69067

David Cunningham wrote:
>
> I have some nice looking coax cable which was originally used as networking
> cable for computers. Does anyone know what impedance this is?

My experience has been that "nice looking cable" is almost
always
50 ohms. But there was that one time that I got some pretty
nice
looking cable that was 75 ohms. Oh, then there was the
surplus
stuff that was 93 ohms...but it wasn't quite as nice looking
as the other, so maybe that didn't count...

Seriously, cable should have a number written on it.
Publish
that and ask again.
mike
--
Big list of WANTS and FORSALES at link below.
Return Address is Bogus. Click below to reply
http://www.geocities.com/SiliconValley/Monitor/4710/
Or you can DELETE the & in the "from" address.

727. Re: What Impeadance is this coax

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-25 00:00:00 UTC
From: &RETIRED0 <&retired0@hotmail.com>
Message-ID: <37733ECC.90C45109@hotmail.com>
Source record: 69068

Clifford Buttschardt wrote:
>
> Yes the proceedure works just fine. Cliff K7RR

Here's a thought experiment.
Assume your L-meter measures L by applying a sinewave of
some
frequency to the device under test. We don't care how it
actually
determines the inductance from this sinewave.
Now take a piece of coax that's 1/4 wavelength at the test
frequency.
Short the end. The other end looks like an open circuit at
the
test frequency. I don't understand how one could possibly
make
an inductance measurement at the test frequency on that open
circuit.

Now if the coax is relatively short compared to the
wavelength of
the test frequency, you'll measure something. In the limit
of
"very short" you get something close to the right
inductance,
but it will be a small inductance requiring a meter capable
of
measuring accurately in the hundred nanohenry range.
What's wrong with this picture?

TDR is NOT exotic. All you need is a pulse source...you can
do it
with a TTL gate...and a scope. You need enough coax so that
the
transit time is somewhat longer than the scope risetime.
Hang a small
potentiometer on the open end and tweek until the reflection
goes
away. Then measure the resistor with an ohmmeter. It's
very
accurate. And the required scope is probably cheaper than
the
LC meter required to do it by the sqrt(L/C) method.

I had a scope long before I had an inductance meter. And I
still
don't have an inductance meter capable of accurately
measuring low inductances.
My cheapo LC-meter is
about 4 orders of magnitude shy on required inductance
range.
miker

>
> On Wed, 23 Jun 1999, Mike Silva wrote:
>
> >
> > Clifford Buttschardt wrote in message ...
> > >It is far easier to find a simple L/C meter----even the little ones for
> > >determining small capacitors and inductors, then go to all the trouble to
> > >find a TDR or other exotic test equipment.

Simply measure the capacitance
> > >of any length of coax. Then short the end and measure the inductance.
> >
> > Will this actually work (shorting the end and measuring inductance)? Seems
> > like the setup is similar to a noninductive resistor winding (but with the
> > coax it's not entirely symmetrical).
> >
> > 73,
> > Mike, KK6GM
> >
> > >Use any simple instrument you might have on hand or can borrow.
> > > Then take the square root of L divided by C. This will give you the
> > >cable impedance close enough for any practical ham application. Cliff K7RR
> >
> >
> >
> >
> >

728. Help !

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-25 00:00:00 UTC
From: dave@omens.freeserve.co.uk
Message-ID: <N.062599.115539.43@q1d9h5>
Source record: 69069
Cross-posted to: alt.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

--
I drink therefore i can !!!

729. Re: modifying radio firmware

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-25 00:00:00 UTC
From: frussle@erols.com
Message-ID: <37777e4e.2395718@news.erols.com>
Source record: 69070

On 25 Jun 1999 08:23:01 GMT, Hamish Moffatt <hamish@rising.com.au>
wrote:

<snip>
>So has anyone done anything like this before? It looks like a bit of
>a dead-end to me at present, since I doubt there's any way to read the code
>out of the micros, and probably no way to obtain a replacement chip to
>program up (especially for the TR-9000). I don't suppose ICOM or Kenwood
>are likely to want to give me the source code, either.

So you really want to get serious about embedded programming, eh?

You should know that many embedded uP chips are designed so that their
internal ROM chips can not be read from the outside.

And source code? I don't know. I suspect that even if you could get
it, the comments and documentation are all too likely to be in another
language, such as Japanese. It seems to me you are asking if anyone
has reverse engineered these radios.

My suggestion is to try building your own from scratch. You can
purchase DDS kits, front end filter kits, receiver kits, and even
transmitter kits. With a bit of extra glue (a handful of switching
diodes and transistors) you could then insert your own uP. And you
could use whatever uP you like.

This sounds like a lot of work, but reverse engineering can be worse.
Frankly, considering the performance compromises one finds in the
radios you mention, I'd seriously consider starting with a clean sheet
of paper.

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

730. Re: Azimuth control for HF antennas?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-25 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3773984D.E716B632@hiwaay.net>
Source record: 69071
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.homebrew

Patrick- I think there is a definition problem- Azimuth is the equivalent to compass direction- you really mean elevation, I think. Try looking for references to elevation control.

Bill

Patrick Stickler wrote:

> Hey folks,
>
> I've been reading "The Joy of QRP" (*great* book) and after reading
> about strategies
> for ideal MUF, radiation angle, skip distance, etc. I began wondering
> why no'one
> (in the HF world, sattelite operation being the exception) seems to be
> experimenting
> with HF antennas where the azimuth is adjustible along with the
> direction (or maybe
> I've just not looked in the right place...).
>
> I.e., what kinds of antennas could be tilted at varying degrees with a
> rotator to
> adjust the skip of HF signals? E.g., if a ground plane for 40M has too
> low a
> radiation angle for the target area one is trying to contact, tilt it
> back to raise
> the radiation angle and get a shorter skip zone???
>
> I've played around a bit with some simulation software, and apparently,
> the
> angle of the vertical radiator of a GP doesn't have much effect in the
> overall
> radiation angle, so the above example wouldn't work too well -- but
> there
> surely must be a number of antenna designs where azimuth control would
> effect the radiation angle. A 40m Helical?
>
> Being the neophyte that I am, I'd very much like to hear any comments
> and
> ideas that others would care to offer.
>
> Cheers,
>
> Patrick

>
> OH2LUV, KC4YYY
> Suolahti, FINLAND
> patrick.stickler@nokia.com

731. Re: Regen question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-25 00:00:00 UTC
From: Mike Silva <mjsilva@jps.net>
Message-ID: <7l0817$e0m$1@its.hooked.net>
Source record: 69072

John Mock wrote in message <87yah9to8f.fsf@mongrel.kd6pag.ampr.org>...
>This probably falls into the 'naive question' category, but do regen's
>receive CW and/or SSB? Or are they basically AM-only devices that are
>no longer very relevant in this day and age...

Sure do -- just advance the regen control far enough to bring the detector into oscillation and you've got your local carrier. The QRP-L list seems to be having a regen revival lately, and on the glowbugs (tubes) list regen design and use is a staple topic.

73,
Mike, KK6GM

732. Re: modifying radio firmware

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-25 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <3773AFF6.CEDCBE7B@midwestmicro-tek.com>
Source record: 69073

Jake Brodsky wrote:

> On 25 Jun 1999 08:23:01 GMT, Hamish Moffatt <hamish@rising.com.au>
> wrote:
>
> <snip>
> >So has anyone done anything like this before? It looks like a bit of
> >a dead-end to me at present, since I doubt there's any way to read the code
> >out of the micros, and probably no way to obtain a replacement chip to
> >program up (especially for the TR-9000). I don't suppose ICOM or Kenwood
> >are likely to want to give me the source code, either.
>
> So you really want to get serious about embedded programming, eh?
>
> You should know that many embedded uP chips are designed so that their
> internal ROM chips can not be read from the outside.
>
> And source code? I don't know. I suspect that even if you could get
> it, the comments and documentation are all too likely to be in another
> language, such as Japanese. It seems to me you are asking if anyone
> has reverse engineered these radios.
>
> My suggestion is to try building your own from scratch. You can
> purchase DDS kits, front end filter kits, receiver kits, and even
> transmitter kits. With a bit of extra glue (a handful of switching
> diodes and transistors) you could then insert your own uP. And you
> could use whatever uP you like.
>
> This sounds like a lot of work, but reverse engineering can be worse.
> Frankly, considering the performance compromises one finds in the
> radios you mention, I'd seriously consider starting with a clean sheet
> of paper.
>

Your right about that! I've been designing microcontrol systems for 10 years and every once in a while we get some company with legacy hardware that was designed by some out of buisiness company and they want us to reverse engineer it so they can "modernize" the design. Usually we spend about a week trying to run down old chip data and firmware code from defunct companies and invariably wind up designing a brand new system from scratch.

However all is not a lost. You can try the old "monitor, modify and replace". This can take a lot of time but it can be worth it. What you do is look at all the I/O lines and determine wether they are input or output then you monitor the output lines while you change the state on the input lines (obviously it is a

bit more complex than this but you get the idea). Once you have detemined the purpose and operation of all the various I/O lines you can then rip out the old microcontroller and its peripherals and install your own. In most cases a single well chosen Microchip Pic can replace most if not all of your present control system.

Basicaly what you do is maintain the integraty of the old controlled system (in this case the radio) but have replaced the controller with a system that is, to you, more user friendly. Bare in mind however that this is pandora's box, once you've torn out the original controller there is usually no going back. If you've made a mistake in determining I/O function or lose an important bit of information your stuck with a nice 2m paper weight.

Rick

> Jake Brodsky, AB3A mailto:frussle@erols.com
> "Beware of the massive impossible!"

733. Re: Portable Low Power Generation ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-25 00:00:00 UTC
From: greenking8@aol.com
Message-ID: <19990625121839.26155.00004101@ng-ba1.aol.com>
Source record: 69074

thanks mate , you have come to the rescue
again , i checked the address you gave me
and also did a search , but was put off cos,
all the alts used had a built in reg , i have a wiring diagram for the car charging system
iwill use that
thanks again jerry

734. Re: modifying radio firmware

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-25 00:00:00 UTC
From: frussle@erols.com
Message-ID: <3783b047.15189890@news.erols.com>
Source record: 69075

On Fri, 25 Jun 1999 11:36:06 -0500, Rick Haub
<rhaub@midwestmicro-tek.com> wrote:

>Your right about that! I've been designing microcontrol systems for 10 years and
>every once in a while we get some company with legacy hardware that was designed
>by some out of buisiness company and they want us to reverse engineer it so they
>can "modernize" the design. Usually we spend about a week trying to run down old
>chip data and firmware code from defunct companies and invariably wind up
>designing a brand new system from scratch.
<snip>

I've always held the opinion that reverse engineering isn't worthwhile
unless there is a very large market of these things in use and it is a
de facto "standard." For example, the IBM personal computer in the
early 1980s.

It's also worth noting that many PLL chips take their data serially.
Unless you know the chip, you're going to have a great deal of fun
figuring out how it works, particularly if it only has a house number
on it. I think we can all see this is not a simple effort. I'm sure
someone has done it once upon a time,

Finally, reprogramming all this, from the control panel buttons and
knobs, to the PLL chip commands, is quite a formidable task to be
undertaking from ground zero. And as you pointed out, the opportunity
for error is quite high.

For most radios, I just don't see how it is a worthwhile endeavor
compared to starting with a totally new design.

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

735. WTB: Reciever kit for 40 meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-25 00:00:00 UTC
From: BamBam <kl0an@my-deja.com>
Message-ID: <7l0gfg$b50$1@nnrp1.deja.com>
Source record: 69076

Looking for a reciever kit for QRP rig. I am going to build a Fireball
40 transmitter and would like to build a reciever along the same
lines.. i.e. fits inside an altoids tin. Anybody have any ideas??

Paul Jordan
KL0AN
Fairbanks, AK

--
There never seems to be enough time to do the
things you want to do once you find them...

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

736. BUY YAESU FT 736R

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-25 00:00:00 UTC
From: Nevio <nterre@tim.it>
Message-ID: <7l0a4p$6qb$1@nslave1.tin.it>
Source record: 69077

> I'm looking for buy for FT 736R modules for 50 and 1296 Mhz
> Nevio
> E-mail nterre@tim.it
>
>
>

737. Transverters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-25 00:00:00 UTC
From: BENT VELLING <pacman@c2i.net>
Message-ID: <35Rc3.438$M91.15603@news>
Source record: 69078

Hi. I`m looking for some good drawings on 2/6/70cm transverters.
I`m going to use my ts940 to drive them.
The 2/70cm transverters should be good enough for EME.
If you got drawings on preamps for the above, that`s also nice.
I`ll cover the postage if you got it on paper.

738. Re: What was XR-1468?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-25 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <3774110A.722E8FDC@corecomm.net>
Source record: 69079
Cross-posted to: rec.radio.amateur.homebrew,sci.electronic.repair

pierretr@collegebdeb.qc.ca wrote:
> Quite a few years ago I built a power supply using a XR-1468 tracking
> regulator. The thing doen't work and I can't seem to find my spec sheets for it.
>
> Can anyboby help?

"The XR-1468/1568 is a dual polarity tracking voltage regulator, internally
trimmed for symmetrical positive and negative 15V outputs. Current output
capability is 100 mA, and may be increased by adding external pass
transistors. The device is intended for local 'on-card' regulation, which
eliminates the distribution problems associated with single point
regulation."
...
"Outputs are internally set to +- 15Volts but can be externally adjusted
between +-8.0 to +-20 Volts with a single control. The circuit features
+-100 mA output current, with externally adjustable current limiting,
and provision for remote voltage sensing."
...
"Output Voltages Balanced Within 1% (XR-1568)" (looks like 2% for 1468)
"0.06% Line and Load Regulation"

Looks very simple to use. Ground pin 1, hang 1500 pF caps from 3 and 12,
sense resistor from 4 to 5 and from 10 to 11 (take power from 4 and 11),
+V to 7 and -V to 8. 2 is "balance adjust"; in sample circuit, 2 to wiper
of a 100K pot whose outside ends go to 4 and 11. 14 is "voltage adjust";
in sample circuit 14 to wiper of a 100K pot, outside ends to 4 and 11.

Only two pages in the (1985) databook.

To be more clear on the output connections, 5 and 10 are the actual chip
outputs, 4 and 11 are the sense inputs. They hang 1 uF from 4 and 11 to
ground in sample circuits. Can't find any data on sizing the sense resistors,
no values given in sample circuits.

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

739. Re: modifying radio firmware

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-25 00:00:00 UTC
From: Hamish Moffatt <hamish@rising.com.au>
Message-ID: <7l155g$30d3$1@arachne.labyrinth.net.au>
Source record: 69080

Jake Brodsky <frussle@erols.com> wrote:
> So you really want to get serious about embedded programming, eh?

My education is in digital systems, I know very little about RF yet :-)

> You should know that many embedded uP chips are designed so that their
> internal ROM chips can not be read from the outside.

Indeed.

> And source code? I don't know. I suspect that even if you could get
> it, the comments and documentation are all too likely to be in another
> language, such as Japanese. It seems to me you are asking if anyone
> has reverse engineered these radios.

I'm interested to know whether people have attempted firmware mods
in general, rather than specifically to these two radios. Just to get
some ideas about obtaining code, etc.

> Frankly, considering the performance compromises one finds in the
> radios you mention, I'd seriously consider starting with a clean sheet
> of paper.

The 726 HF/6m seems to be a very good unit. However, the VFO in the
TR-9000 2m does seem to be very odd indeed (there are big jumps in
actual frequency between 144.099 and 144.100, for example).

Thanks.

Hamish VK3SB
--
Hamish Moffatt Mobile: +61 412 011 176 hamish@rising.com.au

Rising Software Australia Pty. Ltd.
Developers of music education software including Auralia & Musition.
31 Elmhurst Road, Blackburn, Victoria Australia, 3130
Phone: +61 3 9894 4788 Fax: +61 3 9894 3362 USA Toll Free: 1-888-667-7839
Internet: http://www.rising.com.au/

740. Core dope for Torroids???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-25 00:00:00 UTC
From: "Tom E. Miller" <TEMiller@Citynet.Net>
Message-ID: <7l13db$2ij5@news2.newsguy.com>
Source record: 69081

I am about ready to tape and dope some torroids that I have wound with Scotch #27 tape but can't find the core dope. Someone mentioned Radio Shack but can't find any one in my area that know what I'm talking about.

Anybody know where I might find some.

--
Tom E. Miller
WB8ICT

741. Re: Trouble with CAS signal for a repeater

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-26 00:00:00 UTC
From: gfiber@news.cmc.net
Message-ID: <3774c7ff.2859967@news.cmc.net>
Source record: 68985

On Fri, 25 Jun 1999 00:12:42 -0700, "Dan" <express@fastdial.net>
wrotf:

>I'm trying to wire in a controller using a couple of old radios. on both, I
>found the signal that changes when the proper tone is encoded & the squelch
>is opened.
> The problem is, both sourses have a voltage present untill the squelch is
>opened, & the controller I'M using needs an active high to activate. ????
>any suggestions ???
>dan
>

Grab up an inverter and just invert the what is present at the squelch
signal. If a low is presented to the invertor it will output a high.
You may have to find a 5 volt source or install a regulator to
accomplish this along with the invertor.

Gary Fiber

Washington State Resident

742. Re: modifying radio firmware

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-26 00:00:00 UTC
From: Hamish Moffatt <hamish@rising.com.au>
Message-ID: <7l15ci$30d3$2@arachne.labyrinth.net.au>
Source record: 68986

Rick Haub <rhaub@midwestmicro-tek.com> wrote:
> However all is not a lost. You can try the old "monitor, modify and replace".
> This can take a lot of time but it can be worth it. What you do is look at all
> the I/O lines and determine wether they are input or output then you monitor the
> output lines while you change the state on the input lines (obviously it is a
> bit more complex than this but you get the idea). Once you have detemined the
> purpose and operation of all the various I/O lines you can then rip out the old
> microcontroller and its peripherals and install your own. In most cases a single
> well chosen Microchip Pic can replace most if not all of your present control
> system.

That seems like the most likely option. Even if it were possible to
get the code out of the old micros (unlikely), being able to get another
device to program with replacement code is going to be very difficult.

I suspect the micro functions in the 2m TR-9000 are very simple and that
an FPGA could replace just the micro itself -- make a PCB that plugs into
the micro socket so that it would be possible to undo any
mistakes!

Thanks Rick,

Hamish VK3SB
--
Hamish Moffatt Mobile: +61 412 011 176 hamish@rising.com.au

Rising Software Australia Pty. Ltd.
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31 Elmhurst Road, Blackburn, Victoria Australia, 3130
Phone: +61 3 9894 4788 Fax: +61 3 9894 3362 USA Toll Free: 1-888-667-7839
Internet: http://www.rising.com.au/

743. Re: Azimuth control for HF antennas?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-26 00:00:00 UTC
From: Pekka Juvonen <oh2bsc@sral.fi>
Message-ID: <7I16h5$c41$1@usenet48.supernews.com>
Source record: 68987
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.homebrew

There are two things influencing the radiation angle of HF antenna. One is the elevation, the other (in case of vertical) is the conductivity of the ground (number or radials or the structure of radioa system. Adjustable hight might be difficult to achieve, but some sort of adjustable radial system might work.

Haven't tried that, it's just an idea.

73

Pekka oh2bsc

Patrick Stickler wrote in message <37733070.9277CB62@nokia.com>...
>
>Hey folks,
>
>I've been reading "The Joy of QRP" (*great* book) and after reading
>about strategies
>for ideal MUF, radiation angle, skip distance, etc. I began wondering
>why no'one
>(in the HF world, sattelite operation being the exception) seems to be
>experimenting
>with HF antennas where the azimuth is adjustible along with the
>direction (or maybe
>I've just not looked in the right place...).
>
>I.e., what kinds of antennas could be tilted at varying degrees with a
>rotator to
>adjust the skip of HF signals? E.g., if a ground plane for 40M has too
>low a
>radiation angle for the target area one is trying to contact, tilt it
>back to raise
>the radiation angle and get a shorter skip zone???
>
>I've played around a bit with some simulation software, and apparently,
>the
>angle of the vertical radiator of a GP doesn't have much effect in the
>overall
>radiation angle, so the above example wouldn't work too well -- but
>there
>surely must be a number of antenna designs where azimuth control would
>effect the radiation angle. A 40m Helical?
>
>Being the neophyte that I am, I'd very much like to hear any comments

>and
>ideas that others would care to offer.
>
>Cheers,
>
>Patrick
>
>OH2LUV, KC4YYY
>Suolahti, FINLAND
>patrick.stickler@nokia.com
>

744. Re: What was XR-1468?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-26 00:00:00 UTC
From: pierretr@collegebdeb.qc.ca
Message-ID: <EFVc3.527$ya2.22732@wagner.videotron.net>
Source record: 68988
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

In <3774110A.722E8FDC@corecomm.net>, "Clifton T. Sharp Jr." <clifto@corecomm.net> writes:
>pierretr@collegebdeb.qc.ca wrote:
>> Quite a few years ago I built a power supply using a XR-1468 tracking
>> regulator. The thing doen't work and I can't seem to find my spec sheets for it.
>>
>> Can anyboby help?
>
>"The XR-1468/1568 is a dual polarity tracking voltage regulator, internally
>trimmed for symmetrical positive and negative 15V outputs. Current output
>capability is 100 mA, and may be increased by adding external pass
>transistors. The device is intended for local 'on-card' regulation, which
>eliminates the distribution problems associated with single point
>regulation."
>....
>"Outputs are internally set to +- 15Volts but can be externally adjusted
>between +-8.0 to +-20 Volts with a single control. The circuit features
>+-100 mA output current, with externally adjustable current limiting,
>and provision for remote voltage sensing."
>....
>"Output Voltages Balanced Within 1% (XR-1568)" (looks like 2% for 1468)
>"0.06% Line and Load Regulation"
>
>Looks very simple to use. Ground pin 1, hang 1500 pF caps from 3 and 12,
>sense resistor from 4 to 5 and from 10 to 11 (take power from 4 and 11),
>+V to 7 and -V to 8. 2 is "balance adjust"; in sample circuit, 2 to wiper
>of a 100K pot whose outside ends go to 4 and 11. 14 is "voltage adjust";
>in sample circuit 14 to wiper of a 100K pot, outside ends to 4 and 11.
>
>Only two pages in the (1985) databook.
>
>To be more clear on the output connections, 5 and 10 are the actual chip
>outputs, 4 and 11 are the sense inputs. They hang 1 uF from 4 and 11 to
>ground in sample circuits. Can't find any data on sizing the sense resistors,
>no values given in sample circuits.
>
>--
>+-+
>| Cliff Sharp | "Speech isn't free when it comes postage-due." |
>| WA9PDM | -- Jim Nitchals, founder, FREE |

Thanks a lot Cliff!
THAT I remember: the sense resistors were calculated for a drop of 0.6 volt
(one diode drop) at rated output current, and were 330 ohms

for an unamplified 1468. My version was amplified with a 2N3035 and a
TI 3027 (PNP), and had 0,33 ohm sense resistors. I was 9X5PT then (1975)
quite far from any suppliers and I don't recall if it EVER worked...
I'll remount it barefoot and if it doesn't I still have another in the original
XR packing, but that time I'll use a SOCKET!

Thanks again for your help!

Pierre VE2BRD

745. Wanted: HBR-16 any condx

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-26 00:00:00 UTC
From: tubepwr813@aol.com
Message-ID: <19990625213932.26025.00003807@ng-da1.aol.com>
Source record: 68989

I am looking for an HBR-16 in any condition.

Chris "KX0Y"

746. Re: MFJ 40 meter QRP rig

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-26 00:00:00 UTC
From: tubepwr813@aol.com
Message-ID: <19990625225454.12749.00005353@ng-cb1.aol.com>
Source record: 68990

I would highly recommend building the Ten Tec 40 mtr QRP rig (kit)...it is $99 or so, and well worth it!

I have had both rigs MFJ and Ten Tec...The Ten Tec wins!!

Chris KX0Y

747. Re: What Impeadance is this coax

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-26 00:00:00 UTC
From: mike@corn2.freeserve.co.uk
Message-ID: <3773bb0f.2564613@news.freeserve.net>
Source record: 68991

On Fri, 25 Jun 1999 08:44:51 GMT, &RETIRED0 <&retired0@hotmail.com>
wrote:

<snipped>
>as the other, so maybe that didn't count...
>
>Seriously, cable should have a number written on it.
>Publish
>that and ask again.
>mike
>--
>Big list of WANTS and FORSALES at link below.
>Return Address is Bogus. Click below to reply
>http://www.geocities.com/SiliconValley/Monitor/4710/
>Or you can DELETE the & in the "from" address.
>
>
Firstly, why post with a bogus reply address?.
Secondly, If the coax had had a number/ident on it I would'nt have
needed to ask my fellow / peer amateurs in the first place.
Thirdly, Thankyou for your input :-)
Mike W G8NXD

748. Need Mechanical Counter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-26 00:00:00 UTC
From: oldgear@aol.com
Message-ID: <19990626054939.17085.00003503@ng-cs1.aol.com>
Source record: 68992

Looking for a mechanical cam operated counter that is reset capable.a 5-6 digit would be OK. Email me the details if you have one.
Thanks

749. Re: Transverters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-26 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19990626120522704 32@zetnet.co.uk>
Source record: 68993

> Hi. I`m looking for some good drawings on 2/6/70cm transverters.
> I`m going to use my ts940 to drive them.
> The 2/70cm transverters should be good enough for EME.
> If you got drawings on preamps for the above, that`s also nice.
> I`ll cover the postage if you got it on paper.
==========

A very good and comprehensive book on building the above transverters is :
"The VHF/UHF DX Book ,edited by Ian White ,G3SEK
ISBN 0 9520468 0 6

First published in 1992

It is a superb design/home brew reference for amateur radio VHF/UHF
enthousiasts.

Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland UK
e-mail : gm0csz.kn6wh@ukrs.org

750. Re: EMP phenomena (was: Morse code)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-26 00:00:00 UTC
From: Dave Shrader <dshrader@earthlink.net>
Message-ID: <3774AA6E.33853DAB@earthlink.net>
Source record: 68994
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

EMP will generate a very broad area of coverage. A high altitude explosion will produce 50,000 volts per meter over a 1000 mile radius.

The energy spectral range is different between lightning and EMP. Lightning does not have the fast rise time of EMP and therefore lightning EM energy peaks in the range of LF to MF . EMP, as mentioned earlier, has measurable components out to 800 MHz, but peaks in the MF to HF range depending on weapon design and altitude of burst.

Ground burst EMP exhibits a different characteristic. The nuclear x-rays are absorbed within about 10 feet of the blast center and they produce tremendous heat and EMP. The electrons, due to the earths magnetic field, rotate and curl into the earth as opposed to transiting in a longer space path. They produce a radial field. The nuclear prompt gamma rays, much higher energy photons, require about 1 mile of atmosphere, at sea level, to complete their absorption in the atmosphere. It takes a longer time for photons to travel a mile, so you get a broad pulse width.

All together, nuclear EMP produces about 50,000 volts every ~40 inches with energy peak spectral density in the 1-10 mhZ range. Lightning produces about 20,000 volts every ~40 inches with a peak spectral density in the 0.1 to 3 mhZ range.

Both are very nasty. We have all read about lightning damage to antennas and equipment in these groups. It will happen if ever there is a Nuclear induced EMP event.

Gary Coffman wrote:

> On Wed, 23 Jun 1999 08:16:14 GMT, keinanen@sci.fi (Paul Keinanen) wrote:
> >To put it into perspective, how close should a lightning hit in order
> >to produce a similar EMP as an ionospheric nuclear blast ?
>
> About 8 miles. The inverse square law is still our friend, even with
> NEMP.
>
> >In the days when the NEMP was a hot topic of discussion, you could
> >easily get the feeling that nothing would survive, but from the
> >equipment that I have seen that have been designed to be NEMP
> >resistant, the protection is not that exotic.
>
> It isn't. It just has to be done *right*. Same with lightning protection.
>
> Gary

>
> Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
> 534 Shannon Way | We break it |
> Lawrenceville, GA | Guaranteed |

751. Re: EMP phenomena (was: Morse code)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-26 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01bec009$e348f2c0$d2e2abc3@default>
Source record: 68995
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Dave Shrader wrote -
> EMP will generate a very broad area of coverage. A high
altitude explosion
> will produce 50,000 volts per meter over a 1000 mile
radius.
==========
Could this be clarified please ?

Is the field strength 50 KV per meter at a distance of
1000 miles from the explosion?

If not, where *does* the 50 KV per meter occur ?

Reg.

752. Re: EMP phenomena (was: Morse code)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-26 00:00:00 UTC
From: George Andrews <mauser2@erols.com>
Message-ID: <7l2j4u$op0$1@autumn.news.rcn.net>
Source record: 68996
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Looks like a decent explanation. However I have one question. Shouldn't the signal generated fall off at something between 1/d (close to source) or 1/d^2 (further away)?
Dave Shrader <dshrader@earthlink.net> wrote in message news:3774AA6E.33853DAB@earthlink.net...
> EMP will generate a very broad area of coverage. A high altitude explosion
> will produce 50,000 volts per meter over a 1000 mile radius.
>
> The energy spectral range is different between lightning and EMP. Lightning
> does not have the fast rise time of EMP and therefore lightning EM energy
> peaks in the range of LF to MF . EMP, as mentioned earlier, has measurable
> components out to 800 MHz, but peaks in the MF to HF range depending on
> weapon design and altitude of burst.
>
> Ground burst EMP exhibits a different characteristic. The nuclear x-rays are
> absorbed within about 10 feet of the blast center and they produce tremendous
> heat and EMP. The electrons, due to the earths magnetic field, rotate and
> curl into the earth as opposed to transiting in a longer space path. They
> produce a radial field. The nuclear prompt gamma rays, much higher energy
> photons, require about 1 mile of atmosphere, at sea level, to complete their
> absorption in the atmosphere. It takes a longer time for photons to travel a
> mile, so you get a broad pulse width.
>
> All together, nuclear EMP produces about 50,000 volts every ~40 inches with
> energy peak spectral density in the 1-10 mhZ range. Lightning produces about
> 20,000 volts every ~40 inches with a peak spectral density in the 0.1 to 3
> mhZ range.
>
> Both are very nasty. We have all read about lightning damage to antennas and
> equipment in these groups. It will happen if ever there is a Nuclear induced
> EMP event.
>

>
>
> Gary Coffman wrote:
>
> > On Wed, 23 Jun 1999 08:16:14 GMT, keinanen@sci.fi (Paul Keinanen) wrote:
> > >To put it into perspective, how close should a lightning hit in order
> > >to produce a similar EMP as an ionospheric nuclear blast ?
> >
> > About 8 miles. The inverse square law is still our friend, even with
> > NEMP.
> >
> > >In the days when the NEMP was a hot topic of discussion, you could
> > >easily get the feeling that nothing would survive, but from the
> > >equipment that I have seen that have been designed to be NEMP
> > >resistant, the protection is not that exotic.
> >
> > It isn't. It just has to be done *right*. Same with lightning
protection.
> >
> > Gary
> >
> > Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
> > 534 Shannon Way | We break it |
> > Lawrenceville, GA | Guaranteed |
>
>

753. DR-610tq Mod Question ???????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-26 00:00:00 UTC
From: n3taw@aol.comAntiSpam
Message-ID: <19990626090802.13958.00003989@ng-fq1.aol.com>
Source record: 68997

I was surfing some mod pages, And I started looking
at the mods for the DR610. For curiosities sake, they
show that the vhf area open up for TX/,
But the UHF TX does not open up. Is this the case or
was that info about the uhf TX range left out by
acccident. From what I have always seen both
end open up.

Puzzled ?

Mark

754. Re: modifying radio firmware

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-26 00:00:00 UTC
From: Wineteer Family <wz7w@inteliport.com>
Message-ID: <7l2klemve1@jaffa.itower.net>
Source record: 68998

I'm not familiar with either of your radios, but would it be safer to your equipment to make them serial-pc controllable and then tweak on the interfacing software? Software is so much easier to undo.
73's de Jim

755. Re: Core dope for Torroids???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-26 00:00:00 UTC
From: Murray Kelly <mkelly@powerup.com.au>
Message-ID: <377436A5.7232@powerup.com.au>
Source record: 68999

I have used plumber's PVC glue successfully. The local stuff
is thick and gooey and is not just a plain solvent (thin and
runny).

Tom E. Miller wrote:
>
> I am about ready to tape and dope some torroids that I have wound with
> Scotch #27 tape but can't find the core dope. Someone mentioned Radio
> Shack but can't find any one in my area that know what I'm talking about.
>
> Anybody know where I might find some.
>
> --
> Tom E. Miller
> WB8ICT

--
****
* Murray Kelly vk4aok mkelly@powerup.com.au *
* 29 Molonga Ter. / Graceville/ QLD. 4075/ Australia *
* ph/fax Intl+ 61 7 3379 3307 *
****

756. Re: MFJ 40 meter QRP rig

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-26 00:00:00 UTC
From: BamBam <kl0an@my-deja.com>
Message-ID: <7l2qou$1h4$1@nnrp1.deja.com>
Source record: 69000

I've been considering buying the Fireball 40 from the NJQRP group..
It's only $10 shipped.. Still looking for a reciever though.. One
that'll fit in an Altoids tin to look similar to the Frieball 40..
Already got a line on an antenna tuner for it too for $25 shipped.
Take the one guys advice and look at some of the qrp websites.. The
NJQRP club has a lot of good links to qrp sites.

73
Paul Jordan
KL0AN
Fairbanks, AK

In article <19990615225441.17332.00000016@ng-ff1.aol.com>,
jspiker@aol.com (Jspiker) wrote:
> Anyone using the MFJ 40 meter QRP rig?
> I'm considering purchasing one and would like your feedback on this!
> Is it worth the money? Can you make contacts on it?
>
> Jspiker@aol.com
>

--
There never seems to be enough time to do the
things you want to do once you find them...

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

757. Solid State Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-26 00:00:00 UTC
From: Sterling Garwood <sterling.garwood@worldnet.att.net>
Message-ID: <7l2sdb$8kv$1@bgtnsc03.worldnet.att.net>
Source record: 69001

Anyone know if there is any info on the web about solid state tube construction? I know that there were a couple of articles in QST years ago (or was it 73?) ... I lost my last photo copy of the article - and the MOSFETs in the article weren't readily available anyway. I've got a Drake R4b that needs a coouple of non-gassy tubes and I thought I'd give solid state replacements a try.

758. Re: Azimuth control for HF antennas?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-26 00:00:00 UTC
From: Piero <picaruso@dontwriteme.com>
Message-ID: <7l2u6aqie1@fe2.cs.interbusiness.it>
Source record: 69002
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.homebrew

You are talking about the elevation or zenith angle.
The azimuth angle is that around the clock in a
horizontal plane.
Usually the problem is the opposite: how to get a lower
angle to have
a bigger jump.
The idea, maybe, would work with a good beam antenna,
but it shoud be very hard
to control it also in the vertical plane.
73 de IK2VTJ, Piero-
http://ik2vtj.freeweb.org
http://www.qsl.net/ik2vtj

759. Re: Transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-26 00:00:00 UTC
From: cthomas1st@my-deja.com
Message-ID: <7l3nbj$9k0$1@nnrp1.deja.com>
Source record: 69003

In article <376DB513.53FF0135@worldnet.att.net>,
Norm Melick <henmel@worldnet.att.net> wrote:
> I need a H.V transformer for the TEK 556. The part # is
> 120-0432-00.
> If any one has one of these, I'd appreciate an e-mail.

Norm, no offense here, but why should any one read your postin and that
of others. The subject "transformer" means a million thinks, and yet it
means nothing.
Have you been sitting on that bar stool for a long time?
CT

>
> Thanks much.
>
> Norm/KQ6SD
>

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

760. Source for 80481 dual gate mosfet?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-26 00:00:00 UTC
From: Roland <lroland@teleport.com>
Message-ID: <jrhd3.2975$od3.164386@news1.teleport.com>
Source record: 69004

If you know where I can buy a couple or their equivalent, please reply.
Thanks /John
WB7SWB

761. Re: Core dope for Torroids???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-26 00:00:00 UTC
From: Butch Magee <butchkay@netdoor.com>
Message-ID: <3775A9F0.8668418F@netdoor.com>
Source record: 69005

hot glue gun works really good!

Butch KF5DE

"Tom E. Miller" wrote:

> I am about ready to tape and dope some torroids that I have wound with
> Scotch #27 tape but can't find the core dope. Someone mentioned Radio
> Shack but can't find any one in my area that know what I'm talking about.
>
> Anybody know where I might find some.
>
> --
> Tom E. Miller
> WB8ICT

762. Re: Is Barnett Electronics OK

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-26 00:00:00 UTC
From: Douglas Cole <dcole@ior.com>
Message-ID: <3774697A.2E388FD1@ior.com>
Source record: 69006
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Dan wrote:

> Has anyone dealt with this company?
> Any comments on their equipment they sell. IM looking for some GE mastr II's
> & would like to get the best deal
> thank you
> Dan

barnett has always been a consistent supplier of mastr II 's and they have been reliable in the past (haven't gotten anything from then in 10 months) to us , for vhf rigs anyway ....

your mileage may vary as they say ;^))

Douglas Cole
Spokane County Communications

763. >>>>>Looking for schematic and software for FT-840 CAT<<<<<

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-27 00:00:00 UTC
From: jerrys@adept.net
Message-ID: <377599ca.1657048@news.adept.net>
Source record: 69007

Looking for schematic and software for FT-840 CAT.
Anyone have anything out there?

Thanks, Jerry K4FJK

764. Audolyzer- anyone know what this is or does?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-27 00:00:00 UTC
From: bazzarr@aol.com
Message-ID: <19990626234707.17075.00003702@ng-cs1.aol.com>
Source record: 69008

Anyone ever heard of an Audolayzer made by Supreme Instrument corp.? I have come across one of these old instruments and it is very interesting in its look and construction and I'm curious as to what it was used for. Lots O knobs, meters, dials and switches permeate the front panel but there is no real hint of what it's function is.

Thanks for your time!
Joe

765. Re: What Impeadance is this coax

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-27 00:00:00 UTC
From: &RETIRED0 <&retired0@hotmail.com>
Message-ID: <3775C8C9.D47ED93B@hotmail.com>
Source record: 69009

Mike W wrote:
>
> On Fri, 25 Jun 1999 08:44:51 GMT, &RETIRED0 <&retired0@hotmail.com>
> wrote:
>
> <snipped>
> >as the other, so maybe that didn't count...
> >
> >Seriously, cable should have a number written on it.
> >Publish
> >that and ask again.
> >mike
> >--

> Firstly, why post with a bogus reply address?.

Firstly, to eliminate SPAM. The text in the reply address
cannot be mistaken for a legal address and
clearly tells you how to click elsewhere in the sig to
reply.
This method is working extremely well on spam.
If you're browser challenged, I lose.

> Secondly, If the coax had had a number/ident on it I would'nt have
> needed to ask my fellow / peer amateurs in the first place.

Secondly, "nice looking" gives absolutely NO information
from which
to draw a conclusion. In the US it would be difficult to
get the
inspectors to approve installation of unmarked anything.
Maybe that's
why it was available. Sorry for asking the obvious.

> Thirdly, Thankyou for your input :-)

Thirdly, you're welcome.

Send me a foot of it and I'll TDR it for you. Actually need
only about
an inch or two if it's got a connector on it.
mike

> Mike W G8NXD

--
Big list of WANTS and FORSALES at link below.

Return Address is Bogus. Click below to reply
http://www.geocities.com/SiliconValley/Monitor/4710/
Or you can DELETE the & in the "from" address.

766. FS: E810F/7788

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-27 00:00:00 UTC
From: arnoldg@sf.telia.no
Message-ID: <3776585b.278359@news.telia.no>
Source record: 69010
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.ham-radio,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.swap,rec.radio.amateur.equipment

Hi,

E810F Siemens and some Mullard for sale. All NOS and NIB. The Siemens are even in sealed boxes. Also E80CC, E80F, E83F, E182CC, E180F/6688, E280F and E282F in stock. Also Telefunken EF 804 NOS, NIB.
Please e-mail me or visit my homepage for details.

Best regards,

Arnold Goksoyr

DEMOSTENES A.Goksoyr N6899 Balestrand - Norway
Tlf.+47 57691340 Fax +47 57691267 http://demostenes.vestdata.no
Valves (tubes), sockets, transformers, books, capacitors and resistors
Svetlana distributor. We ship everywhere in the world.

767. measuring feedpoint impedance?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-27 00:00:00 UTC
From: "William F. Hagen" <whagen@inreach.com>
Message-ID: <37766695.1979EBA9@inreach.com>
Source record: 69011

anyone know how to measure feedpoint impedance, or seen an instrument
that can do that?
kc6ufe

--
Please remove the word 'NOREPLY' from the email address, sorry for the
inconvenience, but it helps keep down the spam.

768. Filter Capacitance?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-27 00:00:00 UTC
From: John Strunck III <1jhs9867@unixstew.tstc.edu>
Message-ID: <3776a4c9.0@news>
Source record: 69012

Hello,

Is there a way to figure out the size of filter caps? I am building a
9V 1.5A power supply to power a Tentec regenerative receiver.

Any info will be most welcomed.

John

KC5NGX

769. Yaesu FT-2700RH 2m/70cms FM transceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-27 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19990627234150704 32@zetnet.co.uk>
Source record: 69013

To those homebrewers/repairers who require parts for Yaesu FT-2700RH
2m/70cms FM transceiver

The Sutherland & District Amateur Radio Club (SADARC) located near
Golspie in the north of Scotland , has been donated a faulty
FT-2700RH transceiver to repair other equipment using some of its components.

The 2 RF Power modules and casing have now been used ,but all others
components are still available ,perhaps to others who no longer can
get components/sub assemblies to repair their defective unit.

These components are now available for the cost of postage plus a
donation to SADARC.

Some items :
+Loudspeaker 8Ohms - 2Watts flange size 80 x 80 mm

++Front panel with display circuitry complete with knobs (complete
sub-assembly)

+++Tx board

++++RX board

+++++Lithium back-up battery on control board (micro processor is defective)

Apart from the loudspeaker , no components can be garanteed OK ,
although the risk of being defective is low.
The unit had to be scrapped only because the defective microprocessor
is no longer available.

For enquiries you can contact :

Secretary SADARC
Inver by Tain , Ross-shire IV20 1RX - Scotland UK

e-mail : gm0csz.kn6wh@ukrs.org

770. Key PMR Radio Part Wanted.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-27 00:00:00 UTC
From: AHELEC@dial.pipex.com
Message-ID: <3776af05.36971137@News.dial.pipex.com>
Source record: 69014

Hi to all....

I am looking for two items both of which I am prepared to pay for...

A circuit diagram for my KM150 High Band 136-174 MHZ radio..

I also require a 40 Channel head for this radio such as the type fitted to the KM225 177-207MHZ trunking radio. The KM225 can be identified by either the model plate or a small round white only sticker stuck on the side of the PA heatsink.

Thanks for your help.

Andy
G6LBQ
AHELEC@Dial.Pipex.Com

771. ""FOR SALE"" NEAT STUFF"" !!!!!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-27 00:00:00 UTC
From: bendowers@aol.com
Message-ID: <19990627191652.22154.00000678@ng-fb1.aol.com>
Source record: 69015

I really don't have any thing for sale today. I just thought Bob would
appreciate the humor of my posting.
Bob I know this annoys you, but if you never tried to run me away, I wouldn't
be here now.
Lighten up and Have a Good Day!
Ben

772. FA Home Brew Books

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-27 00:00:00 UTC
From: Larry Asp <larry.asp@sympatico.ca>
Message-ID: <3776B8A9.468E@sympatico.ca>
Source record: 69016

Science and Mechanics 1971 Edition - 101 Electronic Projects for under $10.00. $3.00

Radio TV Experimenter Aug/Sept. 1967 Edition. $1.50

Postage Extra.

773. Re: FA Home Brew Books

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-27 00:00:00 UTC
From: Larry Asp <larry.asp@sympatico.ca>
Message-ID: <3776B947.2B7E@sympatico.ca>
Source record: 69017

Larry Asp wrote:
>
> Science and Mechanics 1971 Edition - 101 Electronic Projects for under
> $10.00. $3.00
>
> Radio TV Experimenter Aug/Sept. 1967 Edition. $1.50
>
> Postage Extra.

Whoa!! - My apologies - these are For Sale not for auction

774. Re: Azimuth control for HF antennas?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-28 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <3777FC93.6EDA0CF0@teleport.com>
Source record: 68932
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.homebrew

A Yagi with a reasonable number of elements for HF has a broad elevation pattern. The angle of maximum radiation is determined primarily by the height of the antenna (which determines the phase between the field direct from the antenna and the one reflected from the ground), not the tilt of the antenna. Tilting the antenna has almost no effect on the elevation angle of maximum radiation. This is true of any practical HF antenna.

If you mount an HF Yagi with the elements vertical, you'll take a bad beating at low angles due to ground absorption of vertically polarized fields unless reflection is off salt water. It would be interesting to see the effect of tilting a long vertically polarized Yagi over salt water, but my guess is that antenna height would still be the chief determining factor of the angle of vertical radiation.

You could improve radiation straight up, or at very high radiation angles, by tilting a beam to a vertical, or near-vertical position. But the only way to make an appreciable impact on radiation at low angles is to change its height.

Roy Lewallen, W7EL

Patrick Stickler wrote:
>
> Hey folks,
>
> I've been reading "The Joy of QRP" (*great* book) and after reading
> about strategies
> for ideal MUF, radiation angle, skip distance, etc. I began wondering
> why no'one
> (in the HF world, sattelite operation being the exception) seems to be
> experimenting
> with HF antennas where the azimuth is adjustible along with the
> direction (or maybe
> I've just not looked in the right place...).
>
> I.e., what kinds of antennas could be tilted at varying degrees with a
> rotator to
> adjust the skip of HF signals? E.g., if a ground plane for 40M has too
> low a
> radiation angle for the target area one is trying to contact, tilt it
> back to raise
> the radiation angle and get a shorter skip zone???
>

> I've played around a bit with some simulation software, and apparently,
> the
> angle of the vertical radiator of a GP doesn't have much effect in the
> overall
> radiation angle, so the above example wouldn't work too well -- but
> there
> surely must be a number of antenna designs where azimuth control would
> effect the radiation angle. A 40m Helical?
>
> Being the neophyte that I am, I'd very much like to hear any comments
> and
> ideas that others would care to offer.
>
> Cheers,
>
> Patrick
>
> OH2LUV, KC4YYY
> Suolahti, FINLAND
> patrick.stickler@nokia.com

775. Re: Plate Voltage, Compactron Tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-28 00:00:00 UTC
From: technolad@webtv.net
Message-ID: <27265-3777F7BA-81@newsd-232.iap.bryant.webtv.net>
Source record: 68933

Well whatdya know,.. my pnp transverter worked! although I'm still drawing 5 amps @ 6 volts, and my power supply shuts down prematurely. the secondary only has 60 volts on it... At 12 vdc it will be running over 15 amps! what a little monster! ..this makes me think the plate voltage of the tube is rated a lot lower than 800 volts! It would be better to replace the tube with a power mosfet and run it at 50 volts or something.
The bias transistor only passes 10 to 20 milliamps with 25 ohms in series with the 25 ohm rheostadt. so I can hook the linear to 12 vdc and use the bias control using a ten turn pot if I wanted to, instead of having to buy a 20 amp variable power supply for testing purposes.
If the plate voltage of this tube is only around 100 volts or so, why not just go out and buy one of those ferrrite inverters from RS?
I haven't hooked up the filter caps yet so as not to get zaped! I'll have to wait till I can afford a pair of 3-400z's before I do that!

776. Turn your PC into a DSP

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-28 00:00:00 UTC
From: "Thomas F. Swezey" <swezeyt@winternet.com>
Message-ID: <3777FD67.1D127718@winternet.com>
Source record: 68934

I am a professional software engineer and a long time short wave
listener.

I have developed a Windows program that allows you to filter audio in
real time.

Connect the "Line Out" on your short wave radio to the "Line In" on your
PC's sound card.

Use the Windows "Volume Control" program to assign inputs and outputs
and set levels.

The program takes the digitized audio, filters it and plays it out
through your PC's speakers!

No special hardware or modifications needed.

It does require a fast PC - 200 Mhz or better.

For more information and a free Shareware copy of the program visit my
web site:

http://www.winternet.com/~swezeyt/dsp.htm

Thanks a lot,
--Tom Swezey
--
**** Signature **** (KISS: Keep It Simple, STUPID!) ****
Check out my Web Site: http://www.winternet.com/~swezeyt
E-mail me at swezeyt@winternet.com (o o)
**********************************oOO**( )**OOo****

777. Re: measuring feedpoint impedance?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-28 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <3778034C.3AFD5086@teleport.com>
Source record: 68935

Some of the newer amateur antenna analyzers (by MFJ and AEA) can measure the complex feedpoint impedance of a single antenna, or you can use an impedance bridge such as ones made by GR, or the more modern ones by HP. (Older GR units are commonly available for a few hundred dollars; most HPs are much more.) Measuring the feedpoint impedance of a single element of a phased array would be much trickier, and a good method using simple equipment doesn't come readily to mind. I use modeling to get the impedances of phased array elements.

Roy Lewallen, W7EL

William F. Hagen wrote:
>
> anyone know how to measure feedpoint impedance, or seen an instrument
> that can do that?
> kc6ufe
>
> --
> Please remove the word 'NOREPLY' from the email address, sorry for the
> inconvenience, but it helps keep down the spam.

778. Re: Filter Capacitance?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-28 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37780826.EBAD865F@teleport.com>
Source record: 68936

There are a couple of things you need to know. One is the peak voltage out of the rectifier under full load. The other is the minimum voltage the regulator requires. For example, suppose you have a transformer rated at 12 V RMS at 1.5 A. The peak AC voltage from this transformer would be 12 * 1.4 = 16.8 V. If you use a bridge rectifier, the diodes will have a drop of roughly one volt at 1.5 A, and there are two in the path, so the peak voltage from the rectifier would be about 16.8 - 2 = 14.8 volts. This is the first value you need.

Most 3-terminal regulators require 2 to 3 volts headroom, that is, the voltage at the regulator input has to be 2 to 3 volts greater than the regulated output voltage. So using 3 volts, you need 9 + 3 = 12 volts at the regulator input. This is the second thing you need to know.

The capacitor will charge to the peak value of the rectified input during each half-cycle of the AC waveform, and discharge during the rest of the cycle. The difference between the highest (peak) voltage and the voltage just before it's recharged is the ripple, and the larger the capacitor the smaller the ripple. For this example, you need the capacitor to be big enough that when charged to 14.8 volts, its voltage won't droop below 12 volts. In other words, the maximum ripple you can tolerate is 2.8 volts.

The ripple voltage is approximately V = I*t/C where

I = the discharge current in amperes
t = the time between charge intervals in seconds
C = the capacitance in farads

or C = I*t/V

t = 1/2 of the mains AC period for a full-wave rectifier like a bridge. For 60 Hz mains power, t = 1/2 * 1/60 = .00833 sec. For this example, I = 1.5 amps, and V = 2.8 volts. Plugging these into the equation, C = 0.0125 F = 12,500 uF. You can see that using a transformer with higher voltage will reduce the size of the capacitor required, but this will also increase the regulator's power dissipation.

If you're going to buy the capacitor, I recommend sizing it a bit larger than what you calculate, to allow for errors in the estimation of various values.

Roy Lewallen, W7EL

John Strunck III wrote:
>
> Hello,

>
> Is there a way to figure out the size of filter caps? I am building a
> 9V 1.5A power supply to power a Tentec regenerative receiver.
>
> Any info will be most welcomed.
>
> John
>
> KC5NGX

779. Re: Plate Voltage, Compactron Tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-28 00:00:00 UTC
From: technolad@webtv.net
Message-ID: <21994-3778002E-53@newsd-233.iap.bryant.webtv.net>
Source record: 68937

correction,.... inverter,pnp inverter,.. all I can think about is my next project! home owners association nightmare....18" offset ham antenna!

780. Re: EMP phenomena (was: Morse code)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-28 00:00:00 UTC
From: NOamradioSPAM@thebizlink.com
Message-ID: <NOamradioSPAM-2806992211490001@207-172-134-94.s94.tnt7.col.md.dialup.rcn.com>
Source record: 68938
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <377ca958.17780038@news.atl.bellsouth.net>, ke4zv@bellsouth.net (Gary Coffman) wrote:

SDI was just the straw that broke the camel's back. (And you'll get plenty of argument on this from some people). The USSR was bankrupt for years before that and it finally caught up to them (along with many other things).

BTW, what is the national debt of the USA these days?

On Thu, 24 Jun 1999 20:50:38 -0400, "CommQuart" <commquart@erols.com> wrote:
>Simple. Whether the "Star Wars" defense system was
>ever technically achievable or not did one thing. It
>bankrupted the former USSR.

Indeed. That was its real purpose. The West knew it could outspend the East, and that the East would bankrupt itself in an attempt to compete. This showed a nice grasp of human nature which overshadowed any technical merits or demerits of SDI.

There were some nice spinoffs of SDI in the areas of adaptive optics, supercomputing, and high power lasers, but it was never realistically assumed to be a real defense against nuclear weapons. The concepts of castles and moats are dead when faced with the power of the atom.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

781. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-28 00:00:00 UTC
From: NO SPAM <NOSPAM@mail.rsccd.org>
Message-ID: <377834A7.9AA81505@mail.rsccd.org>
Source record: 68939
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Kevin Hoult wrote:

> Someone had asked about other alternate sources of power for amplification of Xtal
> radio audio - here is a delightful little project that really looks like fun - It's
> called the Pico Turbine, and it is a "table top" version of a vertical shaft Savonius
> design.

> http://www.homepower.com/bonus.htm

Cute, but no cigar. The radio has to work when there's power from a
radio station, not when there's power from a wind.

782. Re: EMP phenomena (was: Morse code)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-28 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <7l9i79$rka@dfw-ixnews5.ix.netcom.com>
Source record: 68940
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <7kujqqmdr1@autumn.news.rcn.net>,
CommQuart <commquart@erols.com> wrote:
>Simple. Whether the "Star Wars" defense system was
>ever technically achievable or not did one thing. It
>bankrupted the former USSR.

No, it didn't.

"Moscow as watched Washington get through $32 billion on SDI since 1983,
while investing little itself in a response, according to Velikhov. Thus
the idea that SDI was simply a ploy to hasting the economic demise of the
Soviet Union makes him chuckle: "It was a good idea, but really we were
quite capable of bankrupting ourselves".

"Fear and Laughter in the Kremlin", Bill O'Neill,
New Scientist, 20 March 1993, (issue No. 1865)

Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

783. FS or Trade Hustler 5BTV vertical

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-28 00:00:00 UTC
From: redberd95@aol.comnospam
Message-ID: <19990627230413.29691.00003989@ng-ci1.aol.com>
Source record: 69018

For sale (best offer) or trade for 2m ssb rig (xcvr or transverter, older models ok). This vertical covers 80-10m, with no warc bands. I live in an apartment and cannot put it up.

Please email me at: redberb95@aol.com

Randy KA4NMA

784. Update FS or Trade Hustler 5BTV

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-28 00:00:00 UTC
From: redberd95@aol.comnospam
Message-ID: <19990627231403.29691.00004001@ng-ci1.aol.com>
Source record: 69019

For sale (best offer) or trade for 2m ssb rig (xcvr or transverter, older models ok). This Hustler vertical covers 80-10m, with no warc bands. I live in an apartment and cannot put it up.

Please email me at: redberd95@aol.com

Randy KA4NMA

785. Is Barnett Electronics OK

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-28 00:00:00 UTC
From: Dan <express@fastdial.net>
Message-ID: <7l6u90$2a3$1@news.iptransit.com>
Source record: 69020
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Has anyone dealt with this company?
Any comments on their equipment they sell. IM looking for some GE mastr II's
& would like to get the best deal
thank you
Dan

786. Re: modifying radio firmware

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-28 00:00:00 UTC
From: Hamish Moffatt <hamish@rising.com.au>
Message-ID: <7l7e1t$2pds$1@arachne.labyrinth.net.au>
Source record: 69021

Wineteer Family <wz7w@inteliport.com> wrote:
> I'm not familiar with either of your radios, but would it be safer to your
> equipment to make them serial-pc controllable and then tweak on the
> interfacing software? Software is so much easier to undo.

Hi Jim,

That's not a bad idea but it's probably just as much work as keeping
it internal. Also, the 2m Kenwood is a portable rig and could be useful
on the road for roving and fox-hunting etc.

Thanks,

Hamish VK3SB
--
Hamish Moffatt Mobile: +61 412 011 176 hamish@rising.com.au

Rising Software Australia Pty. Ltd.
Developers of music education software including Auralia & Musition.
31 Elmhurst Road, Blackburn, Victoria Australia, 3130
Phone: +61 3 9894 4788 Fax: +61 3 9894 3362 USA Toll Free: 1-888-667-7839
Internet: http://www.rising.com.au/

787. Re: Filter Capacitance?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-28 00:00:00 UTC
From: mcalhoun@ksu.edu
Message-ID: <7l82fm$bch@fox.ksu.ksu.edu>
Source record: 69022

"John Strunck III" <1jhs9867@unixstew.tstc.edu> writes:
>Is there a way to figure out the size of filter caps? I am building a
>9V 1.5A power supply to power a Tentec regenerative receiver.

I once saw a "rule of thumb" (based on analysis of ripple, etc.)
that said seven thousand microfarads per ampere of current drawn.

--Myron.
--
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (Professor Emeritus) "Barbershop" tenor. CDL(PTX) W0PBV (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

788. Re: EMP phenomena (was: Morse code)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-28 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <377a9bca.14308601@news.atl.bellsouth.net>
Source record: 69023
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On 24 Jun 1999 17:37:33 GMT, "Reg Edwards" <G4fgq.Regp@btinternet.com> wrote:
>M.A.D.

Indeed. It worked for 50 years.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

789. Diagram of TR-9500 Kenwood wanted!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-28 00:00:00 UTC
From: Marco Bokma <pe1obu@homemail.com>
Message-ID: <7l87kuflg1@news.kabelfoon.nl>
Source record: 69024
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hi All,

Who can sent me by e-mail / snailmail a copy or scanned image of the
circuit diagram of the Kenwood TR-9500 UHF all-mode rig.
I need two parts, the RX part and the diagram round the power module M57716.

Please drop me a mail at : pe1obu@homemail.com

Marco

790. Re: EMP phenomena (was: Morse code)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-28 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <377ca958.17780038@news.atl.bellsouth.net>
Source record: 69025
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Thu, 24 Jun 1999 20:50:38 -0400, "CommQuart" <commquart@erols.com> wrote:
>Simple. Whether the "Star Wars" defense system was
>ever technically achievable or not did one thing. It
>bankrupted the former USSR.

Indeed. That was its real purpose. The West knew it could outspend the East,
and that the East would bankrupt itself in an attempt to compete. This showed
a nice grasp of human nature which overshadowed any technical merits or
demerits of SDI.

There were some nice spinoffs of SDI in the areas of adaptive optics,
supercomputing, and high power lasers, but it was never realistically
assumed to be a real defense against nuclear weapons. The concepts
of castles and moats are dead when faced with the power of the atom.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

791. EI9GQ homebrew radio page

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-28 00:00:00 UTC
From: Eamon Skelton <NOSPAMei9gq@nettaxi.com>
Message-ID: <3777ae9b.0@news.digitalfoundry.com>
Source record: 69026
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur

New pages, new circuits.

www.qsl.net/ei9gq

73, Ed. EI9GQ

--
Eamon 'Ed' Skelton EI9GQ, Cork, Ireland

ANTI SPAM RETURN ADDRESS
Real e-mail address below
ei9gq@qsl.net

EI9GQ home brew radio page
http://www.qsl.net/ei9gq

792. Re: modifying radio firmware

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-28 00:00:00 UTC
From: frussle@erols.com
Message-ID: <377cb66e.5004247@news.erols.com>
Source record: 69027

On 25 Jun 1999 23:59:44 GMT, Hamish Moffatt <hamish@rising.com.au>
wrote:

<snip>
>I'm interested to know whether people have attempted firmware mods
>in general, rather than specifically to these two radios. Just to get
>some ideas about obtaining code, etc.

Again, my advice is to start with a clean sheet of paper. You might
try watching the QRP-L e-mail reflector. Those folks build a lot of
their own gear, can refer you to kits, and even discuss playing with
firmware on occasion. Some have constructed things such as a simple
DDS VFO which includes a morse keyer on the controller chip.

>> Frankly, considering the performance compromises one finds in the
>> radios you mention, I'd seriously consider starting with a clean sheet
>> of paper.
>
>The 726 HF/6m seems to be a very good unit. However, the VFO in the
>TR-9000 2m does seem to be very odd indeed (there are big jumps in
>actual frequency between 144.099 and 144.100, for example).

I suspect your synthesizer may be switching something with the
reference. Does it do this every 100 kHz?

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

793. Re: Solid State Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-28 00:00:00 UTC
From: Harry Brown <hbrown@voicenet.com>
Message-ID: <L2Pd3.40$yA2.5555@news3.voicenet.com>
Source record: 69028

Sterling Garwood <sterling.garwood@worldnet.att.net> wrote in message
news:7l2sdb$8kv$1@bgtnsc03.worldnet.att.net...
> Anyone know if there is any info on the web about solid state tube
> construction? I know that there were a couple of articles in QST years ago
> (or was it 73?) ... I lost my last photo copy of the article - and the
> MOSFETs in the article weren't readily available anyway. I've got a Drake
> R4b that needs a coouple of non-gassy tubes and I thought I'd give solid
> state replacements a try.
>
>
>
>

794. Re: EMP phenomena (was: Morse code)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-28 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01bec1d6$855d5100$LocalHost@default>
Source record: 69029
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Indeed, it may have worked for you, a conspiring member of
a very small world population minority, including North
American citizens like yourself. But it does not work for
by far the great majority of the world's population. It is
they who have been robbed.

But, of course, the remainder of the world's very sensible,
intelligent, better educated population do not expect you
to admit it. It goes against normal human (aggressive)
nature. So don't worry about it.

Reg, G4FGQ.

795. Re: Is Barnett Electronics OK

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-28 00:00:00 UTC
From: The Legendary Fluffy <thefluff@bellsouth.net>
Message-ID: <0OPd3.889$gI5.6207@news4.mia>
Source record: 69030
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Have know him for years & have NEVER heard a bad word about him or his
dealings. Stands behind his equipment 100%

--
The Legendary Fluffy/KB5YUX
thefluff@bellsouth.net
Dan <express@fastdial.net> wrote in message
news:7l6u90$2a3$1@news.iptransit.com...
> Has anyone dealt with this company?
> Any comments on their equipment they sell. IM looking for some GE mastr
II's
> & would like to get the best deal
> thank you
> Dan
>
>
>

796. no-tune 144-MHz transverter ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-28 00:00:00 UTC
From: R <inroman@ellink.ru>
Message-ID: <01bec19a$bd2cb260$a16cbec3@intromanellink>
Source record: 69031

Hello HAMs,
On the QEX site I found this file:
"Postscript PC patterns for no-tune 144-MHz transverter".
I need in your opinion about this scheme.
I would be happy to receive this scheme by e-mail.

Sorry for my English.

Best regards,
UA1WAL, Roman
intromanellink.ru

797. Re: modifying radio firmware

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-29 00:00:00 UTC
From: Hamish Moffatt <hamish@rising.com.au>
Message-ID: <7l97ph$j2q$1@arachne.labyrinth.net.au>
Source record: 68941

Jake Brodsky <frussle@erols.com> wrote:
> On 25 Jun 1999 23:59:44 GMT, Hamish Moffatt <hamish@rising.com.au>
> wrote:
>>The 726 HF/6m seems to be a very good unit. However, the VFO in the
>>TR-9000 2m does seem to be very odd indeed (there are big jumps in
>>actual frequency between 144.099 and 144.100, for example).

> I suspect your synthesizer may be switching something with the
> reference. Does it do this every 100 kHz?

Every 10 kHz, actually. The synthesizer is accurate to 10 kHz, and
a VCO (controlled by a D/A converter connected to the micro) is mixed
with the synthesizer output to give 100 Hz steps. It needs calibration,
I'm told.

Hamish
--
Hamish Moffatt Mobile: +61 412 011 176 hamish@rising.com.au

Rising Software Australia Pty. Ltd.
Developers of music education software including Auralia & Musition.
31 Elmhurst Road, Blackburn, Victoria Australia, 3130
Phone: +61 3 9894 4788 Fax: +61 3 9894 3362 USA Toll Free: 1-888-667-7839
Internet: http://www.rising.com.au/

798. RE: Jackson 598 Tube Tester

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-29 00:00:00 UTC
From: joet@bellsouth.net
Message-ID: <P0Xd3.1902$1K2.17047@news2.mia>
Source record: 68942

Hi;
Would like to know if anyone out there has
vacuum tube data sheets that will work with
a Jackson #598 tube tester. How about
PF reporter magazine where data for newer
tubes was published.
I'm interested in getting data on the following
tubes:
6AV6
6LQ6
6GK6
6JH8
Thanks in advance for any info that comes my
way

Joe

799. pulse-counting discriminator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-29 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7l9ut1$c0l$1@uranium.btinternet.com>
Source record: 68943

Can anyone explain how the pulse-counting discriminator works? I read an article in an old 1960's magazine which was a construction project for an FM receiver using a 'pulse counting discriminator', but I did not fully understand how it worked. I can copy the circuit for anyone who is interested.

800. Searching for a book.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-29 00:00:00 UTC
From: Sotiris Antoniou <samant@ath.forthnet.gr>
Message-ID: <7lamdc$b1a$1@medousa.forthnet.gr>
Source record: 68944
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.misc

Hi,
I am searching for Radio and Telecommunications Engineers Design Manual by
R.E. Blakley.
Could somebody please help me. Thanks.

Regards.
Sotiris Antoniou .
samant@ath.forthnet.gr

801. Re: EMP phenomena (was: Morse code)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-29 00:00:00 UTC
From: Zoran <yod@eunet.yu>
Message-ID: <7lam4l$jd8$1@SOLAIR2.EUnet.yu>
Source record: 68945
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hi Dave,
Do not worry, there is some defanse.
You must made rotating high-frequfency shield.
You can made it with tree of Tesla's coils.
Every secundary put on next primary, and made one circle.
Everything must be in resonantion state (all of coils).
All the best,
Proka
Dave Shrader wrote in message <3774AA6E.33853DAB@earthlink.net>...
>EMP will generate a very broad area of coverage. A high altitude explosion
>will produce 50,000 volts per meter over a 1000 mile radius.
>
>The energy spectral range is different between lightning and EMP. Lightning
>does not have the fast rise time of EMP and therefore lightning EM energy
>peaks in the range of LF to MF . EMP, as mentioned earlier, has measurable
>components out to 800 MHz, but peaks in the MF to HF range depending on
>weapon design and altitude of burst.
>
>Ground burst EMP exhibits a different characteristic. The nuclear x-rays
are
>absorbed within about 10 feet of the blast center and they produce
tremendous
>heat and EMP. The electrons, due to the earths magnetic field, rotate and
>curl into the earth as opposed to transiting in a longer space path. They
>produce a radial field. The nuclear prompt gamma rays, much higher energy
>photons, require about 1 mile of atmosphere, at sea level, to complete
their
>absorption in the atmosphere. It takes a longer time for photons to travel
a
>mile, so you get a broad pulse width.
>
>All together, nuclear EMP produces about 50,000 volts every ~40 inches with
>energy peak spectral density in the 1-10 mhZ range. Lightning produces
about
>20,000 volts every ~40 inches with a peak spectral density in the 0.1 to 3
>mhZ range.
>
>Both are very nasty. We have all read about lightning damage to antennas
and
>equipment in these groups. It will happen if ever there is a Nuclear
induced
>EMP event.

>
>
>
>Gary Coffman wrote:
>
>> On Wed, 23 Jun 1999 08:16:14 GMT, keinanen@sci.fi (Paul Keinanen) wrote:
>> >To put it into perspective, how close should a lightning hit in order
>> >to produce a similar EMP as an ionospheric nuclear blast ?
>>
>> About 8 miles. The inverse square law is still our friend, even with
>> NEMP.
>>
>> >In the days when the NEMP was a hot topic of discussion, you could
>> >easily get the feeling that nothing would survive, but from the
>> >equipment that I have seen that have been designed to be NEMP
>> >resistant, the protection is not that exotic.
>>
>> It isn't. It just has to be done *right*. Same with lightning protection.
>>
>> Gary
>>
>> Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
>> 534 Shannon Way | We break it |
>> Lawrenceville, GA | Guaranteed |
>
>

802. Re: pulse-counting discriminator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-29 00:00:00 UTC
From: RSherry@metricom.com
Message-ID: <3778e98f.89595341@news.metricom.com>
Source record: 68946

On Tue, 29 Jun 1999 09:04:48 +0100, "David Cunningham"
<D.L.C@btinternet.com> wrote:
A pulse count discriminator is typically a non-retriggerable
monostable multivibrator set up to have a very narrow pulse width
output. The monostable is triggered at zero crossings of the amplitude
limited input signal. The pulses are then integrated to provide a
demodulated output. The integrator is typically an RC network. Other
types can also be used. Linearity can be quite good. For small
frequency changes the output can be low.
Russ
>Can anyone explain how the pulse-counting discriminator works? I read an
>article in an old 1960's magazine which was a construction project for an FM
>receiver using a 'pulse counting discriminator', but I did not fully
>understand how it worked. I can copy the circuit for anyone who is
>interested.
>
>
>

803. Re: Is Barnett Electronics OK

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-29 00:00:00 UTC
From: Dr BORIS <eczab@hermes.nottingham.ac.uk>
Message-ID: <7lalj3$d1q$1@oyez.ccc.nottingham.ac.uk>
Source record: 68947
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

test replytest replytest replytest reply

Dan <express@fastdial.net> wrote in message
news:7l6u90$2a3$1@news.iptransit.com...
> Has anyone dealt with this company?
> Any comments on their equipment they sell. IM looking for some GE mastr
II's
> & would like to get the best deal
> thank you
> Dan
>
>
>

804. Re: pulse-counting discriminator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-29 00:00:00 UTC
From: Dana Myers <Dana.Myers@West.Sun.Com>
Message-ID: <37790245.2AD06833@West.Sun.Com>
Source record: 68948

RSherry@metricom.com wrote:

> On Tue, 29 Jun 1999 09:04:48 +0100, "David Cunningham"
> <D.L.C@btinternet.com> wrote:
> A pulse count discriminator is typically a non-retriggerable
> monostable multivibrator set up to have a very narrow pulse width
> output. The monostable is triggered at zero crossings of the amplitude
> limited input signal. The pulses are then integrated to provide a
> demodulated output. The integrator is typically an RC network.

If the output of the monostable is unipolar, then a true integrator
would just ramp up forever, right? I suspect the RC is really a low
pass/averaging filter in this application - and, yes, the linearity ought
to be terrific.

Dana

805. Re: Filter Capacitance?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-29 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01bec2a1$671f99c0$LocalHost@default>
Source record: 68949

The smoothing capacitance must be large enough to limit the peak-to-peak ripple voltage to some specified low level at the maximum DC current drawn from the supply. The following formula applies to a 60Hz power frequency and a bridge rectifier.

C = 1,000,000 * Amps / 120 / Vr

where C is capacitance in micro-farads,
Amps = Load current in amps,
Vr = peak-to-peak ripple volts across capacitor.

So in your particular case, with a maximum DC load current of 1. 5 amps, to limit the ripple voltage across the capacitor to, say, 1. 5 volts pk-pk -

C = 1,000,000 * 1. 5 / 120 / 1. 5 = 8, 333 micro-farads.

Nearest preferred value is 10, 000 uF which is a typical value for your size of power supply. It is not a particularly critical value.

The capacitor should by of a type designed for rectifier reservoir capacitor service. It has to cope with a higher RMS current flowing through it than an ordinary de-coupling capacitor.

Note that for a bridge rectifier the factor 120 is just twice the supply frequency. If a single-diode, half-wave rectifier is used the factor becomes 60 and a capacitor of twice the value is required for the same amount of ripple.

Note that the peak-to-peak ripple voltage is at a frequency twice the AC power supply frequency and is twice the peak deviation of the ripple above and below the average DC voltage across the capacitor.

****
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp

****

John Strunck III <1jhs9867@unixstew.tstc.edu> wrote in article <3776a4c9.0@news>...
> Hello,
>
> Is there a way to figure out the size of filter caps? I

am building a
> 9V 1.5A power supply to power a Tentec regenerative
receiver.
>
> Any info will be most welcomed.
>
> John
>
> KC5NGX
>
>
>
>
>

806. Re: Filter Capacitance?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-29 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <37791549.3BCD@ixpres.com>
Source record: 68950

John Strunck III wrote:
>
> Hello,
>
> Is there a way to figure out the size of filter caps? I am building a
> 9V 1.5A power supply to power a Tentec regenerative receiver.
>
> Any info will be most welcomed.
>
> John
>
> KC5NGX

John OM,

1.5 amps for a regen receiver? Howcum? One should run with MILLI
amps, I would think.

73,
Don, W6JL

807. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-29 00:00:00 UTC
From: NO SPAM <NOSPAM@mail.rsccd.org>
Message-ID: <37791DE7.7E5403A3@mail.rsccd.org>
Source record: 68951
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

NO SPAM wrote:

> Kevin Hoult wrote:

> > Someone had asked about other alternate sources of power for amplification of Xtal
> > radio audio - here is a delightful little project that really looks like fun - It's
> > called the Pico Turbine, and it is a "table top" version of a vertical shaft Savonius
> > design.

> > http://www.homepower.com/bonus.htm

> Cute, but no cigar. The radio has to work when there's power from a
> radio station, not when there's power from a wind.

BTW, has anyone seen those Wind Up radios for sale? They are sold somewhere but I haven't seen them in a catalog or on a store shelf. I saw one guy using one at a cosntruction site, and he wound it up a whole lot and I guess it ran for ten or 20 minutes on a single windup. Pretty neat. Saved a lot on batteries.

One old German guy that works here said that in WW2 he had a flashlight that had a generator that was powered by squeezing the handle. I think I've seen something like that in an outdoors company catalog.

808. Re: pulse-counting discriminator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-29 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <377923B6.7007@pop.removethistomailme.net>
Source record: 68952

Dana Myers wrote:
>
> RSherry@metricom.com wrote:
>
> > On Tue, 29 Jun 1999 09:04:48 +0100, "David Cunningham"
> > <D.L.C@btinternet.com> wrote:
> > A pulse count discriminator is typically a non-retriggerable
> > monostable multivibrator set up to have a very narrow pulse width
> > output. The monostable is triggered at zero crossings of the amplitude
> > limited input signal. The pulses are then integrated to provide a
> > demodulated output. The integrator is typically an RC network.
>
> If the output of the monostable is unipolar, then a true integrator
> would just ramp up forever, right? I suspect the RC is really a low
> pass/averaging filter in this application - and, yes, the linearity ought
> to be terrific.
>
> Dana

I've often thought it would be interesting to see an all-digital version
of such a scheme. With a few ECL chips, a fast clock, and a
high-quality 16-bit audio DAC you ought to be able to build God's own FM
demodulator. You could even demodulate subcarriers, stereo, etc.
entirely in the digital domain.

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam
---

809. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-29 00:00:00 UTC
From: Kevin Hoult <mudshark@ricochet.net>
Message-ID: <37791D6C.50EFCC88@ricochet.net>
Source record: 68953
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

NO SPAM wrote:

> Cute, but no cigar. The radio has to work when there's power from radio station, not when there's power from a wind.

Ahh, you're a task master! OK, how about tuning in "natural radio" frequencies and using that for the power source (as in a second tuner for rf configured to tune vlf elf instead of
BCB)?

> BTW, has anyone seen those Wind Up radios for sale? They are sold
> somewhere but I haven't seen them in a catalog or on a store shelf. I
> saw one guy using one at a cosntruction site, and he wound it up a
> whole lot and I guess it ran for ten or 20 minutes on a single
> windup. Pretty neat. Saved a lot on batteries.

Bob grove advertises them in Monitoring Times Mag, and his catalog, Grove enterprises, and probably on his web site www.grove-ent.com. Wind up, with light, and clear!

> One old German guy that works here said that in WW2 he had a
> flashlight that had a generator that was powered by squeezing the
> handle. I think I've seen something like that in an outdoors company
> catalog.

Me too, even inexpensive ones (probably a bad idea) in surplus outfits like Alltronics, Electronic Goldmine, etc. Now, what if someone put one of those little "hand squeeze generators" together with a couple of computer memory caps (2-5v, 1 farad) and a number of those new, 'white light' LEDS that cave explorers are talking about? Lifetime flashlight?

810. Re: Searching for a book.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-29 00:00:00 UTC
From: cartercook@aol.com
Message-ID: <19990629180303.23759.00004094@ng-cf1.aol.com>
Source record: 68954

>I am searching for Radio and Telecommunications Engineers Design Manual by
>R.E. Blakley.

If someone here doesn't have the book, try a search on www.bibliofind.com/ I've had good luck finding rather unusual books at this site.

Carter
W5URW

811. Re: Searching for a book.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-29 00:00:00 UTC
From: ANDREW <KHOL@prodigy.net>
Message-ID: <7lbg45$1uo8$1@newssvr04-int.news.prodigy.com>
Source record: 68955
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.misc

Radio Shack is where we get ours. It's expensive so be prepared. Any good electronic supply store will have it also
Sotiris Antoniou <samant@ath.forthnet.gr> wrote in message news:7lamdc$b1a$1@medousa.forthnet.gr...
> Hi,
> I am searching for Radio and Telecommunications Engineers Design Manual by
> R.E. Blakley.
> Could somebody please help me. Thanks.
>
> Regards.
> Sotiris Antoniou .
> samant@ath.forthnet.gr
>
>
>
>

812. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-29 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37796579.C61925F5@teleport.com>
Source record: 68956
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

NO SPAM wrote:
>
> BTW, has anyone seen those Wind Up radios for sale? They are sold
> somewhere but I haven't seen them in a catalog or on a store shelf. I
> saw one guy using one at a cosntruction site, and he wound it up a
> whole lot and I guess it ran for ten or 20 minutes on a single
> windup. Pretty neat. Saved a lot on batteries.
> . . .

Let's see, guessing that the radio takes about 10 mA at 6 volts to run, a set of alkaline AA cells would last about 150 hours. I seriously doubt that he's cranked the radio enough to run for 150 hours, so he's saved less than $4.00 at drugstore prices. (I get AA alkaline cells at Price-Costco for about $0.25 each, dropping the savings to $1.00/150 hours.) Wonder how much more he paid for the radio than he would have paid for a simple battery-operated one. Alkaline cells will easily last 5 years in storage, or much longer -- 10 years or more -- if they're not allowed to get too hot. A set or two in the refrigerator, or even stored with a radio, are very good security that you'll be able to listen to the radio in any emergency.

There are places where batteries simply aren't available (but the crank-up radios are?), and the crank-type radios might be practical in those locations. But if you get one to save money on batteries, first subtract the cost of a battery-operated radio from the cost of the crank-up version and see how many hours you'd have to crank to make up the difference. Happy cranking!

Roy Lewallen, W7EL

-- cursed with an engineer's way of thinking.

813. Re: EMP phenomena (was: Morse code)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-29 00:00:00 UTC
From: NOamradioSPAM@thebizlink.com
Message-ID: <NOamradioSPAM-2906992034430001@207-172-130-247.s247.tnt3.col.md.dialup.rcn.com>
Source record: 68957
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <01bec1d6$855d5100$LocalHost@default>, "Reg Edwards"
<G4fgq.Regp@btinternet.com> wrote:

Indeed, it may have worked for you, a conspiring member of
a very small world population minority, including North
American citizens like yourself. But it does not work for
by far the great majority of the world's population. It is
they who have been robbed.

But, of course, the remainder of the world's very sensible,
intelligent, better educated population do not expect you
to admit it. It goes against normal human (aggressive)
nature. So don't worry about it.

Reg, G4FGQ.

Ohhh, those evil ignorant North American citizens!! I never heard of a
country called North America and I never have met one of its citizens.

814. Re: Filter Capacitance?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-29 00:00:00 UTC
From: Jack Taylor <n7oo@theriver.com>
Message-ID: <Gkee3.49$Sn3.4689@news3.giganews.com>
Source record: 68958

The simplest way to figure out the size of filter caps is to look them up in a catalog. Normally the physical dimensions are given along with the voltage and capacitance ratings.

73 de Jack

John Strunck III <1jhs9867@unixstew.tstc.edu> wrote in message <3776a4c9.0@news>...
>Hello,
>
>Is there a way to figure out the size of filter caps? I am building a
>9V 1.5A power supply to power a Tentec regenerative receiver.
>
>Any info will be most welcomed.
>
>John
>
>KC5NGX
>
>
>
>

815. Tantaium caps?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-29 00:00:00 UTC
From: Clinton <cpeebles@_nospam_netidea.com>
Message-ID: <37797AB6.25D7@_nospam_netidea.com>
Source record: 68959

I am putting together the parts to build the lead-acid battery charger
that was in the March 1994 issue of QST. They want 2 10uF 35V Tantalum
capacitors, one from OUT of the LM338K regulator to ground, and the
other from the ADJ terminal to ground. I was wondering what's so
special about tantaium capacitors? I had a quick look in the arrl
handbook but didn't find too much. Why couldn't I use ordinary caps?
or is that a dumb question..

--
Kill the MAI

Remove _nospam_ to reply

Clinton Peebles VE7KNL DN19ie
Salmo, B.C. Canada
E-Mail: cpeebles@netidea.com

816. Re: Tantaium caps?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-29 00:00:00 UTC
From: Ralph Mowery <rmowery@ibm.net>
Message-ID: <37797498.AF5455A7@ibm.net>
Source record: 68960

Usually the small size for value. In your application I do not see why any tupe will not work. The caps need to be very close to the regulators. About an inch or two at the most is the specification to prevent the regulators from going into oscillation for many of the regulators.

Clinton wrote:
>
> I am putting together the parts to build the lead-acid battery charger
> that was in the March 1994 issue of QST. They want 2 10uF 35V Tantalum
> capacitors, one from OUT of the LM338K regulator to ground, and the
> other from the ADJ terminal to ground. I was wondering what's so
> special about tantaium capacitors? I had a quick look in the arrl
> handbook but didn't find too much. Why couldn't I use ordinary caps?
> or is that a dumb question..
>
> --
> Kill the MAI
> ---
> Remove _nospam_ to reply
>
> Clinton Peebles VE7KNL DN19ie
> Salmo, B.C. Canada
> E-Mail: cpeebles@netidea.com

817. Tantalum capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-29 00:00:00 UTC
From: Clinton <cpeebles@_nospam_netidea.com>
Message-ID: <%lfe3.200$R_6.7840@typ42b.nn.bcandid.com>
Source record: 68961

I am putting together the parts to build the lead-acid battery charger that was in March 1994 issue of QST. They call for 2 10uF 35V Tantalum capacitors. One from the OUT of the LM338K regulator to ground, and the other from the ADJ terminal to ground. Is there something special about tantalum capacitors? From what I've been able to find with a quick search is that they are just smaller, so could I use a regular cap., or am I missing something?

Kill the MAI

Clinton Peebles VE7KNL DN19ie
Salmo, B.C. Canada
E-Mail: cpeebles@netidea.com

818. FS:(2) Henry RF Decks

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-29 00:00:00 UTC
From: n4jzh@amsat.org
Message-ID: <3779589b.195719572@news.mindspring.com>
Source record: 68962

FS: (2)each Henry 19' Rack mount RF Decks
will support a single 3cx3000A7 deck comes with
Output Tune & Load, Plate Choke, Socket and
Filament Transformer that supports 7.5v@51.5amps
also has dual metered Bird line section and Blower,Plate choke.
Gold Anodized case. $550.00 each shipped in the lower 48.
73 all n4jzh
n4jzh@amsat.org

819. Re: Tantaium caps?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-29 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37799C96.4D3AEB58@teleport.com>
Source record: 68963

Tantalum capacitors are physically small for a given amount of capacitance, and they have a very low equivalent series resistance (ESR). (They're also quite expensive.) It's the first quality that's most important for the application you mention, because smaller size means less inductance, so tantalum capacitors are more effective bypasses at high as well as low frequencies. Modern miniature aluminum electrolytic capacitors will be fine for this application, though. Be sure to keep the leads very short and mount them very close to the regulator. Without them, the regulator can oscillate.

Roy Lewallen, W7EL

Clinton wrote:
>
> I am putting together the parts to build the lead-acid battery charger
> that was in the March 1994 issue of QST. They want 2 10uF 35V Tantalum
> capacitors, one from OUT of the LM338K regulator to ground, and the
> other from the ADJ terminal to ground. I was wondering what's so
> special about tantaium capacitors? I had a quick look in the arrl
> handbook but didn't find too much. Why couldn't I use ordinary caps?
> or is that a dumb question..
>
> --
> Kill the MAI
> ---
> Remove _nospam_ to reply
>
> Clinton Peebles VE7KNL DN19ie
> Salmo, B.C. Canada
> E-Mail: cpeebles@netidea.com

820. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-29 00:00:00 UTC
From: Olin Lathrop <ogl@cognivis.com>
Message-ID: <930742420.888.36@news.remarQ.com>
Source record: 68964
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

NO SPAM wrote in message <37791DE7.7E5403A3@mail.rsccd.org>...
>One old German guy that works here said that in WW2 he had a
>flashlight that had a generator that was powered by squeezing the
>handle. I think I've seen something like that in an outdoors company
>catalog.

Yes, I've got one of those inherited from my mother who lived in Berlin
during WW2. Pretty cool actually, the light is bright enough to be of some
use.

821. Re: EMP phenomena (was: Morse code)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <7ldc28qbn2@208.207.71.149>
Source record: 68882
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

No-Censorship wrote:
>
> There is something about all this EXPENSIVE nonsense
> about "STAR WARS" and similar methods of Anti-Ballistic Missile
> defenses that grates on me.
>
> WHY are we spending who know how many BILLIONS of
> dollars on this ???
>
> There are so many ways the money can be used for helping
> people......
>

Evidently you don't know anything of economics or the workings of a capitalistic economy... Money MUST be spent for the economy to survive, and LOTS of money must be spent for it to grow.

From college economics of the 60's, I recall that "a dollar spent generates seven dollars" by the time it has circulates through the economy. Who knows what that figure is now? We MUST have huge spending projects such as the B2 bomber at a $billion per copy and other huge spending projects which integrate "high tech" into--and keep it in-- our everyday economy in order for the economic expansion required --no, DEMANDED-- today to endure. Examples are HDTV, the personal communications explosion and Star Wars, to name a few. Forget giveaways to foreign countries, tho it's sure they will continue unabated, but those dollars do nothing for OUR economy. The dollars spent HERE are what counts.

W0EX

822. Re: EMP phenomena (was: Morse code)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01bec34e$a319e040$81ecabc3@default>
Source record: 68883
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Steve wrote -
> Ohhh, those evil ignorant North American citizens!! I
never heard of a
> country called North America and I never have met one of
its citizens.
========================
So why do US citizens refer to themselves as 'americans' ?

They do not yet own the whole continent.

After all, Cubans are americans.

823. 1.2GHz and up uWave Circuits (now for the real work)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: slug@aeminium.ddns.org
Message-ID: <7ldb7jbgr1@bbs.aeminium.pt>
Source record: 68884

Hello,
about 2 months ago i posted a message concerning microwave circuits
and receive 2 replys, one from David Feldman. I received the minicircuits
catalog today and want to start working on circuits about 1.2 GHz (amateur
band) and 2.5GHz (ISM band for a university project). But were to start?
First, how can i make the microstrip PCB's , ie, how can i know the required
parameters, etc. I'm a complete newbie, so please help! I can make PCB's
using the UV method (done many, digital and to about 200MHz simple RF).
Someone also mentioned a program called spuff i think, but i haven't
bought it, since i don't know what the purpose of it. I'm a linux user, and
for simulation there seem to exist good simulations circuits (i have the
aplac demo and enjoy it very much) and if required i can make one for
calculations myself.

I was thinking on starting with something like this:

```
uW VCO ------------ > uW MIXER---------> AMP ------> Antenna
/|\
|
|
Audio -----> LO VCO -------/
```

You could tell me: why don't you apply the audio to the uW VCO? Well
I want to use a mixer on the microwave band to get the feelling of it and
on the 2.5GHz project i need to use one, on the TX and RX side.

And for the receiver something like this:

```
-------->Antenna-------> uW MIXER ------>PLL------->Audio
/|\
|
uW VCO
```

Ok, now your opinions:

-Would this work without much effort?
-Advises,ie, which mixer, vco, etc should i buy,ie, which parameters
should i be aware off (TX mixer LO min dB, RX low noise mixer, etc)
-how to glue the thing up, ie, RFC bias, how to make the PCB, how to
make the RFC (using microstrip or a simple inductor?), etc
-microstrip filters, antenna, etc...

Now the litterature?
I have the following books:

- MicroStrip Antennas (I.J.Bahl)
- Microwave Antenna Theory and Design (Samuel Silver)

- Stripline Circuit Design (Harlan Howe)
- Microwave components, Devices and Active circuits (Paul Combes)

I was thinking on buying some books from ARRL, what do you suggest?

Thank you very much for your patiente,

Nuno Sucena

My Email: slug (at) alumni.dee.uc.pt
CT1FOX

824. Re: Chopping the a.c.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: troglodite@aol.com
Message-ID: <19990630113524.27923.00006025@ng-fd1.aol.com>
Source record: 68885

>If I chop the 60Hz AC input into an HV power transformer (forget the
>filaments taps for a minute.) what problems does anyone foresee with
>spikes, rfi and controlling the HV ouput of the transformer.

Iron core transformers designed to be operated from sinusoidal waveforms do not take well to truncated waveforms. Why not just salvage a variac and put that on your primary? Or, were you looking for something that could be controlled externally?

Doug Moore

825. Where to buy electronic components - online?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: nospam@nospam.com
Message-ID: <7ldf7u$d8m$1@shadow.skypoint.net>
Source record: 68886
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Hi,
I'm looking for Three 'hard to find' electronic parts.
They are:

Hitachi 3sk309
Motorolla MRF9820T1
HP HSCH-9161

Can anyone suggest where the best www site is to
buy these items?

Thanks in advance.

826. Re: Tantalum capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <377A4839.EDA7CE51@teleport.com>
Source record: 68887

Tom McDermott wrote:
> . . .
> One additional caution: solid tantalum capacitors occaisionally fail (as do
> all components). When they fail, they fail shorted with incredibly low series
> resistance. You need to be sure that you have adequate over-current
> protection (or a fuse) feeding the capacitor, or you will burn up PC board
> traces,
> or perhaps worse. If you are bypassing the output of a series-regulator, make
> sure the regulator has over-current shutdown. If the tantalum capacitor is
> across a battery, make sure that there is a fuse between the battery and the
> capacitor.

I have a story about that. Some years ago I was getting ready for Field Day, and discovered that the fuse holder in line with my battery had broken, as they do after a while. I didn't have a replacement on hand, so did without the fuse. Of course, that was the year I connected the battery to the rig backward. The wire to the battery (a 5 Ah sealed lead acid unit) immediately began smoking, and the wire separated from the insulation. I managed to disconnect the battery before a fire started, but burned some holes in the bottom of the tent where the wire had landed.

I had put a 3-watt diode across the rig's power terminals, which would have provided protection had the fuse been in place. Based on the forensic evidence, what happened was that the diode had gotten hot enough to melt the solder at its connections, then finally fused. When this happened, the reverse voltage was applied to a small, dipped tantalum capacitor which was also across the power terminals. It went short, and remained so. The short, as you say, had a very low resistance, and there was no sign of heating of the capacitor despite the several tens of amps which flowed. The tantalum capacitor turned out to provide better reverse-voltage protection than the diode! Needless to say, the fuse is back in place in the battery line.

I've seen a small shorted tantalum happily current-limit a 3 amp supply. If one ever does get supplied enough energy to heat it, it can catch fire. They can occasionally fail when the correct polarity voltage is applied. But even a very small reverse voltage will very noticeably increase the chance of failure, and a high reverse voltage will just about always make one go short.

Roy Lewallen, W7EL

827. Re: 1.2GHz and up uWave Circuits (now for the real work)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <377A48DF.7210C6BD@teleport.com>
Source record: 68888

slug@aeminium.ddns.org wrote:
> . . .
> I was thinking on buying some books from ARRL, what do you suggest?

The ARRL UHF/Microwave Experimenter's Manual

Roy Lewallen, W7EL

828. Re: Chopping the a.c.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: Jim <jdport@xoommail.com>
Message-ID: <7ldl69$gif@chronicle.concentric.net>
Source record: 68889

I have successfully used inexpensive "Light Dimmer Controls" to control the input voltage to a power transformer,
most recently as a screen supply for a 4CX250B push-pull VHF homebrew amplifier.
At the low end there is little or no control, then about midrange it "kicks in" as the transformer begins to
draw sufficient idling current to make the SCR work better in the "light dimmer".
I used lots of C in the filtering of the output, never experienced any hum or weird noises with this method.
The effective control range, however, is rather limited and on the upper range of the knob's turning radius.
Jim W5AOX

"Mr. Muckle" <jdwalton@home.com> wrote:
>
> If I chop the 60Hz AC input into an HV power transformer (forget the
> filaments taps for a minute.) what problems does anyone foresee with
> spikes, rfi and controlling the HV ouput of the transformer.
>
> I am trying to make a supply which ramps the DC output from 100 to 350V,
> where the nominal dc ouput of the supply would have been 350V - and to
> do this without a regulator which generates a lot of heat.
>
> If I wanted to wind the transformer I could probably do this in PWM with
> one of the Motorola chips. Being lazy I prefer a less elegant solution.
>

829. Re: Where to buy electronic components - online?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: Jim <jdport@xoommail.com>
Message-ID: <7ldlb1$gif@chronicle.concentric.net>
Source record: 68890
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Try http://www.dalbani.com/
They have the largest selection of hard to find stuff I've been able to find.
Jim W5AOX

nospam@nospam.com (Buzz Lightyear) wrote:
>
> Hi,
> I'm looking for Three 'hard to find' electronic parts.
> They are:
>
> Hitachi 3sk309
> Motorolla MRF9820T1
> HP HSCH-9161
>
> Can anyone suggest where the best www site is to
> buy these items?
>
> Thanks in advance.
>
>
>
>

830. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <wy0PR7A4Cie3Ewwl@jmwa.demon.co.uk>
Source record: 68891
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

<zgDBRDAQWde3EwAo@wootten.demon.co.uk>, Keith Wootten
<Keith@wootten.demon.co.uk> inimitably wrote:
>I had heard that they're working on a wind-up PC as
>well. Not WinTel, presumably?
I heard that it was to run Windows CE, but maybe not. I hope it uses an
ARM RISC processor for maximum MOPS/mW.
--
Regards, John Woodgate, OOO - Own Opinions Only.
Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
Did you hear about the hungry genetic engineer who made a pig of himself?
PLEASE DO ****NOT**** MAIL COPIES OF NEWSGROUP POSTS TO ME!!!!

831. Re: pulse-counting discriminator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7lds2v$o0e$1@nnrp1.deja.com>
Source record: 68892

In article <377923B6.7007@pop.removethistomailme.net>,
jmiles@pop.removethistomailme.net wrote:

> I've often thought it would be interesting to see an all-digital
version
> of such a scheme. With a few ECL chips, a fast clock, and a
> high-quality 16-bit audio DAC you ought to be able to build God's own
FM
> demodulator. You could even demodulate subcarriers, stereo, etc.
> entirely in the digital domain...

Just for fun I improvised a pulse-counting discriminator in
software and fed it some data that flipped back and forth
between 1500 and 2300 Hz (I've been playing with HF WEFAX
a bit lately...). The results looked good, and were dead
simple to implement...another algorithm for the DSP arsenal,
methinks.
--
Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

832. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <377A6476.6FBE86AB@corecomm.net>
Source record: 68893
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Tom MacIntyre wrote:
> This discussion is getting cranky...

Tom, you just need to unwind.

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+

833. jw miller variable coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <377A6CD8.7902237D@midwestmicro-tek.com>
Source record: 68894

I'm looking for some jw miller slug ajustable coils. I'm building an old receiver design from the early sixties and it calls for som coils made by jw miller. I can't find them in digikey or circuit specilists or ocean state. Is there any one on the net or mail order that carries most if not all of jw millers line?

834. Re: EMP phenomena (was: Morse code)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: Michael Young <nobody@all.org>
Message-ID: <930771119.962.74@news.remarQ.com>
Source record: 68895
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Dick Carroll <dixie@townsqr.com> wrote in message
news:7ldc28qbn2@208.207.71.149...
> From college economics of the 60's, I recall that "a dollar
> spent generates seven dollars" by the time it has circulates
> through the economy. Who knows what that figure is now? We

Speaking as a total idiot when it comes to economics: What kind of BULL is that? Inflation aside, as far as I know, wealth is not created or destroyed, just redistributed. With a trade deficit, the only meaning I can infer from your statement is that each dollar inflates 700% by the time someone gives it back in taxes.

This doesn't feel right, so please explain.

Michael.

835. Re: Chopping the a.c.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: "Mr. Muckle" <jdwalton@home.com>
Message-ID: <377AAADB.86738CFF@home.com>
Source record: 68896

Trog:

I now have a PWM regulator "boost circuit" using an off the shelf (LM3524) to control the duty cycle (I've built a few prototypes with other chips - same idea). I can control the duty cycle of the PWM with a DAC - that's easy enough. The supply, however, must always face a load since the required value of inductor being pumped is inversely proportionate to the load. So I am going to be generating some heat anyway.

I guess that if I dusted off my knowledge of linear programming and optimization I could figure this out, but I did state at the outset that I am lazy.

Since there are no free lunches, and I do want isolation between the mains and the HV I have to use a transformer anyway. It seems just as simple to use one of the old HV xfmrs lying around in the junkbox rather than one of the newer LV xfmrs lying around in the junkbox!

In effect, the frequency that the filter caps see will be higher. That iron core, as you suggest, however, is not going to like to collapse it's magnetic field quite so quickly and I am trying to figure what is going to be reflected back.

I am kind of regretting giving away those 400Hz transformers.

Troglodite wrote:

> >If I chop the 60Hz AC input into an HV power transformer (forget the
> >filaments taps for a minute.) what problems does anyone foresee with
> >spikes, rfi and controlling the HV ouput of the transformer.
>
> Iron core transformers designed to be operated from sinusoidal waveforms do not
> take well to truncated waveforms. Why not just salvage a variac and put that on
> your primary? Or, were you looking for something that could be controlled
> externally?
>
> Doug Moore

836. Re: Where to buy electronic components - online?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: jake23@quicknet.com
Message-ID: <7ldt8fhai1@shadow.skypoint.net>
Source record: 68897
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

'Shamefull shill' Jim W5AOX, promotes his online business:

In article <7ldlb1$gif@chronicle.concentric.net>, jdport@xoommail.com says...
>
>Try http://www.dalbani.com/
>They have the largest selection of hard to find stuff I've been able to find.
>Jim W5AOX

Just obsolete junk at http://www.dalbani.com/ No compononts...
I suspect that Jim W5AOX, is the owner of dalbani.

Anyone else have any suggestions?

837. Re: Core dope for Torroids???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: grogancat@aol.com
Message-ID: <19990630165915.18010.00008568@ng-fr1.aol.com>
Source record: 68898

try halted specialties co. they have a webpage, I found Q-dope there. the other suggestions are good too, but Q-dope smElLs BeTeR plphhh kakkkbllllp!

(just kidding :-) folks)

just keep that stuff away from your teenage kids, after they run out of gasoline and glue, they'll go after your Q-dope to sniff, and it's expensive.

Hrvatska!
Za dom spremni!
#

838. AEA-121 HF ANALYST

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: Richard Earl <w9juc@juno.com>
Message-ID: <377A899F.F84BB8A4@juno.com>
Source record: 68899
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.swap,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchor

Need instruction manual(or copy) for the AEA Model SWR-121 HF Analyst.

Thank you,

Rich

W9JUC

839. Re: Where to buy electronic components - online?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: tmacinty@ns.sympatico.ca
Message-ID: <377a8fdc.5451199@news1.ns.sympatico.ca>
Source record: 68900
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

nospam@nospam.com (Buzz Lightyear) wrote:

>Hi,
>I'm looking for Three 'hard to find' electronic parts.
>They are:
>
>Hitachi 3sk309
>Motorolla MRF9820T1
>HP HSCH-9161
>
>Can anyone suggest where the best www site is to
>buy these items?
>
>Thanks in advance.
>
>
>
>

This might help...

http://www.partminer.com/Pm_HomePage/index.asp

Tom

840. basic economics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: Spamfree <Spamfree@DELETETHIS.spamfree.net>
Message-ID: <7le54d$on8@journal.concentric.net>
Source record: 68901
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

```
Michael Young <nobody@all.org> wrote in message
news:930771119.962.74@news.remarQ.com...
> Dick Carroll <dixie@townsqr.com> wrote in message
> news:7ldc28$qbn$2@208.207.71.149...
> > From college economics of the 60's, I recall that "a dollar
> > spent generates seven dollars" by the time it has circulates
> > through the economy. Who knows what that figure is now? We
>
> Speaking as a total idiot when it comes to economics: What kind of BULL
> is that? Inflation aside, as far as I know, wealth is not created or
> destroyed, just redistributed. With a trade deficit, the only meaning I
> can infer from your statement is that each dollar inflates 700% by the
> time someone gives it back in taxes.
>
> This doesn't feel right, so please explain.

Question: from whom was Bill Gates' wealth redistributed?

Wealth is most certainly created... ever hear the term "economic growth"?

--
Friends don't let friends use e-bay
E-bay: proud sponsor of Al Gore's 2000 presidential campaign
```

841. Re: Core dope for Torroids???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: Doug Smith <nospam@nospam.org>
Message-ID: <jSwe3.101409$_m4.1175471@news2.giganews.com>
Source record: 68902

I recently asked a similar question, and ended up using Duco cement to hold a VFO toroid in place.

It seems to work OK. I've hauled the radio out into the field, and made a bunch of QSOs in European Field Day a few weeks ago... The thing is just as stable as the "big rig", both long-term and short-term and both against vibration and heat.

73 Doug

842. need cw keyer circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: Primus <josip.hrste@siol.net>
Message-ID: <F2xe3.803$3t3.16174488@news.siol.net>
Source record: 68903

I need a cw keyer circuit. I would like it to be CMOS based (without those special cw IC's). It must have squeeze and memmory functions. It could not necceseraly) also have some kind of monitor built in.
If you can help me, point me to a web page or e-mail me, pse.

843. AEA-121 HF ANALYST

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: Richard Earl <w9juc@juno.com>
Message-ID: <377AB446.3C728A26@juno.com>
Source record: 68904
Cross-posted to: alt.ham-radio.hf,rec.ham-radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Are they still in business?

Need instruction manual(or copy), software and serial cable for the AEA
Model SWR-121 HF Analyst.

Thank you,

Rich

W9JUC

844. Re: EMP phenomena (was: Morse code)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: NOamradioSPAM@thebizlink.com
Message-ID: <NOamradioSPAM-3006992128030001@207-172-133-187.s187.tnt6.col.md.dialup.rcn.com>
Source record: 68905
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <01bec34e$a319e040$81ecabc3@default>, "Reg Edwards"
<G4fgq.Regp@btinternet.com> wrote:

Steve wrote -
> Ohhh, those evil ignorant North American citizens!! I
never heard of a
> country called North America and I never have met one of
its citizens.
========================
So why do US citizens refer to themselves as 'americans' ?

They do not yet own the whole continent.

After all, Cubans are americans.

U.S. citizens? The proper name of the country is the United States of
America. How they refer to themselves is irrelevant. Your implication that
all use this moniker and that by this use there are no other Americans
outside of the USA is silly

You forgot Canada (which by the way has far more land mass than the USA),
all the various sovereign Indian nations, Haiti, and Costa Rica to name a
few.

Keep trying, you'll eventually get it.

845. Re: Where to buy electronic components - online?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: Tom Bruhns <tomb@lsid.hp.com>
Message-ID: <377AC024.85209CAD@lsid.hp.com>
Source record: 68906
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Jake wrote:

> Just obsolete junk at ...dalbani... No compononts...
> I suspect that Jim W5AOX, is the owner of dalbani.
>
> Anyone else have any suggestions?

One thing you can try for things like HP and Motorola is to go to their web sites and see if they point to distributors. A lot of distributors now take small credit card orders, though many do still have a minimum, or a minimum shipping charge that could cause some pain.

I'd think that most folk here would already know about Mouser and DigiKey, and there are a few other places that have things like "replacement parts" in the Japanese transistor series. There are also a couple places at least that specialize in RF semiconductors (both low and high power). Do a web search? Look in the ads in magazines like "Electronics Now"? Maybe someone will post some favorites.

I know that answer is kinda vague but maybe it'll get someone pointed in a direction that leads somewhere.

Cheers,
Tom

846. Re: How to combine 4 video inputs for one monitor view.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: Jack Taylor <n7oo@theriver.com>
Message-ID: <BLze3.102056$_m4.1189673@news2.giganews.com>
Source record: 68907

This would be an interesting trick. Do you mean you wish to view 4 separate
windows or 4 ea overlayed video screens?

I would be interested in how to build a video sequencer that switches
baseband video sources for a few seconds, one at a time. There are
commercial units available, but I'd prefer to custom make my own.

73 de Jack

Barddas The Bard wrote in message <377bb830.5171479@news.swpc.net>...
>
>
>I need to figure out how to monitor 4 video (camera) inputs on one
>monitor at the same time.
>I wish to use a Mitsubishi AUM-1381A monitor to view four camera
>outputs on one screen, Anyone have a clue where to start?
>barddas@spammerswpc.net
>
>ALSO:
>I need the Following Schematics and am willing to trade for
>them(electronically).
>REQUESTS:
>President Madison, Glen 326G Digital VFO, Uniden 122, Cobra 31 plus,
>Cobra 40 plus,
>and Eico Signal generator model 324.
>
>I have tons of schematic resources of many types, 100s of Popular
>Electronics, Radio Electronics, Nuts & Volts, CQ, Etc.
>And the Following SAMS:
>Audio Radio Series
> (AR)
>10, 19, 20, 21,22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 68, 70,
>72, 74, 76, 111, 112, 113, 114, 115, 116, 151, and 272. (29 total)
>
>
>Transistor Radio
>(TSM)
>24, 25, 26, 27, 28, 29, 32, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44,
>60, 68, 71, 79, 80, 84, 97, 98, 99, 99, 100, 101, 102, 104, 105, 106,
>107, 108, 109, 110, 112, 114, 115, 116, 117, 118, 119, 120, 122, 132,
>134, and 158. (49 total)
>
>Tape Recorder Series
>(TFrom: barddas@sp
>

847. Re: EMP phenomena (was: Morse code)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <377AF6EB.C7890499@teleport.com>
Source record: 68908
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

> In article <01bec34e$a319e040$81ecabc3@default>, "Reg Edwards"
> <G4fgq.Regp@btinternet.com> wrote:

> So why do US citizens refer to themselves as 'americans' ?
>
> They do not yet own the whole continent.
>
> After all, Cubans are americans.

Chuckle. So are our fine and justly proud brothers the Canadians. But call one an "American" some time and note the reaction you get.

Roy Lewallen, W7EL

848. cmos super keyer 111 problems

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: Paul Newman <pauln@ozemail.com.au>
Message-ID: <rn4e3.3136$vP.24098@ozemail.com.au>
Source record: 68965

i built this keyer some years back and remember it took some time to get it going - cant remember exactly but i believe it latched up somehow any way .....it worked great from then on till the batteries ran out now i am faced with the same no go situation....i have tried just disconnecting power for a while incase the micro became corrupt but so far no good....i seem to recall at the time other projects using the same micro 68hc705c8 used a different method to reset it ....any ideas thoughts much appreciated
73's
paul newman
vk4apn

849. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: Larry Asp <larry.asp@sympatico.ca>
Message-ID: <3779694E.63D@sympatico.ca>
Source record: 68966
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Kevin Hoult wrote:
>
> NO SPAM wrote:
>
> > Cute, but no cigar. The radio has to work when there's power from radio station, not when
> there's power from a wind.
>
> Ahh, you're a task master! OK, how about tuning in "natural radio" frequencies and using
> that for the power source (as in a second tuner for rf configured to tune vlf elf instead of
> BCB)?
>
> > BTW, has anyone seen those Wind Up radios for sale? They are sold
> > somewhere but I haven't seen them in a catalog or on a store shelf. I
> > saw one guy using one at a cosntruction site, and he wound it up a
> > whole lot and I guess it ran for ten or 20 minutes on a single
> > windup. Pretty neat. Saved a lot on batteries.
>
> Bob grove advertises them in Monitoring Times Mag, and his catalog, Grove enterprises, and
> probably on his web site www.grove-ent.com. Wind up, with light, and clear!
>
> > One old German guy that works here said that in WW2 he had a
> > flashlight that had a generator that was powered by squeezing the
> > handle. I think I've seen something like that in an outdoors company
> > catalog.
>
> Me too, even inexpensive ones (probably a bad idea) in surplus outfits like Alltronics,
> Electronic Goldmine, etc. Now, what if someone put one of those little "hand squeeze
> generators" together with a couple of computer memory caps (2-5v, 1 farad) and a number of
> those new, 'white light' LEDS that cave explorers are talking about? Lifetime flashlight?

I can provide you with the name and address of a firm in Toronto Ontario
who sells these if you want. Theyre made in South Africa and had a great
application there because of no power in the little villages etc. One
model in addition to the wind up has a solar panel too. Very neat, well
made - they are sold under the name of Baycom.

850. Re: Tantalum capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: MLJS45A@prodigy.com
Message-ID: <7lc64k$14l4$2@newssvr01-int.news.prodigy.com>
Source record: 68967

Tantalum caps have lower ESR than the same size elecrolytic cap. In old databooks National Semiconductor (a mfr. of LM338) used to say it took 25 uf of aluminum electrolytic to be as effective as a 1 uf solid tantalum, if memory serves me correctly.

Jim McShane
MLJS45A@prodigy.com
Visit My Web Pages at http://pages.prodigy.net/jimmcsha

851. Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <VKqG$MAAqae3Ew37@jmwa.demon.co.uk>
Source record: 68968
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

<37796579.C61925F5@teleport.com>, Roy Lewallen <w7el@teleport.com>
inimitably wrote:
>There are places where batteries simply aren't available (but the
>crank-up radios are?)

Yes, in the south of Africa (and probably elsewhere in Africa by now).
--
Regards, John Woodgate, OOO - Own Opinions Only.
Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
Did you hear about the hungry genetic engineer who made a pig of himself?
PLEASE DO ****NOT**** MAIL COPIES OF NEWSGROUP POSTS TO ME!!!!

852. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: no@spam.please
Message-ID: <3779d98d.94204979@news>
Source record: 68969
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

The local Radio Shacks (Canadian) sells the Baycom version and the
much smaller Sanyo windup radio.
Tap

On Wed, 30 Jun 1999 00:51:06 GMT, Larry Asp <larry.asp@sympatico.ca>
wrote:

>Kevin Hoult wrote:
>>
>> NO SPAM wrote:
>>
>> > Cute, but no cigar. The radio has to work when there's power from radio station, not
when
>> there's power from a wind.
>>
>> Ahh, you're a task master! OK, how about tuning in "natural radio" frequencies and using
>> that for the power source (as in a second tuner for rf configured to tune vlf elf
instead of
>> BCB)?
>>
>> > BTW, has anyone seen those Wind Up radios for sale? They are sold
>> > somewhere but I haven't seen them in a catalog or on a store shelf. I
>> > saw one guy using one at a cosntruction site, and he wound it up a
>> > whole lot and I guess it ran for ten or 20 minutes on a single
>> > windup. Pretty neat. Saved a lot on batteries.
>>
>> Bob grove advertises them in Monitoring Times Mag, and his catalog, Grove enterprises,
and
>> probably on his web site www.grove-ent.com. Wind up, with light, and clear!
>>
>> > One old German guy that works here said that in WW2 he had a
>> > flashlight that had a generator that was powered by squeezing the
>> > handle. I think I've seen something like that in an outdoors company
>> > catalog.
>>
>> Me too, even inexpensive ones (probably a bad idea) in surplus outfits like Alltronics,
>> Electronic Goldmine, etc. Now, what if someone put one of those little "hand squeeze
>> generators" together with a couple of computer memory caps (2-5v, 1 farad) and a number
of
>> those new, 'white light' LEDS that cave explorers are talking about? Lifetime
flashlight?
>
>I can provide you with the name and address of a firm in Toronto Ontario

>who sells these if you want. Theyre made in South Africa and had a great
>application there because of no power in the little villages etc. One
>model in addition to the wind up has a solar panel too. Very neat, well
>made - they are sold under the name of Baycom.
>

853. Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: Keith Wootten <Keith@wootten.demon.co.uk>
Message-ID: <zgDBRDAQWde3EwAo@wootten.demon.co.uk>
Source record: 68970
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

In article <3779694E.63D@sympatico.ca>, Larry Asp
<larry.asp@sympatico.ca> writes

[snipped]
>
>I can provide you with the name and address of a firm in Toronto Ontario
>who sells these if you want. Theyre made in South Africa and had a great
>application there because of no power in the little villages etc. One
>model in addition to the wind up has a solar panel too. Very neat, well
>made - they are sold under the name of Baycom.
>
Baygen, I think the inventor's name is Trevor Bayliss. You can also rig
them up with rocks hanging on string wound around the handle for
extended play. I had heard that they're working on a wind-up PC as
well. Not WinTel, presumably?

Cheers
--
Keith Wootten

854. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: tmacinty@ns.sympatico.ca
Message-ID: <3779e41e.1262594@news1.ns.sympatico.ca>
Source record: 68971
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Keith Wootten <Keith@wootten.demon.co.uk> wrote:

>In article <3779694E.63D@sympatico.ca>, Larry Asp
><larry.asp@sympatico.ca> writes
>
>[snipped]
>>
>>I can provide you with the name and address of a firm in Toronto Ontario
>>who sells these if you want. Theyre made in South Africa and had a great
>>application there because of no power in the little villages etc. One
>>model in addition to the wind up has a solar panel too. Very neat, well
>>made - they are sold under the name of Baycom.
>>
>Baygen, I think the inventor's name is Trevor Bayliss. You can also rig
>them up with rocks hanging on string wound around the handle for
>extended play. I had heard that they're working on a wind-up PC as
>well. Not WinTel, presumably?
>
>Cheers
>--
>Keith Wootten

This discussion is getting cranky...

Tom

855. Tantaium caps?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: MLJS45A@prodigy.com
Message-ID: <7lc5tl$14l4$1@newssvr01-int.news.prodigy.com>
Source record: 68972

Low ESR was the advantage, as compared to the typical electrolytic
cap.

Jim McShane
MLJS45A@prodigy.com
Visit My Web Pages at http://pages.prodigy.net/jimmcshane

856. WANTED: Schematics for Alinco DR-510E Dualbander

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: Marko T Autti <cosse@ee.oulu.fi>
Message-ID: <7ld2q8$j00$1@haavi.uwasa.fi>
Source record: 68973

Marko/OH9LMP

857. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: Olin Lathrop <ogl@cognivis.com>
Message-ID: <930748519.864.21@news.remarQ.com>
Source record: 68974
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Larry Asp wrote in message <3779694E.63D@sympatico.ca>...
>> > One old German guy that works here said that in WW2 he had a
>> > flashlight that had a generator that was powered by squeezing the
>> > handle. I think I've seen something like that in an outdoors company
>> > catalog.
>>
>> Me too, even inexpensive ones (probably a bad idea) in surplus outfits
like Alltronics,
>> Electronic Goldmine, etc. Now, what if someone put one of those little
"hand squeeze
>> generators" together with a couple of computer memory caps (2-5v, 1
farad) and a number of
>> those new, 'white light' LEDS that cave explorers are talking about?
Lifetime flashlight?
>
>I can provide you with the name and address of a firm in Toronto Ontario
>who sells these if you want. Theyre made in South Africa and had a great
>application there because of no power in the little villages etc. One
>model in addition to the wind up has a solar panel too. Very neat, well
>made - they are sold under the name of Baycom.

A solar powered flashlight! Now there's a novel idea! I think I've seen
them for sale right next to the battery operated dinner forks, and the
razors with two safety edges.

858. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <377A0F1B.1C2B2140@mwci.net>
Source record: 68975
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Roy Lewallen wrote:

> Saved a lot on batteries.

Consider solar cells to charge nicad batteries.

Bill W0IYH

859. Re: Tantalum capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: Tom McDermott <mcdermot@NOSPAM.aud.alcatel.com>
Message-ID: <377A2301.9678FE35@NOSPAM.aud.alcatel.com>
Source record: 68976

Several responses about tantalum capacitors (lower ESR, etc.) are correct.
Additionally, electrolytic capacitors lose much of their effective capacitance
at cold temperatures [this may not be a problem with your appliction].

One additional caution: solid tantalum capacitors occaisionally fail (as do
all components). When they fail, they fail shorted with incredibly low series
resistance. You need to be sure that you have adequate over-current
protection (or a fuse) feeding the capacitor, or you will burn up PC board
traces,
or perhaps worse. If you are bypassing the output of a series-regulator, make
sure the regulator has over-current shutdown. If the tantalum capacitor is
across a battery, make sure that there is a fuse between the battery and the
capacitor.

Clinton wrote:

> I am putting together the parts to build the lead-acid battery charger that
> was in March 1994 issue of QST. They call for 2 10uF 35V Tantalum
> capacitors. One from the OUT of the LM338K regulator to ground, and the
> other from the ADJ terminal to ground. Is there something special about
> tantalum capacitors? From what I've been able to find with a quick search
> is that they are just smaller, so could I use a regular cap., or am I
> missing something?
>
> ---
> Kill the MAI
> ---
> Clinton Peebles VE7KNL DN19ie
> Salmo, B.C. Canada
> E-Mail: cpeebles@netidea.com

860. Re: Tantalum capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: Tom McDermott <mcdermot@NOSPAM.aud.alcatel.com>
Message-ID: <377A2513.C30A19BE@NOSPAM.aud.alcatel.com>
Source record: 68977

Several responses about tantalum capacitors (lower ESR, etc.) are correct.
Additionally, electrolytic capacitors lose much of their effective capacitance
at cold temperatures [this may not be a problem with your appliction] while
tantalum capacitors generally do not (down to -40C anyway).

One additional caution: solid tantalum capacitors occaisionally fail (as do
all components). When they fail, they fail shorted with incredibly low series
resistance. You need to be sure that you have adequate over-current
protection (or a fuse) feeding the capacitor, or you will burn up PC board
traces,
or perhaps worse. If you are bypassing the output of a series-regulator, make
sure the regulator has over-current shutdown. If the tantalum capacitor is
across a battery, make sure that there is a fuse between the battery and the
capacitor.

I have a HAL P38 - and it had a tantalum across the +5VDC supply that failed.
It was able to drag down the +5V 30A supply in the PC without blowing up any
traces
or board connectors. It stayed that way for several days I was gone. When I
returned
until I noticed the awful smell and noticed that the PC wasn't working. I
replaced it with
an electrolytic cap with no problems.

Tom, N5EG

Clinton wrote:

> I am putting together the parts to build the lead-acid battery charger that
> was in March 1994 issue of QST. They call for 2 10uF 35V Tantalum
> capacitors. One from the OUT of the LM338K regulator to ground, and the
> other from the ADJ terminal to ground. Is there something special about
> tantalum capacitors? From what I've been able to find with a quick search
> is that they are just smaller, so could I use a regular cap., or am I
> missing something?
>
> ---
> Kill the MAI
> ---
> Clinton Peebles VE7KNL DN19ie
> Salmo, B.C. Canada
> E-Mail: cpeebles@netidea.com

861. Re: Tantalum capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: Tom McDermott <mcdermot@NOSPAM.aud.alcatel.com>
Message-ID: <377A241A.1296B32A@NOSPAM.aud.alcatel.com>
Source record: 68978

Several responses about tantalum capacitors (lower ESR, etc.) are correct.
Additionally, electrolytic capacitors lose much of their effective capacitance
at cold temperatures [this may not be a problem with your appliction].

One additional caution: solid tantalum capacitors occaisionally fail (as do
all components). When they fail, they fail shorted with incredibly low series
resistance. You need to be sure that you have adequate over-current
protection (or a fuse) feeding the capacitor, or you will burn up PC board
traces,
or perhaps worse. If you are bypassing the output of a series-regulator, make
sure the regulator has over-current shutdown. If the tantalum capacitor is
across a battery, make sure that there is a fuse between the battery and the
capacitor.

Clinton wrote:

> I am putting together the parts to build the lead-acid battery charger that
> was in March 1994 issue of QST. They call for 2 10uF 35V Tantalum
> capacitors. One from the OUT of the LM338K regulator to ground, and the
> other from the ADJ terminal to ground. Is there something special about
> tantalum capacitors? From what I've been able to find with a quick search
> is that they are just smaller, so could I use a regular cap., or am I
> missing something?
>
> ---
> Kill the MAI
> ---
> Clinton Peebles VE7KNL DN19ie
> Salmo, B.C. Canada
> E-Mail: cpeebles@netidea.com

862. Re: Is Barnett Electronics OK

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: John Woolem <jwoolem@flash.net>
Message-ID: <377A2D2B.327FBCB1@flash.net>
Source record: 68979
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

They have what they say and will do as they say also

Dan wrote:

> Has anyone dealt with this company?
> Any comments on their equipment they sell. IM looking for some GE mastr II's
> & would like to get the best deal
> thank you
> Dan

--
Amateur Radio Station N5TKG

863. Re: EMP phenomena (was: Morse code)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <7ldb21qbn1@208.207.71.149>
Source record: 68980
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Reg Edwards wrote:
>
> Indeed, it may have worked for you, a conspiring member of
> a very small world population minority, including North
> American citizens like yourself. But it does not work for
> by far the great majority of the world's population.

Reg, you're not stupid so why insist on being ignorant???
Have you NO knowledge of history? Even that of this century?

How many despots did dear old England have to endure for centuries before the populace rose up and demanded some resemblence of humane treatment? How long did we "North Americans" try to ignore the Nazi threat, stay out of it and let your "nature" take it's course before we came to realize that the threat was not just to those on the other side of the pond? How many repeats -of history- does it take to drum some sort of knowledge into any human? Fortunately not an infinite number for some of us. Not so sure about you.

We have learned that the undesirable traits in human nature tend to try to dominate the desirable-so we must remain eternally vigilant so that the Hitlers, Stalins, Pol Pots et al are nipped in the bud, and not at the cost of millions of innocent lives.

Yes--Milosevich, too, is an "educated man". So what does that help?
Did he "rob" anyone???

73, Dick

>it is they who have been robbed.
>
> But, of course, the remainder of the world's very sensible,
> intelligent, better educated population do not expect you
> to admit it. It goes against normal human (aggressive)
> nature. So don't worry about it.
>
> ----
> Reg, G4FGQ.

864. Chopping the a.c.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-06-30 00:00:00 UTC
From: "Mr. Muckle" <jdwalton@home.com>
Message-ID: <377A68E2.426075B9@home.com>
Source record: 68981

If I chop the 60Hz AC input into an HV power transformer (forget the filaments taps for a minute.) what problems does anyone foresee with spikes, rfi and controlling the HV ouput of the transformer.

I am trying to make a supply which ramps the DC output from 100 to 350V, where the nominal dc ouput of the supply would have been 350V - and to do this without a regulator which generates a lot of heat.

If I wanted to wind the transformer I could probably do this in PWM with one of the Motorola chips. Being lazy I prefer a less elegant solution.

865. Red and white spot transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-01 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7lgm95$b1b$1@uranium.btinternet.com>
Source record: 68833

What are these things? I have read several articles on radio projects which use Ge transistors, and they are often described as 'red spot' or 'white spot' . What does this mean?

866. Re: Red and white spot transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-01 00:00:00 UTC
From: "Mogens Kristiansen, OZ1CXX" <gribben@post.tele.dk>
Message-ID: <7lgnnnmgs1@news.inet.tele.dk>
Source record: 68834

The spots (white, red or blue), are on the side of the transistor,
indicating the collector.
Can still be found in some older radios.

73 de OZ1CXX

David Cunningham skrev i meddelelsen
<7lgm95$b1b$1@uranium.btinternet.com>...
>What are these things? I have read several articles on radio projects which
>use Ge transistors, and they are often described as 'red spot' or 'white
>spot' . What does this mean?
>
>

867. Re: basic economics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-01 00:00:00 UTC
From: Barry Smith <baz@g4iat.demon.co.uk>
Message-ID: <ant012159313nGS$@g4iat.demon.co.uk>
Source record: 68835
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <377BBA84.453C@ixpres.com>, Don W6JL
<URL:mailto:W6JL@ixpres.com> wrote:

> Gates has already created as much or more wealth than many of the
> previous tycoons, such as Vanderbilt, Carnegie, Rockefeller, etc.

Not being a student of economics, I cannot offer a logical argument, but to me it would appear to me that the wealth that Bill Gates has accumulated and redistributed was not actually created.

His money came from selling products that *he* was responsible for, as opposed to other products, such as food, clothing, cars, televisions etc.

A person has an amount of 'disposable' income and many see fit to spend it in a way that benefits Mr Gates.

Barry
--
Support the Acorn User RC5-64 cracking effort
See http://www.acornusers.org/rc5/

It's hard to make a program foolproof because fools are so ingenious.

868. WTB/WTT 304TL TUBE SOCKET

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-01 00:00:00 UTC
From: hanavin@ren.eecis.udel.edu
Message-ID: <7lgrtj$b3e$1@dewey.udel.edu>
Source record: 68836

Hi,

I am looking to buy or trade for a Johnson
213, or similiar type tube sockets. They are
the 4 pin type, that fit 304TL, 304TH Tubes.
I am building a homebrew rig, with a pair, and need
one more socket.
I have a good supply of worthy parts to trade,
including 6550 tubes other audio/rf tubes
and large ceramic sockets to fit 4-400, 813 and 810 tubes.

Chuck (W3FJJ)

869. What does one do with the left overs??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-01 00:00:00 UTC
From: REV <rev-1234@cybertrails.com>
Message-ID: <qDSe3.20$Mg3.1422868518@mick.cybertrails.com>
Source record: 68837

Once upon a time (1950"s I was very active as KL7BDA--built all of my equipment and now have a few items for the archives---D-104 (Xtal) and who don't remember the sound and effect of this mike?---BC-221 (with power supply) this kept the FCC off my back as Net control for the SOUR DOUGH Net. Any comments to rev@cybertrails.com in Prescott , Az Handle is bob

870. Re: Where to buy electronic components - online?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-01 00:00:00 UTC
From: "Alex C. Peper" <xxalexx@ix.netcom.com>
Message-ID: <7lgroo$mbt@dfw-ixnews21.ix.netcom.com>
Source record: 68838
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Try http://www.questlink.com
They have a good search engine of data sheets and app notes,
You can order quanity one from many distributors, will drop
ship to your house, no account needed.
Alex
Don W6JL <W6JL@ixpres.com> writes: > Jake wrote:
> >
> > 'Shamefull shill' Jim W5AOX, promotes his online business:
> >
> > In article <7ldlb1$gif@chronicle.concentric.net>, jdport@xoommail.com says...
> > >
> > >Try http://www.dalbani.com/
> > >They have the largest selection of hard to find stuff I've been able to find.
> > >Jim W5AOX
> >
> > Just obsolete junk at http://www.dalbani.com/ No compononts...
> > I suspect that Jim W5AOX, is the owner of dalbani.
> >
> > Anyone else have any suggestions?
>
> I find most anything I need for general components at Digi-Key,
> Mouser, Antique Electronic Supply, Newark, Allied, Dan's Small Parts, to
> name a few. All of these can be found with a Web search. You can order
> over the phone, or by fax usually. What's the problem?
>
> 73,
> Don, W6JL

871. Re: need cw keyer circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-01 00:00:00 UTC
From: r_buschner@KNUUT.de
Message-ID: <7K3GhBT2kEB@r_buschner.knuut.de>
Source record: 68839

Primus wrote in <F2xe3.803$3t3.16174488@news.siol.net>:

> I need a cw keyer circuit. I would like it to be CMOS based (without
> those special cw IC's). It must have squeeze and memmory functions.
> It could not necceseraly) also have some kind of monitor built in.
> If you can help me, point me to a web page or e-mail me, pse.

You could look in yahoo.com for the K8+ Keyer, it's from K1EL, extremely simple, sourcecode is released, works with a PIC 12C509, costs abt. $ 3.

cu, Ralf

--
Was fuer 'ne Signatur?

872. Re: EMP phenomena (was: Morse code)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-01 00:00:00 UTC
From: NOamradioSPAM@thebizlink.com
Message-ID: <NOamradioSPAM-0107992130000001@207-172-128-180.s180.tnt1.col.md.dialup.rcn.com>
Source record: 68840
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <378f64a4.262358180@news.atl.bellsouth.net>,
ke4zv@bellsouth.net (Gary Coffman) wrote:

>>>>snippage<<<<<<

That's also why the government destroyed its old ICBM launchers instead
of selling
them as cut rate satellite launchers. If they had done that, they'd have
depressed
the market for new launchers and hurt the economies of the areas where
they are
produced.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

Never mind that someone/country/terrorist might actually use them in a
weapons application!!

873. Re: Frequency standard / GPS / DDS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-01 00:00:00 UTC
From: paul <paul@ct2.nai.net>
Message-ID: <377C3DFA.3E03@ct2.nai.net>
Source record: 68841

My kind of thread. Thanks! Should beat the old hp117 comparator nicely.
Paul.

Richard Karlquist wrote:
>
> In article <377B36EB.6CC0F4B6@ercom.fr>,
> Frederic Rible <Frederic.Rible@ercom.fr> wrote:
> >I am thinking about a homebrew GPS based frequency standard derived from
> >the W5OJM design.
> >
> >If a replace the DAC which drives the tuning input of the OCXO by a DDS,
> >what kind of performances can be achieved ?
> >
> >The idea is to use a free running OCXO. Its output is connected to a 32
> >bits DDS chip. The PLL algorithm drives the phase step register.
> >
> >With a 32 bits DDS I have 2.5e-10 resolution. I assume I can achieve
> >1/10 performances with the PLL locked to the GPS signal (2.5e-9). But it
> >is only assumption ! Anyone having some theorical background to give the
>
> When I helped develope HP "smart clock" GPS frequency references a few
> years ago, there was a running debate as to whether it is better to
> use a DAC with a VCXO or a fixed OCXO followed by a offset frequency
> synthesizer. We determined that in the HP 10811 oscillator, replacing
> the varactor with a fixed capacitor does not improve the performance of
> the oscillator (because other error sources dominate). So that reason
> for not using a DAC is eliminated. We also determined that with the
> modern DAC's that are available, the DAC error does not need to be
> significant in terms of other oscillator instabilities. That doesn't
> necessarily mean W5OJM's DAC is good enough, but the DAC HP used was
> quite adequate.
>
> OTOH, trying to add a DDS after the oscillator is a can of worms. We
> had one customer who wanted to do that and we had to rule it out because
> of DDS spurs. If you are *not* going to multiply the reference to
> UHF/microwave frequencies, maybe you can tolerate the spurs. But
> why bother?
>
> On my web site <<http://www.karlquist.com>> there are a couple of papers
> I wrote on high resolution offset sythesizers that would be candidates
> to follow an OCXO. However, they are fairly complex so I don't think
> you would want to go to the trouble to eliminate a DAC. In particular,
> see my 1995 Frequency Control Symposium paper.
>

> HP makes a much more stable oscillator called the E1938A (also documented
> on my web site) which requires a much better DAC. Now that DAC was
> truly difficult to design and in that case, there would be more justification
> to go to an offset synthesizer. However, we put the voltage reference for
> the DAC inside the crystal oven that we had anyway, and used a really
> good DAC and got away with it. (But don't try this at home kids!)
>
> So in conclusion re: DDS; nice thought but you probably don't want to
> do that.
>
> Rick Karlquist N6RK
> rick@area.com
> www.karlquist.com

874. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-01 00:00:00 UTC
From: NO SPAM <NOSPAM@mail.rsccd.org>
Message-ID: <377C255C.EB7C247@mail.rsccd.org>
Source record: 68842
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Roy Lewallen wrote:

> NO SPAM wrote:

> > BTW, has anyone seen those Wind Up radios for sale? They are sold
> > somewhere but I haven't seen them in a catalog or on a store shelf. I
> > saw one guy using one at a cosntruction site, and he wound it up a
> > whole lot and I guess it ran for ten or 20 minutes on a single
> > windup. Pretty neat. Saved a lot on batteries.
> > . . .

> Let's see, guessing that the radio takes about 10 mA at 6 volts to run,
> a set of alkaline AA cells would last about 150 hours. I seriously doubt
> that he's cranked the radio enough to run for 150 hours, so he's saved
> less than $4.00 at drugstore prices. (I get AA alkaline cells at
> Price-Costco for about $0.25 each, dropping the savings to $1.00/150
> hours.) Wonder how much more he paid for the radio than he would have
> paid for a simple battery-operated one. Alkaline cells will easily last
> 5 years in storage, or much longer -- 10 years or more -- if they're not
> allowed to get too hot. A set or two in the refrigerator, or even stored
> with a radio, are very good security that you'll be able to listen to
> the radio in any emergency.

> There are places where batteries simply aren't available (but the
> crank-up radios are?), and the crank-type radios might be practical in
> those locations. But if you get one to save money on batteries, first
> subtract the cost of a battery-operated radio from the cost of the
> crank-up version and see how many hours you'd have to crank to make up
> the difference. Happy cranking!

> Roy Lewallen, W7EL
> -- cursed with an engineer's way of thinking.

Well, you're cursed with some kind of thinking, that's for sure. But
I think you didn't throw in all the other considerations.

As an example, I managed apartments and the guy who owned them would
buy those cheap Hungarian light bulbs for four for 99 cents or some
cut rate deal. So I get up on a ladder to change the light bulbs on
the outside of the apartments and it costs him a buck or so for ten
minutes, at the then prevailing rate of $7 an hour back then in the
late 70's. I grabbed a box of four bulbs and tried them in the
socket, and the first three fizzled after a few seconds of light, and
I think the fourth stayed on for awhile.

In any case, it cost him more for me to have to change the bulbs more often because they were el cheapo bulbs, even tho they cost less. Moral of this story is that he should have taken the same path that his employer did. He worked for McDonnel-Douglas, and the maintenance crews would go around to each building and pull out ALL the fluorescent lamps and replace them on a periodic basis, saving the time of having to come back and replace the bad ones often. They figured that the cost of the added lamps was a lot less than the labor to put them in, rightly so.
But hey, I wasn't complaining, starving student that I was, I needed the money.

So back to the batteries, I guess one should count the time it takes to buy the batteries, the gas to go to the store, the cost of storing them in the fridge AKA cooling costs, etc., etc., etc. There's bound to be more, that are not part of the crank-up radio costs. Besides, we could all afford to expend a few more calories, couldn't we.

BTW, I think at least double that 10 mA at 6V would be more realistic. So maybe 75 hours.

875. Re: basic economics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-01 00:00:00 UTC
From: Spamfree <Spamfree@DELETETHIS.spamfree.net>
Message-ID: <7lhag0$mml@journal.concentric.net>
Source record: 68843
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

> Not being a student of economics, I cannot offer a logical argument, but
to
> me it would appear to me that the wealth that Bill Gates has accumulated
and
> redistributed was not actually created.

Ok, the stated premise is that the wealth was redistributed. Bill Gates now has assets of somewhere around $100,000,000,000 - who is now doing without that hundred billion?

> His money came from selling products that *he* was responsible for, as
opposed
> to other products, such as food, clothing, cars, televisions etc.

Actually, most of his money didn't come =from= anywhere. In fact, most of his wealth isn't money at all, but calculated by his stock holdings.

Consider Marc Andersson (or whichever variant of the name he uses) of Netscape fame:
He goes to bed the night before Netscape's IPO and really doesn't have a lot of money. The next day, trading opens, and his holdings are suddenly worth tens of millions - nobody gave him any money, but his wealth was suddenly created.

The other thing to consider is that every minute of every day our various mints and the treasury are creating more money - wealth created. (Which creates inflation, btw...)

But we digress. This topic should be moved to one of the economic discussion groups.

--
Friends don't let friends use e-bay
E-bay: proud sponsor of Al Gore's 2000 presidential campaign

876. Schematic Needed Technics SA-120

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-01 00:00:00 UTC
From: "Richard F. Gillette, P.E." <r.f.gillette@ieee.org>
Message-ID: <377C0273.CC87D48@ieee.org>
Source record: 68844
Body handling: Binary attachment payload not displayed: r.f.gillette.vcf

Thanks, Richard W9PE

[One or more binary attachments are retained only in the source text.]

877. Re: Bi-band mobile antenna ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-01 00:00:00 UTC
From: "Richard F. Gillette, P.E." <r.f.gillette@ieee.org>
Message-ID: <377C04AF.8D4A97DA@ieee.org>
Source record: 68845
Body handling: Binary attachment payload not displayed: r.f.gillette.vcf

If you use a NMO mount with a 1/4 wave wire antenna cut for 145 Mhz. it will work nice at 3x145Mhz = 435 Mhz. The pattern will have a up lobe as well as one on horizon, but the loss will be small.

"J-P. Scherrer" wrote:

> Hi...
> I'm looking for a bi-band 2m./70cm. mobile antenna (to
> buil or buy) !
> The problem is that ALL the antennas I've tried were tailored
> for the AMERICAN bands, and, as you know, in France our bands are :
> 144.000 to 146.000 with the center at 145.000 Mhz. and
> 430.000 to 440.000 with the center at 435.ooo Mhz.
> ...so, the commercial antennas (made from US bands) ARE TOO
> SHORT !!! ...and the whips are too shorts too to compensate for to
> resonate on our mid-band !!!
> Have you got an idea, or drawings of homebrew antennas, or any
> EUROPEAN FIRM who build antennas ?
> Please let me know via E-Mail...
> 73's QRO de F4JOC
> **********
> J-P. Scherrer - Geneva (SWITZERLAND)
> E-Mail: scherrer@infomaniak.ch - ICQ # 6232732
> **********

[One or more binary attachments are retained only in the source text.]

878. Re: AEA-121 HF ANALYST

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-01 00:00:00 UTC
From: jdouglas@timewave.com
Message-ID: <7lem02cbo2@news.minn.net>
Source record: 68909
Cross-posted to: alt.ham-radio.hf,rec.ham-radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

In article <377AB446.3C728A26@juno.com>, w9juc@juno.com wrote:
>Are they still in business?
>
>Need instruction manual(or copy), software and serial cable for the AEA
>Model SWR-121 HF Analyst.
>
>Thank you,
>
>Rich
>
>W9JUC

Hello Rich;

Try 1-800-258-7805. They are closing out the analyzer and this may be you last chance to pick up accessories.

73

John Douglas
N0ISL
Timewave Technology

879. Lab amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-01 00:00:00 UTC
From: wizard@eskimo.com
Message-ID: <377adf17.440068938@eskinews.eskimo.com>
Source record: 68910

FA: Kalmus lab amp 10 kHz- 230 MHz -
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=123340533

880. Re: Japanese transistor model codes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-01 00:00:00 UTC
From: w9sz@prairienet.org
Message-ID: <TTBe3.3331$xg.88@firefly>
Source record: 68911

In a previous article, pmartin@bright.net (Paul) says:

>The Japanese numbers I've looked up in the past always have cross referenced
>to the same as a 2S prefix. On that experience I always assumed they just
>dropped the 2S to save space or whatever. 73.
>
>Frank Dinger wrote:
>
>> Perhaps a very silly question .
>> I have many ex-equipment Japanese transistors with model codes like
>> A1012 ,D880 , D549 , B383, C805, etc.
>> With known Jap. models in the 1SA -----2SB --------3SC range ,can
>> I take it that in the above codes the 1S or 2S or 3S part has been
>> deleted , or are the codes not related to the S -series designations.
>>
>> Would appreciate being informed about a site where the said
>> semiconductors are cross referenced with other (almost) equivalent types .
>>
>> TIA
>>
>> Frank GM0CSZ / KN6WH
>>

That is correct. The Japanese transistors - 2SA, 2SB, 2SC and 2SD -
generally are labelled with the "2S" omitted. Hence, you have above
2SA1012, 2SD880, 2SD549, etc.

Also, the Japanese 2SA and 2SB are all PNP and the 2SC and 2SD are NPN
devices.

73, Zack W9SZ

--

881. Wanted:Yaesu FT707 circuit.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-01 00:00:00 UTC
From: renfredm@bigfoot.com
Message-ID: <377af49f.4763205@news.xtra.co.nz>
Source record: 68912

LOOKING FOR A CIRCUIT AND OR MANUAL FOR MY OLD YAESU FT707.
APPRECIATE ANY PHOTOCOPY OR WHATEVER FORM . HAPPY TO PAY ANY EXPENSES.

tHANKS,
RENFRED.

882. Homebrew heaven

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-01 00:00:00 UTC
From: Harry Lythall SM0VPO <harryvpo@hotmail.com>
Message-ID: <01bec388$f8e6dac0$8734d693@e0060b0eb282a>
Source record: 68913
Cross-posted to: ec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave,uk.radio.amateur,uk.rec.radio.cb

Hello again all,

Yes, there has been loads of activity on the homepage. I have recently added an FM narrow-band RX that is about the size of a cigarette packet and has space to add prototype circuits, such as R/C of models, AF amplifier, data decoders, etc. the set is ideal for HF FSK and will work on any frequency up to 100MHz or more. Naturally there is a PCB layout and component overlay to download and the project is well photographed.

Following many requests I have also added info on building an antenna tuner with a few hints on other methods. Forgive me for not taking this subject so seriously, but all the info is accurate, complete with photograph. Do not be put off by chapter titles such as "ADDING KNOBS" but I feel an ATU/ASTU/ASCTU is a waste of effort on 90% of cases.

The technical message board has seen loads of activity about all aspects, including whether the Reflux still should have the coolant fed to the reflux condenser or the final stage alcohol condenser first. What are your views? I think it is a bit like asking whether the propellor should be mounted at the back of the aeroplane pushing or at the front pulling. Whichever way the still works fine and produced some high-grade alcohol.

The electronic calculator was extended a few weeks ago, thanks to the HTML advice received from another newsgroup. Now that i can handle square-roots I have added frequency and coil-winding calculations to the tables.

I have also received loads of E-mail asking how I draw my circuits and PCB foil patterns. there is a page there with examples that explain everything, right down to the keyboard keys to push. Do not expect any high-tech answers because it is very basic and simple. No software, No code, No preaching about products. you have all the software you need in you basic computer.

Well, there is the latest news, sorry there is not too much of it at the moment. Best regards from Harry

These pages are also located at:
http://sm0vpo.8m.com/
http://www.geocities.com/SiliconValley/3569/
http://hem2.passagen.se/sm0vpo
http://members.xoom.com/sm0vpo

883. Radio calculatioons

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-01 00:00:00 UTC
From: Harry Lythall SM0VPO <harryvpo@hotmail.com>
Message-ID: <01bec38a$586fd5e0$8734d693@e0060b0eb282a>
Source record: 68914
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave,uk.radio.amateur,uk.rec.radio.cb

Just one more bit of news, I have also added T and Pi attenuator calculators to the radio calculations page. Both are even calculated in both unballanced and ballanced forms.

Harry
http://sm0vpo.8m.com/
http://www.geocities.com/SiliconValley/3569/
http://hem2.passagen.se/sm0vpo
http://members.xoom.com/sm0vpo

884. Re: Where to buy electronic components - online?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-01 00:00:00 UTC
From: Harry Lythall SM0VPO <harryvpo@hotmail.com>
Message-ID: <01bec38c$c8b119c0$8734d693@e0060b0eb282a>
Source record: 68915
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

> Just obsolete junk at http://www.dalbani.com/ No compononts...
> I suspect that Jim W5AOX, is the owner of dalbani.
>
> Anyone else have any suggestions?

Yes, loads of them, I live in Sweden where one just pays and pays (and pays and pays ..) when companies charge what they like. It costs $10 just to change an International Money Order in a bank over here! Ok, component suppliers "on-Line":

The only one I really trust on-line in the USA is AES at http://www.tubesandmore.com They have loads of tubes and stuff for antique radio. They are also a goldmine for the constructor.

One basic problem with other suppliers is that many others are cheap but for the personal touch then you have to pay $15 minimum postage (and I also get hit with customs too!). Bardwells in the UK at http://www.bardwells.co.uk/ also have a cat on-line and they accept VISA cards. The components are ridiculously cheap and they will usually write "GIFT" and "HAPPY BIRTHDAY" on the package (for customs).

Then there is Maplin Electronics also in the UK at http.//www.maplin.co.uk and they have loads of stuff on line, and their postal charges start at $7.5 Not nearly as cheap a Bardwells, but they have a wider variety.

If I come accross any more decent suppliers myself I will post them to http://hem2.passagen.se/sm0vpo/info/supply.htm along with those listed above.

Best regards from Harry - SM0VPO

http://sm0vpo.8m.com/
http://www.geocities.com/SiliconValley/3569/
http://hem2.passagen.se/sm0vpo
http://members.xoom.com/sm0vpo

885. Frequency standard / GPS / DDS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-01 00:00:00 UTC
From: Frederic Rible <Frederic.Rible@ercom.fr>
Message-ID: <377B36EB.6CC0F4B6@ercom.fr>
Source record: 68916

I am thinking about a homebrew GPS based frequency standard derived from the W5OJM design.

If a replace the DAC which drives the tuning input of the OCXO by a DDS, what kind of performances can be achieved ?

The idea is to use a free running OCXO. Its output is connected to a 32 bits DDS chip. The PLL algorithm drives the phase step register.

With a 32 bits DDS I have 2.5e-10 resolution. I assume I can achieve 1/10 performances with the PLL locked to the GPS signal (2.5e-9). But it is only assumption ! Anyone having some theorical background to give the right achievable performance ? May be some inconveniences for this design ?

73's Frederic F1OAT.

--
Frederic RIBLE Tel : +33 1 39 46 50 50
ERCOM SA Fax : +33 1 39 46 25 25
13, Avenue Morane-Saulnier Email : frederic.rible@ercom.fr
F-78140 VELIZY Web : http://www.ercom.fr

886. Re: basic economics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-01 00:00:00 UTC
From: "Dr. Dennis C. O'Connor" <k8do@midmich.net>
Message-ID: <377B70AE.D51088CF@midmich.net>
Source record: 68917
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Certainly, wealth is created daily... If it were not then the increased billions of population alive today who were not alive four thousand years ago would never see a single dollar in their entire lifetimes, nor would they have even a scrap of cloth to cover their nakedness... Yet, we have the most wealth in circulation today that we have had in 4000 years of recorded history...

Denny

Spamfree wrote:

> Michael Young <nobody@all.org> wrote in message
> news:930771119.962.74@news.remarQ.com...
> > Dick Carroll <dixie@townsqr.com> wrote in message
> > news:7ldc28qbn2@208.207.71.149...
> > > From college economics of the 60's, I recall that "a dollar
> > > spent generates seven dollars" by the time it has circulates
> > > through the economy. Who knows what that figure is now? We
> >
> > Speaking as a total idiot when it comes to economics: What kind of BULL
> > is that? Inflation aside, as far as I know, wealth is not created or
> > destroyed, just redistributed. With a trade deficit, the only meaning I
> > can infer from your statement is that each dollar inflates 700% by the
> > time someone gives it back in taxes.
> >
> > This doesn't feel right, so please explain.
>
> Question: from whom was Bill Gates' wealth redistributed?
>
> Wealth is most certainly created... ever hear the term "economic growth"?
>
> --
> Friends don't let friends use e-bay
> E-bay: proud sponsor of Al Gore's 2000 presidential campaign

887. Re: basic economics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-01 00:00:00 UTC
From: sparksw4eas@mindspring.com
Message-ID: <7lfrth$5iu$1@nntp8.atl.mindspring.net>
Source record: 68918
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Guess it depends on how ya look at it! THERE is NO real backing for the earthly things we so covet including "money". The ONLY backing for the paper money we circulate today is our belief that it WILL buy something tommorrow! Period.... How long in our present state of affairs will it last? Sparks my two cents worth...

Dr. Dennis C. O'Connor wrote in message <377B70AE.D51088CF@midmich.net>...
>Certainly, wealth is created daily... If it were not then the increased
>billions of population alive today who were not alive four thousand years
ago
>would never see a single dollar in their entire lifetimes, nor would they
>have even a scrap of cloth to cover their nakedness... Yet, we have the
most
>wealth in circulation today that we have had in 4000 years of recorded
>history...
>
>Denny
>
>Spamfree wrote:
>
>> Michael Young <nobody@all.org> wrote in message
>> news:930771119.962.74@news.remarQ.com...
>> > Dick Carroll <dixie@townsqr.com> wrote in message
>> > news:7ldc28qbn2@208.207.71.149...
>> > > From college economics of the 60's, I recall that "a dollar
>> > > spent generates seven dollars" by the time it has circulates
>> > > through the economy. Who knows what that figure is now? We
>> >
>> > Speaking as a total idiot when it comes to economics: What kind of BULL
>> > is that? Inflation aside, as far as I know, wealth is not created or
>> > destroyed, just redistributed. With a trade deficit, the only meaning I
>> > can infer from your statement is that each dollar inflates 700% by the
>> > time someone gives it back in taxes.
>> >
>> > This doesn't feel right, so please explain.
>>
>> Question: from whom was Bill Gates' wealth redistributed?
>>
>> Wealth is most certainly created... ever hear the term "economic growth"?
>>
>> --
>> Friends don't let friends use e-bay
>> E-bay: proud sponsor of Al Gore's 2000 presidential campaign

>

888. Re: How to combine 4 video inputs for one monitor view.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-01 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <377BBBC4.D8C33DF@bellsouth.net>
Source record: 68919

Jack Taylor wrote:
> I would be interested in how to build a video sequencer that switches
> baseband video sources for a few seconds, one at a time. There are
> commercial units available, but I'd prefer to custom make my own.

Some fast analog buffers driving some 4066 switches driving another fast analog buffer would do the trick. You could use a 555 into a long divider (4060?) to do the sequencing. The monitor will roll at each switch, but that shouldn't be too much of a problem.

It gets MUCH harder to show them all simultaneously on a split screen. For one thing, the synchronizing pulses for all sources must happen at the same time; this requires either "genlocking" the pulse generators in the sources, or digitizing and storing the incoming video so it can be read back out in time with a reference source.
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

889. Re: EMP phenomena (was: Morse code)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-01 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <378f64a4.262358180@news.atl.bellsouth.net>
Source record: 68920
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Wed, 30 Jun 1999 14:31:41 -0500, "Michael Young" <nobody@all.org> wrote:
>Dick Carroll <dixie@townsqr.com> wrote in message
>news:7ldc28qbn2@208.207.71.149...
>> From college economics of the 60's, I recall that "a dollar
>> spent generates seven dollars" by the time it has circulates
>> through the economy. Who knows what that figure is now? We
>
>Speaking as a total idiot when it comes to economics: What kind of BULL
>is that? Inflation aside, as far as I know, wealth is not created or
>destroyed, just redistributed. With a trade deficit, the only meaning I
>can infer from your statement is that each dollar inflates 700% by the
>time someone gives it back in taxes.
>
>This doesn't feel right, so please explain.

Dick's right, and it has nothing to do with inflation, but it requires some background in economics to understand why this is so. Money is fungible, and elastic, each time it changes hands it has an economic effect. I can't give you an economics course in a post, but let me try to give an example which might make things a bit clearer. Lets suppose the government spends 1 million dollars a year in each of two different communities. In one community, it spends the money by giving 500,000 people each $2. In another community it buys 1,000 high tech widgets that cost $1,000 each from a local company. Which will have a bigger impact on the local economy?

You seem to be saying that the two expenditures will have the same effect, but they won't. In the first case, people will buy a hamburger, a pack of smokes, or a bottle of Ripple with their $2 windfall, and that's basically the end of the story. The money is dilute, and goes for basic items with little or no multiplier.

But in the second community the company hires engineers and production staff to make the widgets for the government. Each of those people make good money and buy a house, a car, furniture, a new TV, etc. The contractors building the houses, the car dealers, the furniture makers, etc all hire people to produce and sell these items to them. Those people in turn are able to buy relatively big ticket items too. So the dollars turn over in the economy several times over the course of a year instead of once or twice because the wealth is distributed in larger chunks and can have secondary and tertiary effects in the local economy as it cascades through it during the year.

In high tech high wage areas, the multiplier in the local economy is often seven times or more. You get a "boom town" built up around the high tech industry and the businesses which cater to the workers of that high tech industry. In low tech

low wage areas (ie mill towns, farming areas, etc), or with poverty program giveaways, the multiplier is low, generally less than two, so those areas remain depressed compared to the other town, though the same amount of money has been injected into their economies by the government. The difference is that in the former case the money is in large enough lumps to generate job producing secondary and tertiary economic activity while in the latter case it is so dilute that it has little secondary and tertiary impact (or quickly becomes so concentrated in a few hands, ie the mill owner, the company store, etc, that it can't be spent again fast enough in the local economy to have a major impact).

Economists say that money has "velocity", meaning that it moves through the economy at a certain rate. Money in larger chunks retains its velocity better than money that's finely dispersed. It can be said to have an "inertia" proportional to the size of the chunks. This lets it have a bigger impact at each level as it cascades through the economy. There is a size that is so large that it can't easily make it through the porosity of the local economy, however. In other words, a rich man can only watch so many TVs, drive so many cars, or get so many haircuts. So the multiplier again falls when the chunk size passes a certain limit.

There's a size range where the money will retain maximum velocity in the local economy, and have the largest multiplier effect. This can be calculated fairly closely by econometric models. The peak is roughly when the primary wage generated by the injected capital is in the range of $50,000 to $150,000 a year. That's large enough to spur big ticket purchasing activity, but small enough that the money can easily be spent locally. It also happens to be in the range paid by makers of military hardware, which means that the government's buying of big ticket military goods is a spur to the economy.

It then doesn't matter if the hardware gets parked in a desert, or is sent to the scrapyard, or is shot to the Moon. It has already had its economic impact. What we don't want it to do is to have a civilian use. That puts the government in the market in competition with its own people, and acts as a drag on the economy.

(For example, the government could just buy John Deere tractors, that would spur the economy where they are made just the same as if they were buying M1A tanks, but buying tractors would bid up the market price of tractors for farmers and construction companies, ie supply and demand, so it would have a net negative effect on the overall economy. For maximum stimulus effect without undesired side effects, we want the government to buy things that have no civilian use so that they aren't competitors in the marketplace with civilians for those goods.)

That's also why the government destroyed its old ICBM launchers instead of selling them as cut rate satellite launchers. If they had done that, they'd have depressed the market for new launchers and hurt the economies of the areas where they are produced.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

890. Re: Where to buy electronic components - online?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-01 00:00:00 UTC
From: Jim <jdport@xoommail.com>
Message-ID: <7lfvpd$gm3@journal.concentric.net>
Source record: 68921
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Jake, thanks very much for your insightful and kind input. Too bad
you don't know what you're talking about.

#1- What's wrong with promoting an online business?
#2- I have no connection whatever with Dalbani except as a satisfied
customer.
#3- Dalbani is very slow in getting their product line onto their web
page. However, they have a good catalog for the asking, and often
have parts in stock, especially semiconductors, that others don't
have and at lower prices.
#4- I was steered to Dalbani by a post in sci.electronics.repair,
which I didn't think was "shamefully shilling" since the post was
very useful to me.
#5- When I'm shamelessly shilling for my own business I'll include the
info in the post. There's nothing shameful about advertising.
Too bad I'm wasting time trying to help a fellow homebrewer out
when it results in responses like yours. Time that I **could**
be spending at MY business.
#6- Instead of wasting YOUR time flaming me, why not try dalbani instead?
In the past I've called their toll free number to see if they
had odd items in stock like the ones listed originally, but
since I DO have a business of my own to take care of, I just
try to pass on the info: (ah, er, no connection to myself, wasted breath, I know)

Contact Information:

Telephone 1-800-dalbani
FAX 1-305-594-6588
Postal address 4225 NW 72nd Ave. Miami, Florida 33166

Email Information:
Sales: savings@dalbani.com
Customer Support: support@dalbani.com

891. Re: Frequency standard / GPS / DDS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-01 00:00:00 UTC
From: rick@area.com
Message-ID: <7lg17m$lu4$1@vax.area.com>
Source record: 68922

In article <377B36EB.6CC0F4B6@ercom.fr>,
Frederic Rible <Frederic.Rible@ercom.fr> wrote:
>I am thinking about a homebrew GPS based frequency standard derived from
>the W5OJM design.
>
>If a replace the DAC which drives the tuning input of the OCXO by a DDS,
>what kind of performances can be achieved ?
>
>The idea is to use a free running OCXO. Its output is connected to a 32
>bits DDS chip. The PLL algorithm drives the phase step register.
>
>With a 32 bits DDS I have 2.5e-10 resolution. I assume I can achieve
>1/10 performances with the PLL locked to the GPS signal (2.5e-9). But it
>is only assumption ! Anyone having some theorical background to give the

When I helped develope HP "smart clock" GPS frequency references a few
years ago, there was a running debate as to whether it is better to
use a DAC with a VCXO or a fixed OCXO followed by a offset frequency
synthesizer. We determined that in the HP 10811 oscillator, replacing
the varactor with a fixed capacitor does not improve the performance of
the oscillator (because other error sources dominate). So that reason
for not using a DAC is eliminated. We also determined that with the
modern DAC's that are available, the DAC error does not need to be
significant in terms of other oscillator instabilities. That doesn't
necessarily mean W5OJM's DAC is good enough, but the DAC HP used was
quite adequate.

OTOH, trying to add a DDS after the oscillator is a can of worms. We
had one customer who wanted to do that and we had to rule it out because
of DDS spurs. If you are *not* going to multiply the reference to
UHF/microwave frequencies, maybe you can tolerate the spurs. But
why bother?

On my web site <<http://www.karlquist.com>> there are a couple of papers
I wrote on high resolution offset sythesizers that would be candidates
to follow an OCXO. However, they are fairly complex so I don't think
you would want to go to the trouble to eliminate a DAC. In particular,
see my 1995 Frequency Control Symposium paper.

HP makes a much more stable oscillator called the E1938A (also documented
on my web site) which requires a much better DAC. Now that DAC was
truly difficult to design and in that case, there would be more justification
to go to an offset synthesizer. However, we put the voltage reference for
the DAC inside the crystal oven that we had anyway, and used a really
good DAC and got away with it. (But don't try this at home kids!)

So in conclusion re: DDS; nice thought but you probably don't want to do that.

Rick Karlquist N6RK
rick@area.com
www.karlquist.com

892. 144-HF transverter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-01 00:00:00 UTC
From: John Mitchell <j.b.mitchell@qmw.ac.uk>
Message-ID: <377B8686.249DD8EA@qmw.ac.uk>
Source record: 68923

Does anybody know of designs for (or commercially available) transverter using a 2m multimode rig (eg FT290) as an IF to cover the HF bands?

Or is there a good reason why such a setup would not work well?

My knowledge is a little rusty- I've been out of amateur radio for quite a while.

Thanks,

John

--

Dr John Mitchell
IRC in Biomedical Materials
Queen Mary and Westfield College
University of London
Mile End Road
London E1 4NS

Tel 0171 975 5547/5574
Fax 0181 983 1799

893. Re: need cw keyer circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-01 00:00:00 UTC
From: Eamon Skelton <NOSPAMei9gq@nettaxi.com>
Message-ID: <377b9f3b.0@news.digitalfoundry.com>
Source record: 68924

Primus <josip.hrste@siol.net> wrote in message
news:F2xe3.803$3t3.16174488@news.siol.net...
> I need a cw keyer circuit. I would like it to be CMOS based (without
those
> special cw IC's). It must have squeeze and memmory functions. It could
> not neccesseraly) also have some kind of monitor built in.
> If you can help me, point me to a web page or e-mail me, pse.
>

It's not exactly what you are looking for but have a look at:
http://www.qsl.net/ei9gq

73 Ed.

--
Eamon 'Ed' Skelton
CORK IRELAND
EI9GQ

Homebrew radio page www.qsl.net/ei9gq

894. FS: YAESU VX-5R

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-01 00:00:00 UTC
From: Victor <iden1000@hotmail.com>
Message-ID: <nINe3.173$%L2.1468306@bunson.tor.sfl.net>
Source record: 68925
Cross-posted to:
rec.ham-radio.packet,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.noncomm,rec.radio.shortwave

Hello , I have a VX-5 forsales. NEW CONDITION It's about 3 months old
a 9Dxxxxxx series ,and I have never had a problem with it.
It didn't do any hardware mods, I just use the Sofeware EVE to mods it. I'm
not use 6 meters at all since there has no 6M repeater.
and the main reason I selling it is I need the money for my school . It's
comes with radio,antenna, box ,manual , case(CSC-73), Rapid desk
charger(CD-15), Mic adapter(CT-44)and
the RS clip on belt clip. I don't want to give it up but
I need to pay by school for next year. I'm asking $349 + shipping.Thanks
you!! Victor iden1000@hotmail.com

895. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-01 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19990701193852704 32@zetnet.co.uk>
Source record: 68926

The message <930742420.888.36@news.remarQ.com>
from "Olin Lathrop" <ogl@cognivis.com> contains these words:

> NO SPAM wrote in message <37791DE7.7E5403A3@mail.rsccd.org>...
> >One old German guy that works here said that in WW2 he had a
> >flashlight that had a generator that was powered by squeezing the
> >handle. I think I've seen something like that in an outdoors company
> >catalog.

> Yes, I've got one of those inherited from my mother who lived in Berlin
> during WW2. Pretty cool actually, the light is bright enough to be of some
> use.
==========
These were also used in the Netherlands during WW2 , known as
'Knijpkat' = 'Squeeze Cat' .

Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland UK
e-mail : gm0csz.kn6wh@ukrs.org

896. Re: basic economics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-01 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <377BBA84.453C@ixpres.com>
Source record: 68927
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

as far as I know, wealth is not created or
destroyed, just redistributed. This doesn't feel right, so please
explain.
>
> Question: from whom was Bill Gates' wealth redistributed?
>
> Wealth is most certainly created... ever hear the term "economic growth"?
>

Wealth is most certainly created, and is the driver of economic
growth. One learns this in Economics 101. But wealth is generally not
created, only redistributed, by the Government. What you learn in
Economics 101 is that the accumulation of wealth is not a "zero sum
game", as was (is?) believed by folks of the Socialist and Communist
persuasion. Someone getting rich is not necessarily rich because he has
taken it from someone else. He may have created the wealth, as has
Billy Gates.
Gates has already created as much or more wealth than many of the
previous tycoons, such as Vanderbilt, Carnegie, Rockefeller, etc. And,
this wealth is far more widely dispributed: Microsoft has created over
1000 millionaires. None of this came from taxes, or as redistributions
from Government, but instead it was created in spite of Government
redistribution policies.
It amazes me that this elementary economic concept is not understood
by even many 'educated' people today.

73,
Don, W6JL

897. Re: need cw keyer circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-01 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <377BBB99.4B24@ixpres.com>
Source record: 68928

Primus wrote:
>
> I need a cw keyer circuit. I would like it to be CMOS based (without those
> special cw IC's). It must have squeeze and memmory functions. It could
> not neccesseraly) also have some kind of monitor built in.
> If you can help me, point me to a web page or e-mail me, pse.

Primus OM,

Try the Embedded Research TICK keyer chips, in DIP and SMT packages.
I use one for CW mobile Chip and board are 1 inch square, run off a 3V
disc battery, and can be glued under the base of a Bencher paddle. It
is programmable from the key also, making it a FB solution for CW mobile
or any other use.
73,
Don, W6JL

Primus wrote:
>
> I need a cw keyer circuit. I would like it to be CMOS based (without those
> special cw IC's). It must have squeeze and memmory functions. It could
> not neccesseraly) also have some kind of monitor built in.
> If you can help me, point me to a web page or e-mail me, pse.

898. Re: Where to buy electronic components - online?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-01 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <377BBB29.37EB@ixpres.com>
Source record: 68929
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Jake wrote:
>
> 'Shamefull shill' Jim W5AOX, promotes his online business:
>
> In article <7ldlb1$gif@chronicle.concentric.net>, jdport@xoommail.com says...
> >
> >Try http://www.dalbani.com/
> >They have the largest selection of hard to find stuff I've been able to find.
> >Jim W5AOX
>
> Just obsolete junk at http://www.dalbani.com/ No compononts...
> I suspect that Jim W5AOX, is the owner of dalbani.
>
> Anyone else have any suggestions?

I find most anything I need for general components at Digi-Key,
Mouser, Antique Electronic Supply, Newark, Allied, Dan's Small Parts, to
name a few. All of these can be found with a Web search. You can order
over the phone, or by fax usually. What's the problem?

73,
Don, W6JL

899. PSK31 and Kenwood TS-570-S--Info Sought

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-01 00:00:00 UTC
From: djlanasa@aol.com
Message-ID: <19990701151629.08998.00000252@ng-cs1.aol.com>
Source record: 68930

Fellow hams and experimenters!

I have recently tried to connect my computer to my 570-S for PSK-31 and while I can receive signals, I am unable to transmit audio through the 570 by using the rear Acc. 2 jack (pins 11-12). I have good signals at the connector and I have used the same wiring from my computer to send PSK over my old TS.830.

Before I tear my 570 apart, I thought that I would inquire if others had success or failure with their 570's and PSK 31 by using the rear Acc Jack of the 570. I have not tried going directly to the microphone input since I do not have the parts necessary for the attenuator and my closest Radio Shack is 70 miles away.

Any help would be appreciated.

Tnx es 73

jim AA3ID, Hatteras Island NC
DJLanasa@aol.com

900. Re: Frequency standard / GPS / DDS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-01 00:00:00 UTC
From: "Mr. Muckle" <jdwalton@home.com>
Message-ID: <377C0FAF.461266E@home.com>
Source record: 68931

As an aside, Dick Grier's book "Visual Basic - Programmer's Guide to Serial Communications" has a aplet for decoding GPS positioning and clock synchronization.

Frederic Rible wrote:

> I am thinking about a homebrew GPS based frequency standard derived from
> the W5OJM design.
>
> If a replace the DAC which drives the tuning input of the OCXO by a DDS,
> what kind of performances can be achieved ?
>
> The idea is to use a free running OCXO. Its output is connected to a 32
> bits DDS chip. The PLL algorithm drives the phase step register.
>
> With a 32 bits DDS I have 2.5e-10 resolution. I assume I can achieve
> 1/10 performances with the PLL locked to the GPS signal (2.5e-9). But it
> is only assumption ! Anyone having some theorical background to give the
> right achievable performance ? May be some inconveniences for this
> design ?
>
> 73's Frederic F1OAT.
>
> --
> Frederic RIBLE Tel : +33 1 39 46 50 50
> ERCOM SA Fax : +33 1 39 46 25 25
> 13, Avenue Morane-Saulnier Email : frederic.rible@ercom.fr
> F-78140 VELIZY Web : http://www.ercom.fr

901. NJ Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-02 00:00:00 UTC
From: Joel Harding <joelhar@home.com>
Message-ID: <377C105D.288A87DE@home.com>
Source record: 68846
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Can anyone put me in touch with some NJ hams?

902. List of the rec.radio newsgroups

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-02 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <7lh8bn$pij@news.Hawaii.Edu>
Source record: 68847
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

```
Archive-name: radio/personal-brief-introduction

In an effort help ensure a poster's article reaches the appropriate
audience, below is a list of the rec.radio newsgroups. In most cases,
a group's name will explain its purpose. Cross-posting should rarely
be necessary.

rec.radio.broadcasting (devoted to the broadcast industry; moderated)
rec.radio.cb
rec.radio.info (periodic informational bulletins; moderated)
rec.radio.scanner
rec.radio.shortwave
rec.radio.swap (for buying, selling, and trading; not a discussion group)

rec.radio.amateur.antenna
rec.radio.amateur.boatanchors (tube-type communications equipment)
rec.radio.amateur.digital.misc (packet, pactor and other digital modes)
rec.radio.amateur.dx (long-distance amateur communications)
rec.radio.amateur.equipment (questions, comments regarding commercially-
built amateur gear; not for buying/selling)
rec.radio.amateur.homebrew (devoted to home-building ham gear)
rec.radio.amateur.policy (issues include code, restructuring, local
restrictions in conflict with FCC R&R)
rec.radio.amateur.space (satellites, meteor scatter, EME)
rec.radio.amateur.misc (any topic not covered in the above groups)

(At least two other English language radio hierarchies exist, prefixed
with "uk" (United Kingdom), and "aus" (Australia), in place of "rec.")

Again, cross-posting should rarely be necessary. Many times, a long-
running thread results from a single cross-posted article, and the
contents of such a thread drift further and further away from being
"on-topic" in the various NGs that receive each and every followup.

For more detailed information, see "Guide to the Rec.radio Newsgroups"
posted on the 15th of each month.

Jeffrey Herman, KH6O
(rec.radio.amateur working-group)
--
Looking for a Nevada house? www.homeseekers.com, enter "Minden", click
on "Carson", click on "Search Homes", enter Zip: "89423", Street: "4th",
click on photo.
```

903. CCS C Pic Programs?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-02 00:00:00 UTC
From: k7on@arrl.net
Message-ID: <MPG.11e6693990538bef989783@news.speedchoice.com>
Source record: 68848

CCS C Pic Programs?

I am having great fun playing with the Basic Stamp 2
as well as some PICs.

My Basic Stamp 2 CW IDer is completed:

http://www.qex.net/k7on/stamp/cwider.htm

My next step is to use the CW ID as part of my 900MHz
ATV "beacon" system. As it currently stands, I have the
BS2 interfaced with a BOB-II video overlay module. I will
next add the DTMF decoder and control receiver inputs.

Also, I have built up my PIC-E from TAPR and have been
playing with that. I acquired the CCS C compiler for PIC
and am playing around, but I'd like to find some good sample
programs written for 16F84 with CCS C (preferably amateur
related)? Sources? (pun intended)

Thanks in advance, Brian

--
Brian Short, K7ON 1994 E. Laguna Dr. Tempe, Az 85282
bshort@speedchoice.com >or< http://www.qex.net/k7on/
--

904. Re: basic economics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-02 00:00:00 UTC
From: Michael Young <nobody@all.org>
Message-ID: <930901377.818.72@news.remarQ.com>
Source record: 68849
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Spamfree <Spamfree@DELETETHIS.spamfree.net> wrote in message
news:7lhag0$mml@journal.concentric.net...
> Actually, most of his money didn't come =from= anywhere. In fact,
most of
> his wealth isn't money at all, but calculated by his stock holdings.
>

....

> He goes to bed the night before Netscape's IPO and really doesn't have
a lot
> of money. The next day, trading opens, and his holdings are suddenly
worth
> tens of millions - nobody gave him any money, but his wealth was
suddenly
> created.

This is the part that troubles me. I've always suspected that my future retirement hinges on everyone buying in (yuck yuck) on this shared fantasy of wealth. So, is it real, or just a figment?

Certainly there's real value in Microsoft's intellectual property, and in the ore mined from the hills. Where and how are these accounted for in whatever counts these things? Is more currency printed to reflect the value of the software I write, or the book I authored? Or does that wait until the mining company uses it in connection with digging up some more dirt?

Michael.

905. Re: PSK31 and Kenwood TS-570-S--Info Sought

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-02 00:00:00 UTC
From: Michael Young <nobody@all.org>
Message-ID: <930906188.018.61@news.remarQ.com>
Source record: 68850

You need to also connect the ACC2 PTT and its ground; VOX doesn't work on ACC2. I think it's pins 9 and 6, but you should check the manual to make sure. I use a simple diode and a 12v reed relay on the serial port's DTR line to isolate the PC's ground from the radio.

Michael.

Djlanasa <djlanasa@aol.com> wrote in message news:19990701151629.08998.00000252@ng-cs1.aol.com...
> Fellow hams and experimenters!
>
> I have recently tried to connect my computer to my 570-S for PSK-31 and while I
> can receive signals, I am unable to transmit audio through the 570 by using the
> rear Acc. 2 jack (pins 11-12). I have good signals at the connector and I have
> used the same wiring from my computer to send PSK over my old TS.830.
>
> Before I tear my 570 apart, I thought that I would inquire if others had
> success or failure with their 570's and PSK 31 by using the rear Acc Jack of
> the 570. I have not tried going directly to the microphone input since I do
> not have the parts necessary for the attenuator and my closest Radio Shack is
> 70 miles away.
>
> Any help would be appreciated.
>
> Tnx es 73
>
> jim AA3ID, Hatteras Island NC
> DJLanasa@aol.com

906. Re: need cw keyer circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-02 00:00:00 UTC
From: Will White <wcw@asu.uswest.net>
Message-ID: <377C8F64.2F96691C@asu.uswest.net>
Source record: 68851

I have been thinking of getting one of the TiCK kits for use with my grid-block keyed Drake B-line. How do you mod a SS keyer for use on a rig with a HV key-line? I have heard one way is to use a reed relay, but how is it inserted in the keyer circuit? Ideally would like it wired to switch from tube to SS usage. Also, I am not sure if my Drake and other tube rigs were negative or positive key closure?

Don W6JL wrote:

> Try the Embedded Research TICK keyer chips, in DIP and SMT packages.
> I use one for CW mobile Chip and board are 1 inch square, run off a 3V
> disc battery, and can be glued under the base of a Bencher paddle. It
> is programmable from the key also, making it a FB solution for CW mobile
> or any other use.
>

--
Will White, KD7BFX

to reply, please click this link mailto:wcw@uswest.net

907. WTB: MC12179 2.8Ghz PLL IC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-02 00:00:00 UTC
From: Norman Gillaspie <norman@pcseng.com>
Message-ID: <377c9251@jolt.pagesat.net>
Source record: 68852
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew,sci.electronics.equipment

I am in need of a Motorola MC12179 PLL IC.
These have a fixed divide by 256 and work up to
2.8GHZ. Does anyone have one or two that could sell me?

Molorola will be delivering this part in a few weeks and I don't want to
wait on a project I am working on.

Norman

PCS Engineering
Norman Gillaspie
325M Sharon Park Dr. #210
Menlo park, Ca. 94025
Tel 650-854-5263
Fax 650-854-5445
KF6WHG
Email norman@pcseng.com

908. Re: Other uses for a BUD?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-02 00:00:00 UTC
From: Ted Mahler <ted@thought.sh-gpl.ti.com>
Message-ID: <7li9o6jos3@superb.csc.ti.com>
Source record: 68853

I have the chance to pick up a nice 7 foot dish. Since my
10 footer is working fine I don't really need it but I thought
there may be some other way to use it.
What other uses for a dish are there? Does anyone do
geosynchronous weather satellite reception? Amateur
radio astronomy? What about full azamuth and elevation mounts?
Any web sites?

--

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| \O_\/lol\/_O__ Ted Mahler NAR 18184 |
| /O`. [ ] ;O_L\ N5ZYO |
| _\__\_[ ]_/__/_/ |
| /'| | H | |'\ t-mahler@ti.com |
| /_\l___|_H_|___|/_\ |
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```

909. Re: Red and white spot transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-02 00:00:00 UTC
From: troglodite@aol.com
Message-ID: <19990702083613.11565.00002836@ng-cp1.aol.com>
Source record: 68854

>What are these things? I have read several articles on radio projects which
>use Ge transistors, and they are often described as 'red spot' or 'white
>spot' . What does this mean?

On the early GE transistors, such as the 2N2926 series, the color dot indicated the Beta range. OEM's bought production lots of these devices, and were guaranteed a certain number in the various Beta categories. Some designs made use of this. The lower Beta devices (brown and red) were used as local oscillators, drivers or switches, while the higher Beta units (green and blue) were used for high gain audio stages.

Doug Moore

910. 73 Magazine

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-02 00:00:00 UTC
From: Daniel Metzger <dmetzger@monroe.lib.mi.us>
Message-ID: <377C6C64.3CDB@monroe.lib.mi.us>
Source record: 68855

Could somebody give me the surface mail address for 73 magazine, please.
I just spent 20 min on Yahoo and couldn't find it. (I know I'm off
topic for this group - sorry.)

Dan, K8JWR

dmetzger@monroe.lib.mi.us

911. Re: 73 Magazine

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-02 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <377CBB4A.2E76@ix.netcom.com>
Source record: 68856

Daniel Metzger wrote:
>
> Could somebody give me the surface mail address for 73 magazine, please.
> I just spent 20 min on Yahoo and couldn't find it. (I know I'm off
> topic for this group - sorry.)
>
> Dan, K8JWR
>
> dmetzger@monroe.lib.mi.us

Hi Dan -- George Pataki WB2AQC has listed over 60 Amateur Radio
Publications world wide at the AC6V Site at URL:
http://www.ac6v.com/pageafh

For 73 Magazine he has:
73 Magazine (English) E-MAIL -- design73@aol.com Editor: ?, 70 Route 202
North, Peterborough, NH 03458, USA
--
73 From Rod In San Diego

AC6V INDEX TO DX AND HAM RADIO
FEATURING 88 PAGES, 400 INDEXED TOPICS, AND 3000 LINKS
Over 402,000 visits on the counter
http://www.ac6v.com/pageas.html -- Alphabetical Index
http://www.ac6v.com/ -- Home Page

912. Re: need cw keyer circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-02 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <377D08CB.2A0F@ixpres.com>
Source record: 68857

Will OM,

1). Measure your older rigs' key-up voltage. That will tell you its polarity and level.

2). You can key either polarity of any voltage with the appropriate output circuit arrangement. The simplest way is just key a reed relay with the existing keyer circuit's output. Connect the relay winding in series with sufficient voltage of correct polarity to operate the relay, in series with the output switching device in the keyer. If this is a problem for you to understand, you need to review basic series-connected circuits, or have someone who knows elementary DC circuits help you with it. This level of circuit knowledge is covered in the written exam for General class or higher ham tickets..

3) You can have two output connectors on your keyer, one for the HV keyed rigs (cathode keying, positive high voltage on the key), and for newer negative or positive low-voltage keyed rigs.

See any ARRL handbook for examples of keying arrangements.

73 and GL,
Don, W6JL

Will White wrote:
>
> I have been thinking of getting one of the TiCK kits for use with my
> grid-block keyed Drake B-line. How do you mod a SS keyer for use on a rig with
> a HV key-line? I have heard one way is to use a reed relay, but how is it
> inserted in the keyer circuit? Ideally would like it wired to switch from tube
> to SS usage. Also, I am not sure if my Drake and other tube rigs were negative
> or positive key closure?

913. Re: PSK31 and Kenwood TS-570-S--Info Sought

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-02 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <377D09B6.5F03@ixpres.com>
Source record: 68858

Djlanasa wrote:
>
> Fellow hams and experimenters!
>
> I have recently tried to connect my computer to my 570-S for PSK-31 and while I
> can receive signals, I am unable to transmit audio through the 570 by using the
> rear Acc. 2 jack (pins 11-12). I have good signals at the connector and I have
> used the same wiring from my computer to send PSK over my old TS.830.
>
> Before I tear my 570 apart, I thought that I would inquire if others had
> success or failure with their 570's and PSK 31 by using the rear Acc Jack of
> the 570. I have not tried going directly to the microphone input since I do
> not have the parts necessary for the attenuator and my closest Radio Shack is
> 70 miles away.
>
> Any help would be appreciated.
>
> Tnx es 73
>
> jim AA3ID, Hatteras Island NC
> DJLanasa@aol.com
Jim OM,
You can order small parts mail order via phone or fax. No need to
drive 70 miles to a poor source (RS). Try Digi-Key, Mouser, Dan's
Small Parts, etc. Web search will give you details on them.
You need a junk box with at least a coffee can full of resistors and
small caps, just for general purposes around the shack. Dan's Small
Parts is a good source for grab bags of parts.

73 and GL,
Don, W6JL

73,
Don, W6JL

914. Re: NJ Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-02 00:00:00 UTC
From: Tom Hogerty <thogerty@arrl.org>
Message-ID: <377D1325.1F6AC1E0@arrl.org>
Source record: 68859
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Joel:
Check out the FCC database at the web site for the University of Little Rock at Arkansas. It is at: http://www.ualr.edu/~hamradio/callsign.html Just enter just a zip code for the part of New Jersey you're interested in. That should give you plenty of hams to contact.

73,
Tom, KC1J
ARRL Field & Educational Services

Joel Harding wrote:

> Can anyone put me in touch with some NJ hams?

915. wireless set no. 88

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-02 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7lj82a$34k$1@neptunium.btinternet.com>
Source record: 68860

I have several 88 sets and would like to restore them to a working pair. I understand that they are FM trancievers working on about 43MHz, but am looking for details such as a circuit diagram.

916. Re: Red and white spot transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-02 00:00:00 UTC
From: John Mortlock <jmort@global.freeserve.co.uk>
Message-ID: <7lj9ef$t2f$1@news7.svr.pol.co.uk>
Source record: 68861

I see you are in the UK so here is the answer.

Newmarket Transistors, a very early UK semi manufacturer had a range of 4 or 5 different types of transistor to cover RF, AF output , AF preamp etc. This was in the VERY early days of transistors, before Newmarket Semi used alpha / numeric part number designations. Instead they used coloured spots to denote type (these are not the spots used by some manufacturers to indicate the Collector on some later devices which used alpha / numeric number designations)

So a Red and Yellow spot was an RF transistor, a Yellow and Green spot was an AF Output. There where only a few other spot combinations, their range of transistors was very small. I probably have a few tucked away somewhere.

John G3UGY

David Cunningham wrote in message <7lgm95$b1b$1@uranium.btinternet.com>...
>What are these things? I have read several articles on radio projects which
>use Ge transistors, and they are often described as 'red spot' or 'white
>spot' . What does this mean?
>
>

917. WTB Kanga R2 receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-02 00:00:00 UTC
From: warren kidd <kidd@datasync.com>
Message-ID: <7ljb6r$t57$1@news.ametro.net>
Source record: 68862

Kit or built will do
Send info to
kidd@ametro.net
KD5GIH

918. SV: 144-HF transverter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-02 00:00:00 UTC
From: BENT VELLING <pacman@c2i.net>
Message-ID: <T%af3.142$IH5.25909@juliett.dax.net>
Source record: 68863

Hi John. I think what you are looking for is an Tokyo hipower transverter.It
covers the classic hambands with ca. 50watts(I think).
Check it out. I saw it for a couple of years ago.

vy 73 de LA0GE BENT

919. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-02 00:00:00 UTC
From: Rich Grise <off-duty@entheosengineering.com>
Message-ID: <377D56C7.163F@entheosengineering.com>
Source record: 68864
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

The height of decadence, of course, would be a generator
on your exercise bike/treadmill/stepmaster/etc.

Cheers!
Rich

Roy Lewallen wrote:
>
> NO SPAM wrote:
> >
> > BTW, has anyone seen those Wind Up radios for sale? They are sold
> > somewhere but I haven't seen them in a catalog or on a store shelf. I
> > saw one guy using one at a cosntruction site, and he wound it up a
> > whole lot and I guess it ran for ten or 20 minutes on a single
> > windup. Pretty neat. Saved a lot on batteries.
> > . . .
>
> Let's see, guessing that the radio takes about 10 mA at 6 volts to run,
> a set of alkaline AA cells would last about 150 hours. I seriously doubt
> that he's cranked the radio enough to run for 150 hours, so he's saved
> less than $4.00 at drugstore prices. (I get AA alkaline cells at
> Price-Costco for about $0.25 each, dropping the savings to $1.00/150
> hours.) Wonder how much more he paid for the radio than he would have
> paid for a simple battery-operated one. Alkaline cells will easily last
> 5 years in storage, or much longer -- 10 years or more -- if they're not
> allowed to get too hot. A set or two in the refrigerator, or even stored
> with a radio, are very good security that you'll be able to listen to
> the radio in any emergency.
>
> There are places where batteries simply aren't available (but the
> crank-up radios are?), and the crank-type radios might be practical in
> those locations. But if you get one to save money on batteries, first
> subtract the cost of a battery-operated radio from the cost of the
> crank-up version and see how many hours you'd have to crank to make up
> the difference. Happy cranking!
>
> Roy Lewallen, W7EL
>
> -- cursed with an engineer's way of thinking.

920. Re: wireless set no. 88

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-02 00:00:00 UTC
From: Gord Skiffington <skiffing@nbnet.nb.ca>
Message-ID: <377D9602.6690@nbnet.nb.ca>
Source record: 68865

Howdy Dave....suggest you post this same request to
rec.radio.amateur.boatanchors This fine group may be more likely to
help you or point a good link out.

73 - Gord VE1AJF

921. Motorola Sig. Generator??? Help!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-02 00:00:00 UTC
From: Randy/Dee/Robin <dc@citynet.net>
Message-ID: <7ljuhehk1@news.citynet.net>
Source record: 68866
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

Looking for a Manual... user and/or service or whatever...

Hey all, Need a hand identifying/using a Motorola signal generator. Looks to be about 60's vintage.. I NEED A MANUAL!!! please....
plate on top says:

Manufactured for Motorola, Inc

MEASUREMENTS
A McGraw-Edison Division
Boonton New Jersey
Model: T-1034-C serial: 5480

Goes about 24-900 MHz ext./cw/1000Hz tone/incr.
and has seperate I.F. generator, inputs... has output deviation meter and adjustment.

Anyone got any ideas? Does Moto still have literature on this boatanchor?
It works fine and seems to be the rx tuning half of today's service monitors. Breaks my maxtrac squelch at .2mV using 2:1 pad... ?
thanks,
Randy

922. Re: Bi-band mobile antenna ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-02 00:00:00 UTC
From: John Mock <kd6pag@qsl-nojunk.net>
Message-ID: <874sjmuyje.fsf@mongrel.kd6pag.ampr.org>
Source record: 68867

If you use a NMO mount with a 1/4 wave wire antenna cut for 145 Mhz. it will work nice at 3x145Mhz = 435 Mhz. The pattern will have a up lobe as well as one on horizon, but the loss will be small.

That may give decent SWR at 70cm and thus won't make your rig unhappy. But it's not a great antenna for terrestrial use. That's what i use on my van most of the time. It's suboptimal but it works. Here's my attempt to simulate a similar antenna, since i was interested in the space sub-band:

http://www.qsl.net/kd6pag/nec/2mModGndP.html

So, at 70cm, most of the signal goes skyward. But that's just what i want to work AO-27! I ran that way for about a half year, just a 2 meter spike, no diplexer and no pre-amp. (And AO-27 is not easy to hear.) By the way, a gain omni antenna intended for terrestrial use make a very poor antenna for satellite operates except for rather low elevation passes.

So, i think you'll be much happier with a commercial antenna and just put up with a mild SWR mismatch in the 70cm band. But if you enjoy homebrew antennas, keep lookin'. Or take the commercial version, and replace the middle rod with something just a little longer to tune it (albeit that may tweak the pattern in the vertical plane off a bit). Good luck!

-- KD6PAG (Networking Old-Timer, "RF newbie")

923. Need garage door opener receiver schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-02 00:00:00 UTC
From: CDT <xctx@onr.com>
Message-ID: <01bec59e$aafc03e0$6833c8cf@ct>
Source record: 68868
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

I'd like to build a 300 MHz receiver based
on one of those garage door opener receivers.

Does anyone have an example schematic of a garage
door opener receiver?

Thanks in advance,

W5CDT

--
>>>Remove the X's from my email address before using<<<

XctX@onr.com

924. Online Hamfest

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-03 00:00:00 UTC
From: Bob Grosse <BobGrosse@quality-enterprises.com>
Message-ID: <377ECB66.E9B7C4A1@quality-enterprises.com>
Source record: 68783

The Online Hamfest has an all new format with many new features.

If it's been awhile since you've paid a visit to the Online Hamfest you may want to stop back and check out all the new features, one of which is the ability to place a picture in your ad, and as always, it's FREE!

http://quality-enterprises.com/tcrg/OnlineFest/

Tri-County Radio Group Inc.

We hope to see you at our Woodstock '99 Hamfest on Sunday, August 29, 1999 at the McHenry County Fairgrounds, Woodstock Il.

925. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-03 00:00:00 UTC
From: tmacinty@ns.sympatico.ca
Message-ID: <377d5b35.5113518@news1.ns.sympatico.ca>
Source record: 68869
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Rich Grise <off-duty@entheosengineering.com> wrote:

>The height of decadence, of course, would be a generator
>on your exercise bike/treadmill/stepmaster/etc.
>
No, that would be an example of reponsible use of normally exerted
energy which is diverted/recycled into a usable form...I have thought
about this very thing, on a larger scale...if it won't save the
planet, it'll slow down the demise...Rich, I'm glad that some people
are thinking with me; sort of...if this flies as an idea, financially,
it won't be the first time that I have not made a cent on something
that I have come up with...always, with the help of others, right...

Tom

>Cheers!
>Rich

926. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-03 00:00:00 UTC
From: noone@nowhere.com
Message-ID: <377ebec5.482247102@news.squonk.net>
Source record: 68870

Maybe if I weren't a little sleepy I'd be able to pass this
up, but I am, so here goes...

On Thu, 01 Jul 1999 19:35:08 -0700, NO SPAM
<NOSPAM@mail.rsccd.org> wrote:

>Roy Lewallen wrote:
>
>> NO SPAM wrote:
>
>> > BTW, has anyone seen those Wind Up radios for sale? They are sold
>> > somewhere but I haven't seen them in a catalog or on a store shelf. I
>> > saw one guy using one at a cosntruction site, and he wound it up a
>> > whole lot and I guess it ran for ten or 20 minutes on a single
>> > windup. Pretty neat. Saved a lot on batteries.
>> > . . .
>
>> Let's see, guessing that the radio takes about 10 mA at 6 volts to run,
>> a set of alkaline AA cells would last about 150 hours. I seriously doubt
>> that he's cranked the radio enough to run for 150 hours, so he's saved
>> less than $4.00 at drugstore prices. (I get AA alkaline cells at
>> Price-Costco for about $0.25 each, dropping the savings to $1.00/150
>> hours.) Wonder how much more he paid for the radio than he would have
>> paid for a simple battery-operated one. Alkaline cells will easily last
>> 5 years in storage, or much longer -- 10 years or more -- if they're not
>> allowed to get too hot. A set or two in the refrigerator, or even stored
>> with a radio, are very good security that you'll be able to listen to
>> the radio in any emergency.
>
>> There are places where batteries simply aren't available (but the
>> crank-up radios are?), and the crank-type radios might be practical in
>> those locations. But if you get one to save money on batteries, first
>> subtract the cost of a battery-operated radio from the cost of the
>> crank-up version and see how many hours you'd have to crank to make up
>> the difference. Happy cranking!
>
>> Roy Lewallen, W7EL
>> -- cursed with an engineer's way of thinking.
>
>Well, you're cursed with some kind of thinking, that's for sure. But
>I think you didn't throw in all the other considerations.
>
<snip - story of guy wasting time & money on cheap

lightbulbs>
>
>So back to the batteries, I guess one should count the time it takes
>to buy the batteries, the gas to go to the store, the cost of storing
>them in the fridge AKA cooling costs, etc., etc., etc. There's bound
>to be more, that are not part of the crank-up radio costs. Besides,
>we could all afford to expend a few more calories, couldn't we.
>
To be fair, you'd want to only count the extra time buying
batteries. I'm thinking most people with a technical
background (like everyone on this thread, I'm sure), is
buying their AA cells along with the rest of their groceries
& storing them for later use, either shelf or fridge.

I suspect the questions are: Will you ever use the radio
enough to recover the extra cost of the wind up radio vs.
batteries for a less expensive radio? If so, will the
mechanicals of the wind-up radio actually last long enough
for this cost recovery to happen?

The wind up radio is a cool gizmo, I'll grant you. For an
emergency radio it has some applications, too. But I'd much
rather have some kind of human powered generator that would
be powerfull enough to effectively run my 2 meter rig...
(or charge a battery to do same.)

My final thought on the wind up? I'd guestimate that I
could run a milliamp powered AM/FM radio a couple of hours a
day for about a year on the battery in my truck outside.
The value of that concept to me is that I'd spend my budget
for backup communications in areas that have, to me, a
better payoff.

Now where do you find those wind up generators they used to
power the tube sets in all the old WW2 jungle movies??

>BTW, I think at least double that 10 mA at 6V would be more
>realistic. So maybe 75 hours.

Just random thoughts

927. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-03 00:00:00 UTC
From: Rich Grise <off-duty@entheosengineering.com>
Message-ID: <377DD13D.775E@entheosengineering.com>
Source record: 68871
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Well, I was thinking decadence in terms of saving a buck
and a half on batteries - but I've read SF stories about
post-holocaust where everybody had to take turns pedaling
the air recycler in the shelter and stuff.

Inventions you haven't made any money on? How about:

A steam car that uses an instant-heat propane boiler and
a blower (as in supercharger, like on racing engines, and
Deisel big rigs) run as a positive expansion turbine?

A recumbent bicycle a la
http://www.entheosengineering.com/images/Recumbent-bike-draft-1.gif
where the pedals pivot instead of circling a crankshaft.

A turbine-powered (a la Kirby Turbo-brush) paint scraper thing
for house-painting, where the turbine vibrates a beater-bar
type thing, and it just sticks on the end of a shop-vac hose.

I got a million of 'em, including about a half-dozen that I've
done for companies that have since gone belly-up. Wonder if
I'm some kind of jinx?

:)
Cheers!
Rich

Tom MacIntyre wrote:
>
> Rich Grise <off-duty@entheosengineering.com> wrote:
>
> >The height of decadence, of course, would be a generator
> >on your exercise bike/treadmill/stepmaster/etc.
> >
> No, that would be an example of reponsible use of normally exerted
> energy which is diverted/recycled into a usable form...I have thought
> about this very thing, on a larger scale...if it won't save the
> planet, it'll slow down the demise...Rich, I'm glad that some people
> are thinking with me; sort of...if this flies as an idea, financially,
> it won't be the first time that I have not made a cent on something
> that I have come up with...always, with the help of others, right...
>
> Tom
>

> >Cheers!
> >Rich

928. 1987 Ham radio today magazines wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-03 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7lkp19ija1@uranium.btinternet.com>
Source record: 68872

I recently bought a morse and RTTY decoder which was a constructional project in 1987 ham radio today magazine.The decoder uses a PLL and a couple of Z80 chips, with a centronics type output connector, and the article called it a 'microchip morse decoder'. I am looking for the original article so that I know where I am with it. If anyone has the original article, from around june 1987, please let me know, likewise if anyone else has built the decoder.

thanks.

929. Re: 73 Magazine

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-03 00:00:00 UTC
From: Clinton <cpeebles@_nospam_netidea.com>
Message-ID: <377DFFB4.261@_nospam_netidea.com>
Source record: 68873

Daniel Metzger wrote:
>
> Could somebody give me the surface mail address for 73 magazine, please.
> I just spent 20 min on Yahoo and couldn't find it. (I know I'm off

http://www.waynegreen.com/

--
Kill the MAI

Remove _nospam_ to reply

Clinton Peebles VE7KNL DN19ie
Salmo, B.C. Canada
E-Mail: cpeebles@netidea.com

930. Still looking for 40m qrp rig

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-03 00:00:00 UTC
From: BamBam <kl0an@my-deja.com>
Message-ID: <7llm54bkc1@nnrp1.deja.com>
Source record: 68874

Howdy,

I'm looking at purchasing the Fireball 40 transitter but, before I do I'd like to find a reciever along the same construction standards and definitely along the same price. The Fireball 40 is only $10 shipped as a kit. Does anyone know of a kit like this for a reciever?? I've been looking everywhere.. Any help would be appreciated.

73
Paul Jordan
kl0an
Fairbanks, AK

--
There never seems to be enough time to do the
things you want to do once you find them...

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

931. Re: basic economics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-03 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <377f20c3.130663244@news.atl.bellsouth.net>
Source record: 68875
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Fri, 2 Jul 1999 02:42:48 -0500, "Michael Young" <nobody@all.org> wrote:
>Spamfree <Spamfree@DELETETHIS.spamfree.net> wrote in message
>news:7lhag0$mml@journal.concentric.net...
>> Actually, most of his money didn't come =from= anywhere. In fact,
>most of
>> his wealth isn't money at all, but calculated by his stock holdings.
>>
>....
>
>> He goes to bed the night before Netscape's IPO and really doesn't have
>a lot
>> of money. The next day, trading opens, and his holdings are suddenly
>worth
>> tens of millions - nobody gave him any money, but his wealth was
>suddenly
>> created.
>
>This is the part that troubles me. I've always suspected that my future
>retirement hinges on everyone buying in (yuck yuck) on this shared
>fantasy of wealth. So, is it real, or just a figment?
>
>Certainly there's real value in Microsoft's intellectual property, and
>in the ore mined from the hills. Where and how are these accounted for
>in whatever counts these things? Is more currency printed to reflect the
>value of the software I write, or the book I authored? Or does that wait
>until the mining company uses it in connection with digging up some more
>dirt?

Currency is just one counter used as an exchange medium for trading wealth.
The "money supply" at any given time is the sum of the current deposits in banks
(just numbers in a computer), available lines of credit (again just numbers in a
computer), other liquid assets (ie readily convertible T-bills etc), and currency.
The latter is the smallest, representing less than 10% of the current money
supply at any given moment.

Money, at least US paper currency, is just a form of promissory note. Its
real value is less than 1 cent per bill. But as a counter, it serves in place
of barter to let us trade among ourselves items of value, as do checks,
credit cards, etc. The items of value are the goods and services which
we wish to obtain or have performed, or which we produce or are willing
to perform.

Is wealth real? Well yes, it is as real as anything can be in human terms. It is as real as love, hate, want, envy, and desire. But every price is flexible. The free market sets what we agree to be the value of a good or service at any given moment. Nothing has an absolute value for all time. Goods and services don't, and the counter we use in their stead (money) doesn't either.

Fashions in what is desirable change, circumstances change, the value we assign to things goes up and down. When I'm hungry, a hamburger has more value than when I'm sated. I may value an hour of my time more or less than you do today. Etc. The market averages these things out, but even the average value doesn't stay the same over time. 40 years ago, hoola hoops, coonskin caps, and tailfins had a lot of value. Today they are a drag on the market.

Some things retain a constant value better than others, of course. But even gold and silver swing wildly in value. For many years, I had Coffman's rule of meat. That said that a US made car cost the same, pound for pound, as hamburger. It did from the 1920s through the 1960s, but then government interference in the market drove the price of autos up (CAFE, emissions standards, 5 MPH bumpers, airbags, ie things the average consumer wouldn't choose in a free market), so now autos cost the same as filet mignon, pound for pound. Does that represent a real increase in wealth? I don't think so. Only the free unfettered and uncoerced market can determine true wealth.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

932. Vaccum Variables 4 sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-03 00:00:00 UTC
From: baack@maine.edu
Message-ID: <7llklj$75d$1@ruby.mint.net>
Source record: 68876
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

Greetings all,
I have a few Vacuum variables up for sale.
I have pictures of each if interested parties request them.

#1 is a Jennings Radio usls 465
465pf 5KV @ Max Cap 10KV @ Min Cap

It is complete, asking $120 obo

#2 Jennings Radio ucsl 250
250 pf
5,000 Volts.

Asking $90 obo

#3 Jennings 3,000 Volts ucsl-1500-3n103

It has a non standard head, but complete.
$160 obo

#4 Jennings Radio ucs 300
10,000 Volts

It has a scale and meter on the head.
$200 obo

#5 Jennings Radio Type UXC -500
500 pF maximum capacitance.

$160 obo

Pictures are available upon request.
Money order is preferred, but will take personal check,
however I will wait for it to clear before I ship.
Will ship UPS or USPS whatever is preferred.

Jay, N1RWY
baack@maine.edu

933. WTB: 8877 and chimney

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-03 00:00:00 UTC
From: ny1e@server.nlbbs.com
Message-ID: <FEB80n.nIv@server.nlbbs.com>
Source record: 68877

I'm looking for an 8877 pull with full output and a chimney for it, Please reply with price including shipping to Maine. Thanks, Dick NY1E

934. Re: WTB: MC12179 2.8Ghz PLL IC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-03 00:00:00 UTC
From: Stuart <stuart@valon.net>
Message-ID: <377E71BB.1C4CFF46@valon.net>
Source record: 68878
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew,sci.electronics.equipment

Norman Gillaspie wrote:

> I am in need of a Motorola MC12179 PLL IC.
> These have a fixed divide by 256 and work up to
> 2.8GHZ. Does anyone have one or two that could sell me?
>
> Molorola will be delivering this part in a few weeks and I don't want to
> wait on a project I am working on.
>
> Norman
>
> PCS Engineering
> Norman Gillaspie
> 325M Sharon Park Dr. #210
> Menlo park, Ca. 94025
> Tel 650-854-5263
> Fax 650-854-5445
> KF6WHG
> Email norman@pcseng.com

Norm:

I have some MC12176 PLLs I could spare if you can use them.
--
Stuart Rumley ki6qp
VALON Technology LLC
phone: (650)369-0575
telecopier:(650)369-0577

935. RTTY decoder software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-03 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7lltb0$n5n$1@neptunium.btinternet.com>
Source record: 68879

I am constructing a RTTY decoder using an NE567 PLL and require the software to convert the pulses from the decoder into text. I assume that I will connect the output of the NE567 decoder to the data input pins on the COM port of my computer. Are TTL level signals compatible with the COM port, or do I require 12v pulses?

936. Kenwood IF10B HELP NEEDED--PLEASE

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-03 00:00:00 UTC
From: "Larry G. Gouliard, Jr" <ka9gci@ntslink.net>
Message-ID: <377E7FA1.8A05F52A@ntslink.net>
Source record: 68880
Cross-posted to: rec.radio.swap,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

Please:

Is there some kind soul out there that owns a Kenwood IF10B interface module and is willing to share some information ?

I have been unable to locate an IF10B module (the part of the computer interface that fits inside the TS940S) and have come to the conclusion, after many hours of research, that finding one will be next to impossible.

At this point the best option appears to be the construction of a "replacement" module for the IF10B. To facilitate construction of a replacement module the following information is necessary:

Schematic of the IF10B.
Source Code for the Eprom.
Pictures or direct scans of the Kenwood printed circuit board.

I plan to use cad and photoresist to duplicate the "daughter" board giving me the ability to help others once a successful replacement has been verified.

Any information that you can supply would be greatly appreciated.

Thank you and 73
Larry KA9GCI

937. WTB I.F. Transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-03 00:00:00 UTC
From: <>
Message-ID: <7lm3artlp1@nntp2.atl.mindspring.net>
Source record: 68881

Looking for several 100 Kc and 1700 Kc I.F. transformers for vacuum tube projects.

Thanks, Darrell WA5VGO

938. Q: 572-B bias

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-04 00:00:00 UTC
From: Zeljko <zeljko.dodos@sk.tel.hr>
Message-ID: <7lnmmknmg1@as102.tel.hr>
Source record: 68784

What is the optimal current bias for 572-B tube in AB2 class?
Thank you!
73, 9A3LE, Zeljko

939. 4sale or trade:3CX15000B7 tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-04 00:00:00 UTC
From: jimmoci@aol.com
Message-ID: <19990704103157.23870.00003846@ng-fj1.aol.com>
Source record: 68785

I have a 3CX15000B7 tube that I was going to use to build the Mother of all amps and I ended up going with something a little smaller. I am looking to sell it for $1000 or trade it for equipment. I am interested in all types of equipment- boatanchors, amps, amp parts, ATV equipment, HF Transceivers, high end receivers, etc. I will trade up or down in value and the price difference will be made up with cash. I will be entertaining trade offers for a few days to see what is out there and will reply to anyone who makes an offer.I am specifically looking for-
Icom 706 MK2
Ten-Tec Hercules2 amp
Collins equipment
Hallicrafter SX-115
New 3-1000Z's and 4-1000A's
or just about anything else neat- my interests are varied so let me know what you have.

Tnx,
Jim W3ATV
P.S. Low power weenies need not apply to preach to me about how I shouldnt be selling a tube this big or why I even thought
about running it or what I am running now. Thanks for you input in advance but keep it to yourself. Thanks!

940. WTB: MC3423P or equivalent

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-04 00:00:00 UTC
From: "Carl E. Boyd" <ceboyd@intranet.ca>
Message-ID: <B5Lf3.4725$m4.17433398@news.magma.ca>
Source record: 68786

I am interested in the overvoltage protection circuit in the 1999 Handbook (28 V High Current Power Supply) but am having trouble locating the MC3423P IC. Mouser, DigiKey, Radio Shack, RF Parts don't seem to have it. Any help, please?

Carl, VE3CAZ
(ceboyd@intranet.ca)

941. FS: 2Meter POWER MOBILE Ant

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-04 00:00:00 UTC
From: jerryr@home.com
Message-ID: <377f8049.8172754@news>
Source record: 68787

Fellows,

If you have any concern about vandalism to your car because of excess antennas showing, please check out

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=124309144

942. power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-04 00:00:00 UTC
From: "Drayton L. Hanna" <hanna@gate.net>
Message-ID: <377F8CD4.101C6FCE@gate.net>
Source record: 68788

Has anyone ever tried to modify a generic PC power supply to deliver 13.8V instead of 12V? Just curious if this has been done because I have several power supplies here that I'd be willing modify if I knew it would be successful. How about any interference problems, or does the power supply enclosure provide sufficient shielding?

Drayton L Hanna, KF4AME/TI5
Wisdom is not acquiring knowledge, it's knowing what knowledge to acquire.

943. Re: power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-04 00:00:00 UTC
From: "Mr. Muckle" <jdwalton@home.com>
Message-ID: <377FCB96.A324A9E@home.com>
Source record: 68789

If you don't have the schematic why not just add on a switching "buck" converter - you won't give up a lot of energy as heat that way. The equations for the coil etc.are given on a couple manufacturer web pages and the chip is only a dollar or so.

I was thinking of building a switching "boost" converter to generate HV from a computer switching supply for a tube tester. Oftentimes these computer ps are available for only a few dollars at TechAmerica or JDR.

You probably want to put a pair of chokes on the a.c. input and some ferrite beads etc.

"Drayton L. Hanna" wrote:

> Has anyone ever tried to modify a generic PC power supply to deliver
> 13.8V instead of 12V? Just curious if this has been done because I have
> several power supplies here that I'd be willing modify if I knew it
> would be successful. How about any interference problems, or does the
> power supply enclosure provide sufficient shielding?
> ___
> Drayton L Hanna, KF4AME/TI5
> Wisdom is not acquiring knowledge, it's knowing what knowledge to
> acquire.

944. Re: Human power (was amp'd crystal radio)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-04 00:00:00 UTC
From: NO SPAM <NOSPAM@mail.rsccd.org>
Message-ID: <377F9057.F799034E@mail.rsccd.org>
Source record: 68790
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Rich Grise wrote:

> The height of decadence, of course, would be a generator
> on your exercise bike/treadmill/stepmaster/etc.

> Cheers!
> Rich

Hey, in our gym we've got the exercise bicycles that, believe it or not, have a hood on the front, underneath which is a small alternator from a car. The thing has a variable load and a display that also runs off it.

Humans can do maybe a hundred watts but that's pushing it. For longer periods it's somewhat less. Yeah, I guess that's decadence.

Hey, YEAH! Maybe instead put a generator on the remote control, so it has to have a certain expenditure of calories to make it work! Decadence with a twist!

945. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-04 00:00:00 UTC
From: NO SPAM <NOSPAM@mail.rsccd.org>
Message-ID: <377F9238.1E3B857E@mail.rsccd.org>
Source record: 68791
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Rich Grise wrote:
[snip]

> A recumbent bicycle a la
> http://www.entheosengineering.com/images/Recumbent-bike-draft-1.gif
> where the pedals pivot instead of circling a crankshaft.
> Cheers!
> Rich
[snip]

Speaking of.. Why hasn't anyone come out with a system that works just like a little kiddie car, the ones with the pedals connected to rods that connect to a crankshaft? Something like that to eliminate the chain, make it simpler. I guess maybe because there's no easy way to change gears?? I was thinking on maybe somehow changing the crank radius. Or instead of a crank, use a ratchet mechanism.

946. WTD: Packet Radio Games

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-04 00:00:00 UTC
From: Allan McDermid <allan@mm1bjp.freeserve.co.uk>
Message-ID: <7lo6if$p2q$1@news5.svr.pol.co.uk>
Source record: 68792
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Hi there, does anyone know of any windows based games that can be played with another player via packet radio?

If so, I would be very gratefull if you can email me at the following address:

ALLAN@MM1BJP.FREESERVE.CO.UK

I hope someone can be of some assistance to me!

73's for now!

Allan - MM1BJP

947. Sweet Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-04 00:00:00 UTC
From: technolad@webtv.net
Message-ID: <8981-377F9553-46@newsd-232.iap.bryant.webtv.net>
Source record: 68793

Where can I find low voltage tubes for 10 meter use? I have an 8950 which I think the plate voltage is 100 volts, you could use an RS power inverter.

948. [Fwd: Kenwood IF10B HELP NEEDED--PLEASE]

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-04 00:00:00 UTC
From: "Larry G. Gouliard, Jr" <ka9gci@ntslink.net>
Message-ID: <377FA0BA.DB175257@ntslink.net>
Source record: 68794

Please:

Is there some kind soul out there that owns a Kenwood IF10B interface module and is willing to share some information ?

I have been unable to locate an IF10B module (the part of the computer interface that fits inside the TS940S) and have come to the conclusion, after many hours of research, that finding one will be next to impossible.

At this point the best option appears to be the construction of a "replacement" module for the IF10B. To facilitate construction of a replacement module the following information is necessary:

Schematic of the IF10B.
Source Code for the Eprom.
Pictures or direct scans of the Kenwood printed circuit board.

I plan to use cad and photoresist to duplicate the "daughter" board giving me the ability to help others once a successful replacement has been verified.

Any information that you can supply would be greatly appreciated.

Thank you and 73
Larry KA9GCI

949. Re: power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-04 00:00:00 UTC
From: fsimonds@gate.net
Message-ID: <7locaq$la2$1@news.gate.net>
Source record: 68795

"Drayton L. Hanna" <hanna@gate.net> wrote:

->Has anyone ever tried to modify a generic PC power supply to deliver
->13.8V instead of 12V?

There may be an adjustment inside that will permit you to adjust up to
13.8. If you want to charge batteries with the PS, be careful. You'll
boil them away unless you monitor their condition.

If you want to run your TX at 13.8V, good move! A small voltage
difference makes a large difference in power out.

gl--
Terry in Ft. Lauderdale

950. Wanting Info On Maxon 49B5 Conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-04 00:00:00 UTC
From: bns <bns@entercomp.com>
Message-ID: <377fab8c.0@newsman.viper.net>
Source record: 68796

I have a Maxon 49B5 Base station that operates on 49.830 to 49.890 (5
channell TX & RX)
Want to convert to 6 meters. It has a PLL # LC-7150
Any helpful information will be greatly appreciated.
Bill
KD4MXE

951. Microwave Oven.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-04 00:00:00 UTC
From: "Mogens Kristiansen, OZ1CXX" <gribben@post.tele.dk>
Message-ID: <7log30$59v$1@news.inet.tele.dk>
Source record: 68797

I heard that the PWR Supply from a microwave can be modified to
supply a PA tube with 2-2,5 Kv.
Sounds interesting to me.
Anyone with experience reg. rectifier, filter capacitor etc.

73 de OZ1CXX, Mogens

952. Re: power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-04 00:00:00 UTC
From: Woody White <woody.white@att.net>
Message-ID: <377FD7D8.F48CEFB2@att.net>
Source record: 68798

RFI may be a problem depending on how well the PS is made.
A secondary shielded enclosure with bypassing and ferrite
cores *could* be needed to clean up the hash. ...A try it
and see.

Almost all regulated supplies will have an internal
reference voltage and a group of resistors which "sample"
the output for comparison to the reference. Within
limitations established by other circuit paramaters (YMMV)
the voltage can typically be raised by changing the
reference voltage (often generated within a regulator IC) or
the resistive feedback network.

Typically raising the reference voltage will raise the
output correspondingly. It is possible that some references
may be connected to an inverting amp. In that case lowering
the ref would raise the output.

Adding the right value potentiometer (connected as variable
resistor- 2 terminals) between ground and the (output of)
feedback circuit. That is NOT the PS output, but after the
resistive divider / feedback network. Exact value will
depend on current network values. Keep in mind that you
want to drop the REF voltage from the output about 1.8 volts
over the current value. That way the PS output will go up
bu 1.8 volts to compensate. ...There is often already a
potentiometer in the feedback circuit to vernier the output
of the stock PS, but may not have sufficient range.

Most PC supplies are switchers, running from full wave
rectified line (170vac), so "headroom" voltage for
regulation at the higher output level should not be too much
of a problem.

Woody

"Drayton L. Hanna" wrote:
>
> Has anyone ever tried to modify a generic PC power supply to deliver
> 13.8V instead of 12V? Just curious if this has been done because I have
> several power supplies here that I'd be willing modify if I knew it
> would be successful. How about any interference problems, or does the
> power supply enclosure provide sufficient shielding?
> ___
> Drayton L Hanna, KF4AME/TI5
> Wisdom is not acquiring knowledge, it's knowing what knowledge to

> acquire.

---------- de Woody, WB4QXE ----------

Ham Homebrew/ATV Circuits -*- Scanning Electron Microscope Images

http://www.geocities.com/capecanaveral/3722

953. Re: Human power (was amp'd crystal radio)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-04 00:00:00 UTC
From: Nick <nick@i.hate.spam>
Message-ID: <7loj37$5ob$1@news5.svr.pol.co.uk>
Source record: 68799
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

NO SPAM wrote in message <377F9057.F799034E@mail.rsccd.org>...
>
>Hey, YEAH! Maybe instead put a generator on the remote control, so it
>has to have a certain expenditure of calories to make it work!
>Decadence with a twist!

Isn't just that being done at a trial in the U.S.? To force kids to exercise in order to be able to watch TV? Can't remember where I read it, but it was recently.

954. FS Assorted Books

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-04 00:00:00 UTC
From: Larry Asp <larry.asp@sympatico.ca>
Message-ID: <377FF40E.76F5@sympatico.ca>
Source record: 68800
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

The following books are for sale, all are in good shape, and postage is extra. Make an offer for the lot if you want.

RF and Digital Test Equipment You can Build. Tab Books 729 $6.00
Electronics Unraveled by James Kyle. Tab Books 691 $4.00
Working With Semiconductors. Tab Books 501 1st Edn 1969 Hardcover $10.00
Sams Tube Substitution Handbook #11 $6.00
101 Electronic Projects For Under $10.00 1971 $2.00
Radio TV Experimenter Aug/Sep 1987 $2.00
Elementary Electronics Dec.1968 $1.00
Sams Books - 101 Ways to Use Your Scope in TV $6.00
Radio Shack - Realistic Guide to Oscilloscopes $5.00
Devry Institute Lesson 2627 Advanced Oscilloscopes $3.00
Bell and Howell Institute - Lesson 3227 Intrument Maintenance $3.00
Tab Books #472 - Working With The Oscilloscope by Saunders $7.00

955. Re: Human power (was amp'd crystal radio)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-04 00:00:00 UTC
From: J <ns5n@erols.com>
Message-ID: <37801CB6.7679FAEE@erols.com>
Source record: 68801
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Popular Electronics did an article or two years ago about someone utilizing a bicycle/generator system in configuration with a television. If the kids wanted to watch a program, they had to peddle away during the program to provide enough current for the set. I have seen similar units in use for Field Day, and they do work.

--
J Edgar/NS5N & Maureen/KE4GSZ send>>>

956. Re: Human power (was amp'd crystal radio)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-04 00:00:00 UTC
From: dakidd@primenet.com
Message-ID: <dakidd-0407992015170001@powermac7500.megalon.net>
Source record: 68802
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

In article <37801CB6.7679FAEE@erols.com>, J <ns5n@erols.com> wrote:

: Popular Electronics did an article or two years ago about someone
: utilizing a bicycle/generator system in configuration with a
: television. If the kids wanted to watch a program, they had to peddle
: away during the program to provide enough current for the set. I have
: seen similar units in use for Field Day, and they do work.

Makes me think of the scene from the beginning of Soylent Green where the
old guy is pedalling away merrily as he watches the tube and discusses the
price of a pint of Maple Syrup...

--
Don Bruder - Dakidd@primenet.com <--- Preferred Email - unmunged
Secondary --> Dakidd@grfn.org +------------------------------+
Horseman by day, 'net-freak by night. What a contrast, eh?

957. FT-901D - Mod Info Required

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-05 00:00:00 UTC
From: Michael Jones <mikej@freewebaccess.co.uk>
Message-ID: <377ff71e@eeyore.callnetuk.com>
Source record: 68803

I have just passed my Radio Amateurs Exam and have been given a FT-901D in order to help me progress onto the HF bands and would like to add the 11 metre band to it as well

If it can be done please let me know here or send e-mail to: m1emf@go.com

73

Mike
M1EMF

958. Re: Microwave Oven.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-05 00:00:00 UTC
From: "Mr. Muckle" <jdwalton@home.com>
Message-ID: <37804AE0.F1A8FEA@home.com>
Source record: 68804

Wasn't this discussed in QST during the past year?

"Mogens Kristiansen, OZ1CXX" wrote:

> I heard that the PWR Supply from a microwave can be modified to
> supply a PA tube with 2-2,5 Kv.
> Sounds interesting to me.
> Anyone with experience reg. rectifier, filter capacitor etc.
>
> 73 de OZ1CXX, Mogens

959. How to make a programing cable for kenwood tk-353 model 450MHZ to 470MHZ ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-05 00:00:00 UTC
From: mike <mikeone@noln.com>
Message-ID: <01bec68d$b7250e60$8f5333cf@noln.noln.com>
Source record: 68805

Hi my name is Mike and i am looking for someone in the amatuer radio
community that may have
Knowledge on Comercial version kenwood tk-353 model 450 to 470MHZ . that
may have basic
Knowledge on giving me some info on building myself a Programming cable for
this unit. i have the
programming Rib box skpg for Comercial kenwood Portables and mobile units.
If anyone has info
on this radio please send me email at : mikeone@noln.com

Sincerly Yours
Mike KB2ITR

960. Re: - 78 turns/minute records - RIAA correction?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-05 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19990705033456.04332.00004261@ngol04.aol.com>
Source record: 68806

In article <376e90b4.23046137@news.skynet.be>, on5wv@RadioLink.net (Kawaya) writes:

>Anyone knows if RIAA-correction was used for old 78 turns per minute >records?

Hello,

No, they don't.

That question brings me back to my early childhood...

Until the mid-50s or later, there were actually several different equalization curves in use by different record companies. Records from different companies and different eras had very different curves.

In the '50s there were several curves in use in the USA alone. The industry wanted a single standard, and the RIAA (Recording Industry Association of America) equalization curve was the winner. By 1960 or so all records in the US were produced using this curve.

The reason the question brings me back is that from as far back as I can remember, my father was a "hi-fi" enthusiast. (Still is!). The first "serious" equipment he had that I remember was the Fisher mono preamp and 50 watt power amplifier. The preamp had all the usual controls, plus two levers (one for the low end, one for the high end) to set the equalization on various records. Of course a curious small boy had endless fun making the records sound funny by manipulating the levers.

73 de Jim, N2EY

961. YEASU FT-726R

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-05 00:00:00 UTC
From: "Robert A.Stein" <wb1hjc@ecqual.net>
Message-ID: <378090D1.1B83B65D@ecqual.net>
Source record: 68807
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

The manual that I have shows listings for several modules for this
tranceiver. However, I am wondering if anyone has or has convertd a
module for the 726 for 1296 Gig. I would like to know of availability
if such a module is available...

Tnx in advance
Bob WB1HJC

--
73 de Whiskey Bravo ONE Holy Jumpin' Catfish
Bob Stein, WB1HJC, P.O.Box 6042, Stuart, FL 34997-6042
CM for Samuel Clemens Chapter of 10-10 International
Tues 21:00 EST-Wed 0200 UTC Winter-0100 Summer-28.333 Mhz

962. Old, tired eyes?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-05 00:00:00 UTC
From: Major Ron <majrabsr@rconnect.com>
Message-ID: <931180658.242.46@news.remarQ.com>
Source record: 68808

Your original schematic scanned, cleaned & printed on 24" x 36" plotter paper. $5. Your schematic returned with large copy. Ron, KA9ALC.

963. Re: power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-05 00:00:00 UTC
From: paul <paul@ct2.nai.net>
Message-ID: <3780EEDD.363@ct2.nai.net>
Source record: 68809

Woody hit the nail on the head. I will add one additional fact to his comments. PC power supplies take there feedback off of the 5 volt supply. As such find the feedback resistor, lift one end add additional resistance to that resistor and attach it to the + 12v line. I guess the only other comment I would have is that most of the 12v power supplies that I have seen do not deliver that much current, however the price of the PC supplies is usually very inexpensive and you can do all kinds of things with them.
Gud Luc and let us know how you do,
Paul.

Woody White wrote:
>
> RFI may be a problem depending on how well the PS is made.
> A secondary shielded enclosure with bypassing and ferrite
> cores *could* be needed to clean up the hash. ...A try it
> and see.
>
> Almost all regulated supplies will have an internal
> reference voltage and a group of resistors which "sample"
> the output for comparison to the reference. Within
> limitations established by other circuit paramaters (YMMV)
> the voltage can typically be raised by changing the
> reference voltage (often generated within a regulator IC) or
> the resistive feedback network.
>
> Typically raising the reference voltage will raise the
> output correspondingly. It is possible that some references
> may be connected to an inverting amp. In that case lowering
> the ref would raise the output.
>
> Adding the right value potentiometer (connected as variable
> resistor- 2 terminals) between ground and the (output of)
> feedback circuit. That is NOT the PS output, but after the
> resistive divider / feedback network. Exact value will
> depend on current network values. Keep in mind that you
> want to drop the REF voltage from the output about 1.8 volts
> over the current value. That way the PS output will go up
> bu 1.8 volts to compensate. ...There is often already a
> potentiometer in the feedback circuit to vernier the output
> of the stock PS, but may not have sufficient range.
>
> Most PC supplies are switchers, running from full wave
> rectified line (170vac), so "headroom" voltage for

> regulation at the higher output level should not be too much
> of a problem.
>
> Woody
> ----------
> "Drayton L. Hanna" wrote:
> >
> > Has anyone ever tried to modify a generic PC power supply to deliver
> > 13.8V instead of 12V? Just curious if this has been done because I have
> > several power supplies here that I'd be willing modify if I knew it
> > would be successful. How about any interference problems, or does the
> > power supply enclosure provide sufficient shielding?
> > ___
> > Drayton L Hanna, KF4AME/TI5
> > Wisdom is not acquiring knowledge, it's knowing what knowledge to
> > acquire.
> ---------------------
> ----------- de Woody, WB4QXE -----------
>
> Ham Homebrew/ATV Circuits -*- Scanning Electron
> Microscope Images
>
> http://www.geocities.com/capecanaveral/3722

964. Re: Human power (was amp'd crystal radio)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-05 00:00:00 UTC
From: notjimbob@worldnet.att.net
Message-ID: <3786b77c.4118330@netnews.worldnet.att.net>
Source record: 68810
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

On Sun, 04 Jul 1999 20:15:15 -0700, dakidd@primenet.com (Don Bruder)
wrote:

>Makes me think of the scene from the beginning of Soylent Green where the
>old guy is pedalling away merrily as he watches the tube and discusses the
>price of a pint of Maple Syrup...

I wonder how one goes about making "Maple Syrup" from corpses.

Jim

965. F.S. 2 meter Power Mic

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-05 00:00:00 UTC
From: TLNixon@revealed.net
Message-ID: <3780d4c3.7578080@news.revealed.net>
Source record: 68811

Of course this is a joke!!
Power mics on 2 meter sets would more than likely distortthe audio so badly you couldn't understand it, and would also more than likely make the carrier deviate a lot more than the legal 5 khz, resulting in splattering or the very least severe clipping.

Just checking to see if anyone is awake out there!!

Terry-WB0VQP

966. Re: FM detector circuit required

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-05 00:00:00 UTC
From: Troy Manos <tcmanos@bigfoot.com>
Message-ID: <3780DE94.934576AC@bigfoot.com>
Source record: 68812

There is a good circuit description and schematic for the type of circuit you desire in the 1994 ARRL Handbook, starting on page 18-23. I

believe the frequency-discriminator circuit shown in Fig. 42 is what you

need. The circuit uses one Miller 12-C45 transformer, an rf choke, two 1N34A diodes, and a few caps and resistors.

Troy Manos
KE4ZXY

967. SWM seeks Trans

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-05 00:00:00 UTC
From: hitubefi@my-deja.com
Message-ID: <7lqtobpau1@nnrp1.deja.com>
Source record: 68813

I want to start building my own audio amplifiers and am looking for good vertical pairs of output transformers that came out of stereo gear from the 50s and 60s.If you have things like this on your garage shelves collecting dust and you know what they came out of or the type of power tubes that they were used with drop me a line. Oh,and if you are reading this just because of my intro.....GOTCHYA! David Thatcher

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

968. RFcalc software help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-05 00:00:00 UTC
From: David <davhayes@netcomuk.co.uk>
Message-ID: <7lqqjlaup1@taliesin.netcom.net.uk>
Source record: 68814
Cross-posted to:
rec.radio.amateur.equipment,rec.radio.amateur.homebrew,sci.electronics.cad,sci.electronics.design,sci.electronics.misc

Have recently downloaded RFCALC with RFFILTER by Daniel Klosterman(Circuit Synthesis Inc) from RF Globalnet, I would like to register this program so I can get full use from it.
The above vendors web site is down and I have tried e-mail but to no avail.
Can you help in any way with the vendors new contact details, some registration info or a copy of the registered version.

Many thanks in advance if you can assist.

David Hayes

Sherwood Forest, Nottingham, UK

969. F.S. Mosley MPK-3 high power kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-05 00:00:00 UTC
From: John Habs <jhabs@worldnet.att.net>
Message-ID: <7lr3uhadr1@bgtnsc03.worldnet.att.net>
Source record: 68815
Cross-posted to:
alt.ham-radio.marketplace,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

I have forsale the mosley mpk-3 high power kit.this will make your ta-33jr able to handle 1.5kw. this comes with all the aluminium and traps to replace center driven element.also might be good for experimenters who want to design their own tribander or make a simple rotary dipole.asking $90 shipped u.s. John jhabs@worldnet.att.net or w3ayt@arrl.net

970. Noaa weather Radio Circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-05 00:00:00 UTC
From: Matthew Hudson <MEH@univrel.tamu.edu>
Message-ID: <3780F825.90C778C2@univrel.tamu.edu>
Source record: 68816

I am looking at building a NOAA radio instead of purchasing one.
Does anyone have this circuit or know where I could find the layout of
it...Is their anything in the ARRL Handbook? Thanks

KC5IRZ

971. Re: Human power (was amp'd crystal radio)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-05 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <vAIodYAwVQg3EwBx@jmwa.demon.co.uk>
Source record: 68817
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

<3786b77c.4118330@netnews.worldnet.att.net>, James Meyer
<notjimbob@worldnet.att.net> inimitably wrote:
>On Sun, 04 Jul 1999 20:15:15 -0700, dakidd@primenet.com (Don Bruder)
>wrote:
>
>>Makes me think of the scene from the beginning of Soylent Green where the
>>old guy is pedalling away merrily as he watches the tube and discusses the
>>price of a pint of Maple Syrup...
>
> I wonder how one goes about making "Maple Syrup" from corpses.
>
You probably don't want to know, but you might start with Clostridium
aureum or the agent of necrotizing fasciosis (Staphylococcus sp.?).
--
Regards, John Woodgate, OOO - Own Opinions Only.
Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
Did you hear about the hungry genetic engineer who made a pig of himself?
PLEASE DO ****NOT**** MAIL COPIES OF NEWSGROUP POSTS TO ME!!!!

972. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-05 00:00:00 UTC
From: Patrick Kelley <shaping@ev1.net>
Message-ID: <3781151B.3B343DEA@ev1.net>
Source record: 68818
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Rich Grise wrote:
>
> The height of decadence, of course, would be a generator
> on your exercise bike/treadmill/stepmaster/etc.
>

Actually, this sort of thing used to be fairly common, back when the surplus market was loaded with cheap aircraft generators. With a gas engine attached, they could also make useful welders. Now, it'd be a whole 'nother thing. Silicon is cheap, structural steel is not too expensive, but lots of copper and magnetic iron is another story.

--
Mu Elektron
http://users.ev1.net/~shaping/

973. Re: Noaa weather Radio Circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-05 00:00:00 UTC
From: CDT <xctx@onr.com>
Message-ID: <DiRf3.335$Rc4.3702038537@news.onr.com>
Source record: 68819

Get a schematic for the Radio Shack "Weather Cube".
It uses one Motorola chip.

-W5CDT

--
-->Remove the x's from my email address before using <--
Matthew Hudson wrote in message <3780F825.90C778C2@univrel.tamu.edu>...
> I am looking at building a NOAA radio instead of purchasing one.
>Does anyone have this circuit or know where I could find the layout of
>it...Is their anything in the ARRL Handbook? Thanks
>
>KC5IRZ
>

974. EICO 710 Grid Dip Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-05 00:00:00 UTC
From: clyde edgar <cedgar@pacificnet.net>
Message-ID: <3781481B.AC9F8127@pacificnet.net>
Source record: 68820

My GD meter died, need a schematic. Can anyone help ? Tnx, Clyde
-WA6DCM

975. DB25 Greenlee punch

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-05 00:00:00 UTC
From: Hugh Duff <hduff@ica.net>
Message-ID: <3781607C.790EEBEA@ica.net>
Source record: 68821

This may be of interest to homebrewers....
I have a Greenlee punch for knocking out DB-25 holes in chassis.
Make me an offer.
Reply by email

976. Re: Human power (was amp'd crystal radio)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-05 00:00:00 UTC
From: Krusty The Klown <spam@not.com>
Message-ID: <378175FB.856F38F8@not.com>
Source record: 68822
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

J wrote:

> Popular Electronics did an article or two years ago about someone
> utilizing a bicycle/generator system in configuration with a
> television. If the kids wanted to watch a program, they had to peddle
> away during the program to provide enough current for the set. I have
> seen similar units in use for Field Day, and they do work.

I have a quarter slot on the TV my kids watch. Makes me about $2 an
hour...

977. Re: Homebuilt Rotatorv Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-06 00:00:00 UTC
From: Ralph Mowery <rmowery@ibm.net>
Message-ID: <3782B372.457E230C@ibm.net>
Source record: 68733

As the motor draws current the voltage will drop some. You need to
add a voltage regulator to the meter circuit.

Hansanter wrote:
>
> Hi all,
>
> I've built my own homebrew rotator and 'mechanically' it works quite
> well. The motor I used is a wiper motor from a large vehicle so it's 24
> V. The whole thing is powered by a small transformer supplying 20 V at
> 3A (its well capable). In order to determine the antenna heading I have
> included a potentiometer in the rotator housing. In the control box I
> have a meter from an old multimeter calibrated in degrees (N,S,E,W etc)
> this is fed on one side by 20V from the transformer (the same line that
> feeds the direction switch) and on the other side by 10V from the center
> tab on the pot (via a 240k resistor and and a 20K cermet pot for
> calibrating). Can somebody tell me why the meter deflects fully left or
> right (depending on the direction the rotator turns) when I get the
> rotator to turn. When I release the 'TURN' switch the meter needle
> returns to indicate the direction. Obviously the motor is drawing
> current away from the meter but that's amps and I'm using the pot and
> meter to measure volts so it shouldn't drop - right ??
>
> Thanks for your time.
> Regards
> Terry Gaff

978. Re: BOB Pleaser: Mosley MPK-3 available

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-06 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <3782C70F.5F416E71@corecomm.net>
Source record: 68734

John Habs wrote:
>
> This is formatted to please the internet cop Bob Headrick,I will not
> mention or use the word FORSALE,but I have available to any homebrewer or
> experimenter who would like to make a three band dipole or even a three band
> beam a mosley mpk-3.this is all the aluminium and traps to make either the
> ta-33jr into a full power beam or the ta32jr.I would like to trade either 90
> george wasingtons or 18 abe lincolns or 9 jacksons or 4 hamiltons and 1
> jackson or any combination of these items so long as it totals 90 dollars.I
> will also except in trade a money order filled out in such a way that it
> reads ninety dollars and no cents. John

And knowing in advance this doesn't belong in this newsgroup, you posted
it here anyway instead of in rec.radio.swap where it belongs? Or in
rec.radio.amateur.antennas, where it would still be spam but at least be
on topic?

So, basically, you're going out of your way to be nasty. Is that it?

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+

979. Info Needed Burle TC302 Video Camera

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-06 00:00:00 UTC
From: willemson@shellus.com
Message-ID: <OJag3.4071$F7.197519@news3.giganews.com>
Source record: 68823

I have a Burle TC302 Video Camera, that was used at a security company. I need a schematic and information about this camera. If I can get it to work I will use it for amatuer TV. Any help would be apprecated.

Remove the xxx in the address to reply marwynnXXX@c-com.net

Thanks
Marwynne

980. Re: EMP phenomena (was: Morse code)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-06 00:00:00 UTC
From: sphinx@world.std.com
Message-ID: <FEFKy1.HFx@world.std.com>
Source record: 68824
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <378e49dc.395896971@news.atl.bellsouth.net>,
Gary Coffman <ke4zv@bellsouth.net> wrote:
>This isn't quite correct. When the nuclear device detonates, it generates
>large amounts of prompt gamma radiation. Gamma is electromagnetic
>radiation of an extremely high frequency (higher than X-rays), so it travels
...snip...
>But when the device is detonated at high altitude, there is little sensible
>atmosphere to absorb the gammas. Instead they encounter the free
>electrons in the ionosphere. These are accelerated by the gammas, just as
>they are accelerated by any radio wave encountering the ionosphere (or as
>the free electrons in your antenna are accelerated by a passing radio wave).
>But since the gammas are so energetic, and are available in copious amounts,
>the acceleration produced is *much* stronger, and the reradiated energy
>as the free electrons decelerate is also much greater.

But the KEY POINT (according to FEMA's consultant) is that the re-radiated
energy builds up IN PHASE because the point at which new radiation is
being generated is advancing just as fast as the newly-generated wavefront
is propagating, i.e. at the speed of light. This is what gives the EMP
its very sharp wavefront and wide bandwidth, which in turn is what makes
bypassing and shielding tricky.

-John S., W3IKG

981. Re: F.S. 2 meter Power Mic

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-06 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <378236EA.BD4A4F02@bellsouth.net>
Source record: 68825

TLNixon@revealed.net wrote:
> Of course this is a joke!!

Still I hear people ask for them from time to time<g>...

> Power mics on 2 meter sets would more than likely distortthe audio so
> badly you couldn't understand it, and would also more than likely make
> the carrier deviate a lot more than the legal 5 khz, resulting in
> splattering or the very least severe clipping.

Actually there is no 5kHz legal limit on FM deviation on 2 meters in the amateur service.. if I'm not mistaken, one could legally run the full FM broadcast deviation of 75kHz, and occasionally did in the early modulated-oscillator days 40 years ago.

Now if you tried that today, you'd clobber much of the repeater band and probably get a pink ticket for failing to observe "good amateur practice"... (and probably "intentional QRM" unless you could show you were dumb enough to not understand the technical consequences...)
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

982. BOB Pleaser: Mosley MPK-3 available

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-06 00:00:00 UTC
From: John Habs <jhabs@worldnet.att.net>
Message-ID: <7lsv9q$kk4$1@bgtnsc01.worldnet.att.net>
Source record: 68826

This is formatted to please the internet cop Bob Headrick,I will not mention or use the word FORSALE,but I have available to any homebrewer or experimenter who would like to make a three band dipole or even a three band beam a mosley mpk-3.this is all the aluminium and traps to make either the ta-33jr into a full power beam or the ta32jr.I would like to trade either 90 george wasingtons or 18 abe lincolns or 9 jacksons or 4 hamiltons and 1 jackson or any combination of these items so long as it totals 90 dollars.I will also except in trade a money order filled out in such a way that it reads ninety dollars and no cents. John

BYE BOB!enjoy yourself and happy homebrewing.

983. Hows that BOB?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-06 00:00:00 UTC
From: John Habs <jhabs@worldnet.att.net>
Message-ID: <7lsvbokql1@bgtnsc01.worldnet.att.net>
Source record: 68827

no message as I think I said enough in my last post.

984. New Amateur Radio Portal

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-06 00:00:00 UTC
From: Nigel <nigel@csi.com>
Message-ID: <uZGuzs7x#GA.333@nih2naac.compuserve.com>
Source record: 68828

This week, a new Amateur Radio Portal opened on the web, www.dxbands.com

It includes dx news, a dx-pedition diary, contest lists and much more.

Do come and take a look and let us know what you think. The area is being updated daily and your input is valuable.

Nigel de G4KIU
www.dxbands.com
news@dxbands.com

985. Bicycle Power generation idea source...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-06 00:00:00 UTC
From: Randy Elliott <relliott_at@at_pktechnology.com>
Message-ID: <01bec7d5$466e2e60$715533d1@verboort>
Source record: 68829
Cross-posted to:
alt.energy.homepower,alt.energy.renewable,alt.radio.amateur,rec.amateur.radio,rec.radio.amateur,rec.radio.amateur.homebrew

I polled the fitness newsgroups to see if they knew of any standard bicycle
stands for indoor use. I'd seen one with a 4" squirrel cage fan for
dissipating the power thus using the bicycle's gears to adjust the pedal
resistance. I figured we could yank the fan and drop in an alternator,
etc. One respondent to the poll pointed me to:
http://www.nashbar.com/catalog/bike/display_html/bikeindex.html
Maybe we can come up with a simple adaptation. I'm crossposting to some
amateur radio groups to see if anyone there has done this modification
already. Any good ideas out there?
--
Randall Elliott
The views expressed are not those of PK Technology or
its parent company IFR Systems ...but they will be soon...
Remove my spamguards to reply by e-mail.
[Feel free to steal and modify the following sig. I did!]
And for you automated email spammers out there,
here's some nice addresses for you:
rep.elizabeth.furse@mail.house.gov
senator@wyden.senate.gov
oregon@gsmith.senate.gov
uce@ftc.gov

986. HC49 crystal lead "conversion"

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-06 00:00:00 UTC
From: "Peter E. Orban" <Peter.Orban@nrc.ca>
Message-ID: <37824092.116EEA8A@nrc.ca>
Source record: 68830

I have a couple of crystals with the wire, solder-in type leads, and I
would like to use them in a plug-in application (FT-301 10m band
crystals). Any good way to convert them?
I have some ideas but would like to hear from others as well.

Thanks, Peter
--
Peter E. Orban
National Research Council of Canada
e-mail: peter.orban@nrc.ca

987. Re: EMP phenomena (was: Morse code)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-06 00:00:00 UTC
From: David <dmartin@net1inc.net>
Message-ID: <378259E7.B7806FC6@net1inc.net>
Source record: 68831
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Why are you people so intent on cross posting this to news groups that could care less what you think about the EMP of a nuclear blast!!

David - W4DSM

Gary Coffman wrote:

> On Tue, 6 Jul 1999 04:10:48 GMT, sphinx@world.std.com (SPHINX Technologies) wrote:
> >In article <378e49dc.395896971@news.atl.bellsouth.net>,
> >Gary Coffman <ke4zv@bellsouth.net> wrote:
> >>This isn't quite correct. When the nuclear device detonates, it generates
> >>large amounts of prompt gamma radiation. Gamma is electromagnetic
> >>radiation of an extremely high frequency (higher than X-rays), so it travels
> >>...snip...
> >>But when the device is detonated at high altitude, there is little sensible
> >>atmosphere to absorb the gammas. Instead they encounter the free
> >>electrons in the ionosphere. These are accelerated by the gammas, just as
> >>they are accelerated by any radio wave encountering the ionosphere (or as
> >>the free electrons in your antenna are accelerated by a passing radio wave).
> >>But since the gammas are so energetic, and are available in copious amounts,
> >>the acceleration produced is *much* stronger, and the reradiated energy
> >>as the free electrons decelerate is also much greater.
> >
> >But the KEY POINT (according to FEMA's consultant) is that the re-radiated
> >energy builds up IN PHASE because the point at which new radiation is
> >being generated is advancing just as fast as the newly-generated wavefront
> >is propagating, i.e. at the speed of light. This is what gives the EMP
> >its very sharp wavefront and wide bandwidth, which in turn is what makes
> >bypassing and shielding tricky.
> >
> >-John S., W3IKG
>
> Well, much as I hate to disagree with a consultant to Our Government,
> his physics doesn't work.
>
> Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
> 534 Shannon Way | We break it |
> Lawrenceville, GA | Guaranteed |

988. Re: SWM seeks Trans

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-06 00:00:00 UTC
From: sparksw4eas@mindspring.com
Message-ID: <7lu8asbeq1@nntp2.atl.mindspring.net>
Source record: 68832

Thought ya might be trying to transform a TV :-)
hitubefi@my-deja.com wrote in message <7lqtobpau1@nnrp1.deja.com>...
>I want to start building my own audio amplifiers and am looking for
>good vertical pairs of output transformers that came out of stereo gear
>from the 50s and 60s.If you have things like this on your garage
>shelves collecting dust and you know what they came out of or the type
>of power tubes that they were used with drop me a line. Oh,and if you
>are reading this just because of my intro.....GOTCHYA! David Thatcher
>
>
>Sent via Deja.com http://www.deja.com/
>Share what you know. Learn what you don't.

989. Frequency Hopping Handhelds

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-07 00:00:00 UTC
From: henryt@perth.dialix.com.au
Message-ID: <931306507.537696@newton.dialix.com.au>
Source record: 68735

Hi,
I am interested in homebrew of some frequency hopping handhelds. My thoughts are to adapt current radios by adding an extra control board using a PIC chip. The units would have a control channel where the TX would make a tone prior to commencing a predetermined hop. The RX of the other unit would hear the tone and also start to hop. Once in a while the TX would provide another tone for re-sync. The PIC would control tone transmission and reception and channel changing.

Has anyone had experience with making something along similar lines??

The problems I can see arising are:
-PLL will not settle fast enough
-Because of the above hopping speed may be VERY slow.

I have read the ARRL Spread Spectrum sourcebook. The units I am interested in building sound very similar to units made my an AMRAD member (1981 :-)) Chuck Phillip N4EZV, I can't find him on the net tho....I will try to find a US callbook.

Any assistance with helping me with this project would be greatly appreciated.

Best Regards From,
Henry,
VK6HJT

990. Homebuilt Rotatorv Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-07 00:00:00 UTC
From: Hansanter <shbcommm@indigo.ie>
Message-ID: <3782A1B8.15AAE539@indigo.ie>
Source record: 68736

Hi all,

I've built my own homebrew rotator and 'mechanically' it works quite well. The motor I used is a wiper motor from a large vehicle so it's 24 V. The whole thing is powered by a small transformer supplying 20 V at 3A (its well capable). In order to determine the antenna heading I have included a potentiometer in the rotator housing. In the control box I have a meter from an old multimeter calibrated in degrees (N,S,E,W etc) this is fed on one side by 20V from the transformer (the same line that feeds the direction switch) and on the other side by 10V from the center tab on the pot (via a 240k resistor and and a 20K cermet pot for calibrating). Can somebody tell me why the meter deflects fully left or right (depending on the direction the rotator turns) when I get the rotator to turn. When I release the 'TURN' switch the meter needle returns to indicate the direction. Obviously the motor is drawing current away from the meter but that's amps and I'm using the pot and meter to measure volts so it shouldn't drop - right ??

Thanks for your time.
Regards
Terry Gaff

991. G3RUH Modem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-07 00:00:00 UTC
From: Matt Donohoe <killer00@tig.com.au>
Message-ID: <7lugnl$874$1@toto.tig.com.au>
Source record: 68737
Cross-posted to: alt.ham-radio.packet,aus.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.space

Does anybody know any dealers that sell the G3RUH 9600 Bps modem kit as is and not modified ?

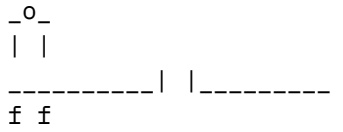
Dealers in any country accepted.

Please email me as I do not sometimes check newsgroups...

992. Yagi Feed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-07 00:00:00 UTC
From: Mike Willis <M.J.Willis@rl.ac.uk>
Message-ID: <378304FA.C0FE9991@rl.ac.uk>
Source record: 68738

I have a yagi, with an interesting type of feed. It looks like this (if you have a fixed width font)



The feed is indicated by points f f. the length of the matching section is about 50cm in total, designed to work at 28MHz. I am not sure of the name of this type of feed, the yagi is a 4 ele. My question regards what type of feeder this is for, open wire or after a balun, coax. It looks to me like the mid point of the matching section is connected to the boom. This is good as it makes all the parts grounded (essential).

I think it is probably low impeedance, say 75 or 50 ohms, designed for 75 ohm twin, or coax with a choke balun.

73 Mike

993. Re: Frequency Hopping Handhelds

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-07 00:00:00 UTC
From: knox_k_NOBS@nemaine.com
Message-ID: <37831bd4.1367412@news.nemaine.com>
Source record: 68739

On Wed, 07 Jul 1999 00:15:08 GMT, henryt@perth.dialix.com.au (Henry Titchen) wrote:

[snipped}
>
>I have read the ARRL Spread Spectrum sourcebook. The units I am
>interested in building sound very similar to units made my an AMRAD member
>(1981 :-)) Chuck Phillip N4EZV, I can't find him on the net tho....I will
>try to find a US callbook.
>
>Any assistance with helping me with this project would be greatly
>appreciated.
>
>Best Regards From,
>Henry,
>VK6HJT

You can find his address at:

http://www.qrz.com/

Ken

994. Re: Homebuilt Rotatorv Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-07 00:00:00 UTC
From: paul <paul@greenrover.demon.co.uk>
Message-ID: <TtMC9DALwyg3EwEc@greenrover.demon.co.uk>
Source record: 68740

>Further up the thread, Hansanter <shbcommm@indigo.ie> wrote:
>Hi all,
>
>I've built my own homebrew rotator and 'mechanically' it works quite
>well.

Something that occurs to me.. are you using the same earth return for
both motor power and metering.

If so the two or three amps of return current could be messing up the
meter current.

They should be separate wires really

HTH

Regards

--
Paul G8IZR

http://www.greenrover.demon.co.uk

995. Mosley MPK-3 Available to all homebrewers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-07 00:00:00 UTC
From: John Habs <jhabs@worldnet.att.net>
Message-ID: <7lvh2iejk1@bgtnsc03.worldnet.att.net>
Source record: 68741

From: John Habs <jhabs@worldnet.att.net>
Subject: BOB Pleaser: Mosley MPK-3 available
Date: Tuesday, July 06, 1999 9:15 AM

This is formatted to please the internet cop Bob Headrick,I will not mention or use the word FORSALE,but I have available to any homebrewer or experimenter who would like to make a three band dipole or even a three band beam a mosley mpk-3.this is all the aluminium and traps to make either the ta-33jr into a full power beam or the ta32jr.I would like to trade either 90 george wasingtons or 18 abe lincolns or 9 jacksons or 4 hamiltons and 1 jackson or any combination of these items so long as it totals 90 dollars.I will also except in trade a money order filled out in such a way that it reads ninety dollars and no cents. John

BYE BOB!enjoy yourself and happy homebrewing.

996. Mosley MPK-3 available

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-07 00:00:00 UTC
From: John Habs <jhabs@worldnet.att.net>
Message-ID: <7lvhj8$g1b$1@bgtnsc03.worldnet.att.net>
Source record: 68742

I would also ship for the same portraits of George,Abe and Andrew.

997. Re: G3RUH Modem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-07 00:00:00 UTC
From: Robin Gilks <gb7ipd@freeuk.com>
Message-ID: <f2Ig3.16211$GA4.280632@nnrp3.clara.net>
Source record: 68743
Cross-posted to: alt.ham-radio.packet,aus.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.space

Have a look at the G4XYW modem at
www.tvipug.freeserve.co.uk
which is RUH compatible (9k6 only) and also interfaces directly
to a TNC disconnect header with no additional components and
to a PA0HZP Opto-SCC card with no extra parts (both connector types
are on-board). Lots of other features such as CWID compatible,
hardware PTT watchdog, selection of TX waveforms, clock
generation and many other points.

Also available is a simple interface to allow the modem to be driven
directly from a PC serial port. So far DOS drivers for BPQ, xNOS
packet driver, Ethrax25 packet driver are ready.

Win95/win98 users are looked after by the SV2AGW packet engine
which now has a suitable driver.

Linux users will have a driver very soon!!

None of these drivers are required when using an SCC or TNC of
course - only if using the simple voltage converter.

Robin. G8ECJ

Matt Donohoe <killer00@tig.com.au> wrote in message
news:7lugnl$874$1@toto.tig.com.au...
> Does anybody know any dealers that sell the G3RUH 9600 Bps modem kit as is
> and not modified ?
>
> Dealers in any country accepted.
>
> Please email me as I do not sometimes check newsgroups...
>
>
>

998. homebrew me this batman

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-07 00:00:00 UTC
From: jhabs@worldnet.att.net
Message-ID: <37834580.433479601@netnews.att.net>
Source record: 68744

When I originally posted my message in this newsgroup as to the forsale of one Mosley MPK-3 kit I thought and still do that I was making a proper posting as to bringing to the attention of homebrewers and experimenters alike a piece of equipment to the group.Then I get E-mail from Bob Headrick and Cliff Sharp to what they think I or we should post in this newsgroup...well opinions are like assholes,everyone has one.I will continue to use the internet and newsgroups the best way that I see fit and hope others will not be intimidated by these two newsgroup cops.I know there will be replies to this post as to the pros and cons and also to the validity of posting this here,but as being the time of the season(July 4th)this is what makes our country so great...Freedom to think and do what you will and not to be forced to think singularily than individually.So Bob and Cliff as you scroll down through the message board if you see something you don't like...just keep going,it is only one line in the row of many. John

999. FS: SMA relays

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-07 00:00:00 UTC
From: Ken Smmons <ksimmons@jempac.com>
Message-ID: <37835825.CE3753A4@jempac.com>
Source record: 68745
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.components,rec.radio.swap

```
For Sale SMA relays

1 ea DB Products Model TS1G11 12vdc transfer relay $20.00
1 ea Transco PN 82152-710c70100 transfer relay 28 vdc $20.00
1 ea Transco PN 82151-919c70100 SPDT 28 vdc $20.00
1 ea K&L MS-12-F-SMA-1-TTL SPDT + indicator spdt $20.00
4 ea RLC SR-2 min-D 18 Ghz SPDT ------------------------$20.0 ea
1 ea U/A Microwave MA 7530-S030 SPDT 28 vdc--------$20.00
all are many Ghz only have spec. data for the RLC
Shipping included in US.
The K&L relay requires 12vdc power and uses a TTL logic signal for control
Ken K5UHF
```

1000. Re: homebrew me this batman

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-07 00:00:00 UTC
From: hitubefi@my-deja.com
Message-ID: <7lvt39$g7o$1@nnrp1.deja.com>
Source record: 68746

In article <37834580.433479601@netnews.att.net>,
w3ayt@arrl.net wrote:
> When I originally posted my message in this newsgroup as to the
> forsale of one Mosley MPK-3 kit I thought and still do that I was
> making a proper posting as to bringing to the attention of homebrewers
> and experimenters alike a piece of equipment to the group.Then I get
> E-mail from Bob Headrick and Cliff Sharp to what they think I or we
> should post in this newsgroup...well opinions are like
> assholes,everyone has one.I will continue to use the internet and
> newsgroups the best way that I see fit and hope others will not be
> intimidated by these two newsgroup cops.I know there will be replies
> to this post as to the pros and cons and also to the validity of
> posting this here,but as being the time of the season(July 4th)this is
> what makes our country so great...Freedom to think and do what you
> will and not to be forced to think singularily than individually.So
> Bob and Cliff as you scroll down through the message board if you see
> something you don't like...just keep going,it is only one line in the
> row of many. John

>I have seen this on other groups as well.I don't know what your
post was and I don't care.As long as someone stays basically in bounds
of the tone of the kind of postings that are on a newsgroup,they should
be able to post what they want.If a news group moves away from what the
founding members had in mind it is because the members that use the
group want it that way.Offering items for sale or trade is one reason
that people read NGs.Another is to look for services that other members
can provide to them.If this group was Tech and not Rec then the trading
of info might be the main thrust.Wheeling and dealing is a good way to
be able to upgrade,and also a good way to get the gear to take
advantage of the info being traded.Also it can be fun...ie:rec.
>>>>>>>> David Thatcher

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1001. Inexpensive NICAD's and Mosfets (dual-gate)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-07 00:00:00 UTC
From: bw201@torfree.net
Message-ID: <FEI7x7.4Bo.0.queen@torfree.net>
Source record: 68747
Cross-posted to: rec.radio.swap,sci.electronics.components,rec.radio.amateur.homebrew

I just received my order here is Canada from an Arizona surplus dealer called Electronic Goldmine
http://www.goldmine-elec.com
I was very very happy with my purchase of Nicads as well as everything else.

They have their "High Capacity 12VDC 2.4Amp Ni-cad Battery" which is a plastic cased Novatel package, with a barrel-type power jack (their item number G8543). Yes, there are ten 2.4AH nicads in each pack. The price? Only $8 each or 10 for $50

Another interesting thing in the new catalog are BF989 Dual-gate Mosfets (my data book says they are for Input and Mixer stages in UHF tuners up to 900 MHz and gives specs at 800 MHz and 200MHz), their part number G5602. 69 cents each or ten for $6. They are in the SOT-143 surface mount package.

Since I have seen lots of homebrewers looking for Mosfets I figured you would want to know this source, and I think the Nicads are a bargain too.

1002. Re: RTTY decoder software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-07 00:00:00 UTC
From: ve6inm@telusplanet.net
Message-ID: <7m0c40$n2m$1@nnrp1.deja.com>
Source record: 68748

The serial port (COM) on most PC's runs with RS-232 standards. That
would mean using 12V rather than TTL at 5V.
73 de VE6INM
In article <7lltb0$n5n$1@neptunium.btinternet.com>,
"David Cunningham" <D.L.C@btinternet.com> wrote:
> I am constructing a RTTY decoder using an NE567 PLL and require the
software
> to convert the pulses from the decoder into text. I assume that I will
> connect the output of the NE567 decoder to the data input pins on the
COM
> port of my computer. Are TTL level signals compatible with the COM
port, or
> do I require 12v pulses?
>
>

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1003. Re: HC49 crystal lead "conversion"

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-07 00:00:00 UTC
From: Dieter Mayr <d.mayr@salzburg.co.at>
Message-ID: <3783AB5E.65123981@salzburg.co.at>
Source record: 68749

"Peter E. Orban" wrote:

> I have a couple of crystals with the wire, solder-in type leads, and I
> would like to use them in a plug-in application (FT-301 10m band
> crystals). Any good way to convert them?
> I have some ideas but would like to hear from others as well.
>
> Thanks, Peter
> --
> Peter E. Orban
> National Research Council of Canada
> e-mail: peter.orban@nrc.ca

Hi Peter

I had a similar problem a time ago and i took a little piece of
pcb-material, cut out the copper in the
middle (abt 3....5 mm wide) , soldered in two pins to fit the crystal
holder (in my case abt 1.5 mm dia)
and then solder in the crystal.

hope this will help
greetings
Dieter OE2CDM

1004. re :antenna rotor control box

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-07 00:00:00 UTC
From: w4pqwhs@aol.com
Message-ID: <19990707162146.23763.00008223@ng-cf1.aol.com>
Source record: 68750

About a week ago someone listed rotor control box for sale, I lost the listing and e-mail address..if it is available please advise. thanks, Harold W4PQW

1005. H A M F E S T

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-07 00:00:00 UTC
From: Sam Geller <sgeller@bcpl.net>
Message-ID: <Pine.SOL.3.96.990707162002.19584C-100000@mail.bcpl.net>
Source record: 68751
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

```
-----------------------------------------------------------------
| The Famous BRATS Maryland |
| |
| H A M F E S T and C O M P U T E R F E S T |
| |
| Sunday July 25, 1999 |
| |
| At the Maryland State Fairgrounds, Timonium, MD |
| (On York Road, just North of the Baltimore Beltway (695)) |
| |
| Air Conditioned Building LARGE Tailgating Area |
| |
| Plenty of Free Parking |
| Accessible to the Handicapped |
| For Information, or table reservations, call (410)461-0086 |
| OR brats@smart.net OR http://www.smart.net/~brats |
| |
| Talk-in on the BRATS Repeater System 147.030(+) and 224.960(-) |
-----------------------------------------------------------------
```

1006. Limiting full-charge output voltage of NiMh battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-07 00:00:00 UTC
From: dgf@netcom.com
Message-ID: <7m0ikt$s8o@dfw-ixnews11.ix.netcom.com>
Source record: 68752

Trying out a 12-Cell NiMh battery to run a HF rig here. At full charge the battery ends up at about 17V. I am concerned about damage to the rig so I bypassed two cells and get full charge voltage of about 14V. During transmit, the battery (with two cells bypassed) drops to 10.5V or so at voice peaks (100W rig). That's expected (the voltage drop) but...

I'd like to find out is how to keep all 12 cells in the battery (better voltage during voice peaks, etc.) but not kill the rig when the charge is full and the rig is receiving.

I thought of using a power op-amp that would be in saturation whenever the supply voltage is below 14V, and set at output of 14V when the supply voltage is above 14V, but my current peak (20A) might make this not the best solution. A voltage regulator doesn't seem like a good idea because I'd like to continue using the 12 cell battery until it's voltage drops below 12V. A shunt (zener-style) regulator might be OK but it seems a waste to force the battery down to an acceptable voltage (14.5V or so?) before starting to use it, after charging.

Any other ideas?

73 Dave WB0GAZ dgf@netcom.com

1007. lower cost RF design software ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-07 00:00:00 UTC
From: emr01@ms19.hinet.net
Message-ID: <3783cba3.1528312@news.hinet.net>
Source record: 68753

Some of the often heard tools used in microwave circuit design
seems to be Harmonica from Ansoft (SuperCompact) or Tuch-Stone Libra
of EEsof series from HP; yet these software packages cost a lot
(for one that doest two or three small RF projects a year). Are there
any other lower cost microwave circuit design software available?

Best Regards,

Oliver

1008. FS: tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-07 00:00:00 UTC
From: Harvey S Axlerod <axlerod@acsu.buffalo.edu>
Message-ID: <Pine.GSO.4.05.9907071843380.11115-100000@callisto.acsu.buffalo.edu>
Source record: 68754
Cross-posted to: rec.audio.tubes,rec.audio.marketplace,rec.antiques.radio+phono,rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

TUBES FOR SALE:

All the following tubes are new, in original boxes.

Quantity Tube Price Comments
---

7 6BK4/6EL4A $8- EACH
2 6LB6 $20/PR
2 4-65 $20/EACH
2 8322 $20/EACH Amperex Gold Pin
2 2C53 $20/EACH
2 40KG6A $16/PR

Buyer pays shipping. Thanks, Harvey

Harvey Axlerod, Computer Discipline Officer, University at Buffalo
http://www.acsu.buffalo.edu/~axlerod voice: 716-645-3570

1009. Re: Yagi Feed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-07 00:00:00 UTC
From: Eamon Skelton <nospam@oceanfree.net>
Message-ID: <3783e140.0@news.digitalfoundry.com>
Source record: 68755

Mike Willis <M.J.Willis@rl.ac.uk> wrote in message
news:378304FA.C0FE9991@rl.ac.uk...
I have a yagi, with an interesting type of feed. It looks like this (if you
have a fixed width font)
(snip)

Looks like a 'Hairpin Match'

73, Ed.

--
Eamon 'Ed' Skelton EI9GQ
Cork, Ireland.

My e-mail address really is:
nospam@oceanfree.net

Home brew radio page
http://www.qsl.net/ei9gq

1010. Re: Kenwood IF10B HELP NEEDED--PLEASE

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-07 00:00:00 UTC
From: John Emmons <nfishman@optonline.net>
Message-ID: <HoRg3.6932$sc.14832630@news.optonline.net>
Source record: 68756
Cross-posted to: rec.radio.swap,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

Larry,

Try this URL: http://michiganradio.com/kenwood.htm They have
the "IC-10B COMP INTERF. KIT TS940 " listed. Is this the same thing?

John WD4KKE

--
Your enemy is never a villain in his own eyes. Keep this in mind; it may
offer a way to make him your friend.
If not, you can kill him without hate -- and quickly.

Lazarus Long

Larry G. Gouliard, Jr <ka9gci@ntslink.net> wrote in message
news:377E7FA1.8A05F52A@ntslink.net...
> Please:
>
> Is there some kind soul out there that owns a Kenwood IF10B interface
> module and is willing to share some information ?
>
> I have been unable to locate an IF10B module (the part of the computer
> interface that fits inside the TS940S) and have come to the conclusion,
> after many hours of research, that finding one will be next to
> impossible.
>
> At this point the best option appears to be the construction of a
> "replacement" module for the IF10B. To facilitate construction of a
> replacement module the following information is necessary:
>
> Schematic of the IF10B.
> Source Code for the Eprom.
> Pictures or direct scans of the Kenwood printed circuit board.
>
> I plan to use cad and photoresist to duplicate the "daughter" board
> giving me the ability to help others once a successful replacement has
> been verified.
>
> Any information that you can supply would be greatly appreciated.
>
> Thank you and 73
> Larry KA9GCI
>
>

1011. Re: Limiting full-charge output voltage of NiMh battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-07 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <7m1026$68g$1@autumn.news.rcn.net>
Source record: 68757

Your peak current may be exceeding the rating of the battery. NiMh voltage shouldn't drop that much under load (except over time as it discharges). Remember, batteries have two ratings, Ah capacity and peak current. A battery rated at 10Ah doesn't necessarily mean you can draw 10 Amps from it.

Mr. Muckle <jdwalton@home.com> wrote in message news:37842E1E.C4941064@home.com...
> Why not a switching regulator?
>
> David Feldman wrote:
>
> > Trying out a 12-Cell NiMh battery to run a HF rig here. At full
> > charge the battery ends up at about 17V. I am concerned about
> > damage to the rig so I bypassed two cells and get full charge
> > voltage of about 14V. During transmit, the battery (with two
> > cells bypassed) drops to 10.5V or so at voice peaks (100W rig).
> > That's expected (the voltage drop) but...
> >
> > I'd like to find out is how to keep all 12 cells in the battery
> > (better voltage during voice peaks, etc.) but not kill the rig
> > when the charge is full and the rig is receiving.
> >
> > I thought of using a power op-amp that would be in saturation
> > whenever the supply voltage is below 14V, and set at output of
> > 14V when the supply voltage is above 14V, but my current peak
> > (20A) might make this not the best solution. A voltage regulator
> > doesn't seem like a good idea because I'd like to continue using
> > the 12 cell battery until it's voltage drops below 12V. A shunt
> > (zener-style) regulator might be OK but it seems a waste to
> > force the battery down to an acceptable voltage (14.5V or so?)
> > before starting to use it, after charging.
> >
> > Any other ideas?
> >
> > 73 Dave WB0GAZ dgf@netcom.com
>

1012. Re: BOB Pleaser: Mosley MPK-3 available

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-07 00:00:00 UTC
From: John Habs <jhabs@worldnet.att.net>
Message-ID: <7m131moqj1@bgtnsc02.worldnet.att.net>
Source record: 68758

```
And you have the balls to sign off with a quote on free speech?

Clifton T. Sharp Jr. wrote in message <3782C70F.5F416E71@corecomm.net>...
>
>And knowing in advance this doesn't belong in this newsgroup, you posted
>it here anyway instead of in rec.radio.swap where it belongs? Or in
>rec.radio.amateur.antennas, where it would still be spam but at least be
>on topic?
>
>So, basically, you're going out of your way to be nasty. Is that it?
>
>--
>+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
-+-+
>| Cliff Sharp | "Speech isn't free when it comes postage-due."
|
>| WA9PDM | -- Jim Nitchals, founder, FREE
|
>+-+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
```

1013. Re: Yagi Feed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-07 00:00:00 UTC
From: "William F. Hagen" <whagen@inreach.com>
Message-ID: <378415FC.80FB645B@inreach.com>
Source record: 68759

thats a hairpin match, designed to impedance match, can be grounded at
the center.

Mike Willis wrote:

> I have a yagi, with an interesting type of feed. It looks like this
> (if you have a fixed width font)
>
> _o_
> | |
> __________| |_________
> f f
>
> The feed is indicated by points f f. the length of the matching
> section is about 50cm in total, designed to work at 28MHz. I am not
> sure of the name of this type of feed, the yagi is a 4 ele. My
> question regards what type of feeder this is for, open wire or after a
> balun, coax. It looks to me like the mid point of the matching section
> is connected to the boom. This is good as it makes all the parts
> grounded (essential).
>
> I think it is probably low impeedance, say 75 or 50 ohms, designed for
> 75 ohm twin, or coax with a choke balun.
>
> 73 Mike

--
Please remove the word 'NOREPLY' from the email address, sorry for the
inconvenience, but it helps keep down the spam.

1014. Re: Limiting full-charge output voltage of NiMh battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-08 00:00:00 UTC
From: "Mr. Muckle" <jdwalton@home.com>
Message-ID: <37842E1E.C4941064@home.com>
Source record: 68760

Why not a switching regulator?

David Feldman wrote:

> Trying out a 12-Cell NiMh battery to run a HF rig here. At full
> charge the battery ends up at about 17V. I am concerned about
> damage to the rig so I bypassed two cells and get full charge
> voltage of about 14V. During transmit, the battery (with two
> cells bypassed) drops to 10.5V or so at voice peaks (100W rig).
> That's expected (the voltage drop) but...
>
> I'd like to find out is how to keep all 12 cells in the battery
> (better voltage during voice peaks, etc.) but not kill the rig
> when the charge is full and the rig is receiving.
>
> I thought of using a power op-amp that would be in saturation
> whenever the supply voltage is below 14V, and set at output of
> 14V when the supply voltage is above 14V, but my current peak
> (20A) might make this not the best solution. A voltage regulator
> doesn't seem like a good idea because I'd like to continue using
> the 12 cell battery until it's voltage drops below 12V. A shunt
> (zener-style) regulator might be OK but it seems a waste to
> force the battery down to an acceptable voltage (14.5V or so?)
> before starting to use it, after charging.
>
> Any other ideas?
>
> 73 Dave WB0GAZ dgf@netcom.com

1015. FS: Hundreds of new RELAYS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-08 00:00:00 UTC
From: Marv_E_Ads@Juno.com
Message-ID: <7m16lt$3b$1@nnrp1.deja.com>
Source record: 68761

SPST -- DIP Reed Relays -- 5V coil -- Claire PRME 1A005 -- $1 ea

4PDT -- 5A 120 VAC / 3A 30VDC contacts -- 24 VDC coil -- P&B KHU17D11 style, various manufacturers -- $2 ea.

DPDT -- 10 & 15 amp ratings at 120 /277 VAC -- 6 VDC, 24VDC or 115VAC coils -- $2 ea

3PDT -- P&B KUP14D15 10A 125VAC or 6 2/3A 250VAC -- 24VDC coil -- $2 ea

DPDT -- P&B R10-E1-X2 12VDC coil -- $1 ea

6PDT -- P&B R10-E1-X6-V90 5A 28VDC/115VAC contacts -- 12 VDC coil -- $3 ea

DPDT -- P&B KRP11AG 10A contacts -- 120 VAC coil -- octal base -- $4 ea

DPDT 10A Adjustable Time Delay Relay -- P&B CUH-41-30010 -- 24VDC coil -- $10 ea

Sockets, some rail mount & screw type, are also available for most of the above relays.

... plus shipping if necessary, naturally! :-)

Contact Marv, WC6W, 310 649 3111 (reasonable hours Pacific Time please) or via: Marv_E_Ads@Juno.com

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1016. Re: homebrew me this batman

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-08 00:00:00 UTC
From: TLNixon@revealed.net
Message-ID: <37840c75.19487037@news.revealed.net>
Source record: 68762

Don't feel bad John,
I posted a "Tongue-in-cheek" message about a 2 meter power mic for
sale and got similar response.

It's a shame there are people who take themselves far too seriously in
almost anything one wants to do!

Call them "Purists," "Holier than thou,", or what you called them.

Just ignore them, they are too busy shooting themselves in the feet!

Terry-WB0VQP

On Wed, 07 Jul 1999 12:19:46 GMT, jhabs@worldnet.att.net (John Habs)
wrote:

>When I originally posted my message in this newsgroup as to the
>forsale of one Mosley MPK-3 kit I thought and still do that I was
>making a proper posting as to bringing to the attention of homebrewers
>and experimenters alike a piece of equipment to the group.Then I get
>E-mail from Bob Headrick and Cliff Sharp to what they think I or we
>should post in this newsgroup...well opinions are like
>assholes,everyone has one.I will continue to use the internet and
>newsgroups the best way that I see fit and hope others will not be
>intimidated by these two newsgroup cops.I know there will be replies
>to this post as to the pros and cons and also to the validity of
>posting this here,but as being the time of the season(July 4th)this is
>what makes our country so great...Freedom to think and do what you
>will and not to be forced to think singularily than individually.So
>Bob and Cliff as you scroll down through the message board if you see
>something you don't like...just keep going,it is only one line in the
>row of many. John

1017. Re: Microwave Oven.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-08 00:00:00 UTC
From: Randy L Henderson <randylh@flash.net>
Message-ID: <3783F0EB.1CE@flash.net>
Source record: 68763

Mr. Muckle wrote:
>
> Wasn't this discussed in QST during the past year?
>
> "Mogens Kristiansen, OZ1CXX" wrote:
>
> > I heard that the PWR Supply from a microwave can be modified to
> > supply a PA tube with 2-2,5 Kv.
> > Sounds interesting to me.
> > Anyone with experience reg. rectifier, filter capacitor etc.
> >
> > 73 de OZ1CXX, Mogens

See the ARRL publication QEX: Forum for Communications Experimenters, January/February 1998 issue, page 47, "Build a High-Voltage Power Supply at Low Cost."
73

Randy L. Henderson, WI5W

1018. LPWS 10k! 8401

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-08 00:00:00 UTC
From: bajones@worcester.demon.co.uk
Message-ID: <378451cb.0@news1.mcmail.com>
Source record: 68764
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

Greetings

The new and improved LPWS web site is just coming up for 10,000 hits! We only need a few hundred more. Can you drop by and push us over this milestone before the weekend?

http://www.laughingpoliceman.com

Additions and suggestions welcome!

73s G8ASO

crxnnivvsidjhjwoldehynggmbvivjxlxhcnkwetgwdhuhbqufkbfgupkntrpppxricbytteqyvjbfiliejwoxsexk
rgbbcktordchtnkiwqxlyljrttxudlmmhzcwljpvmvqrjjwuxdjgdgiqetehfzmnfzqmwjpxeeogrhldqxgxxirthx
fncjhidhqcoxeokethxtpcryntnguvsgzwyciqrwxyqpqouvdzfiqmsjbbcncrgtkpxqzhovllgworbgnurnccjctz
trxckojyfqtbkecsnifstkyvnxgqhgpyshtswpshxnyqvvterlbmqihmwyozetkfcvymiylvfxbxozkbvumrjcjzxh
mxquczcwydlqkwhhjrfpwoewxenrfqtijejhppuxfkvrorgejplsedvhtsuf

1019. service manual or photocopy for Swan700 cx tranceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-08 00:00:00 UTC
From: brendantmurphy@tinet.ie
Message-ID: <7m1m16$20n$1@scotty.tinet.ie>
Source record: 68765

Looking for service manual or photocopy for Swan 700cx tranceiver or and related service data Tks

1020. Re: lower cost RF design software ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-08 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <1FD+aJA2uEh3EwqT@ifwtech.demon.co.uk>
Source record: 68766

Oliver Huang wrote:
> Some of the often heard tools used in microwave circuit design
>seems to be Harmonica from Ansoft (SuperCompact) or Tuch-Stone Libra
>of EEsof series from HP; yet these software packages cost a lot
>(for one that doest two or three small RF projects a year). Are there
>any other lower cost microwave circuit design software available?

SCALC (at www.marsport.demon.co.uk) is an S-parameter based analysis
program including an optimizer.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

1021. Schematic of QSK-5

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-08 00:00:00 UTC
From: Igor <un7gm@qsl.net>
Message-ID: <7m2g9pftn2@mail.nursat.net>
Source record: 68767

Hi folks,
I'd like to find the schematic diagram of QSK-5 unit which used in
Ameritron amplifiers.
Anybody help please.
Igor UN7GM@QSL.NET

1022. transmitter designs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-08 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <3784C922.9BA40444@midwestmicro-tek.com>
Source record: 68768

I just came into possesion of 4 like new 807 tubes. I'm looking for transmitter designs using them. Anyone got any good references?

1023. Re: transmitter designs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-08 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <3784E30B.10259486@teleport.com>
Source record: 68769

See if you can find an ARRL Radio Amateur's Handbook from about the end of WWII (when surplus 807s became plentiful) and about the mid-60's. They'll contain at least one 807 transmitter (almost surely with a 6AG7 oscillator). Or maybe you can find someone with the schematic for a Viking Adventurer or one of the popular rigs of the era which used 'em.

I recall having a large box full of 807s. Gave them away when I moved in '61. At one point I had a rig with a pair of 807s, modulated by a pair of 807s, all homebrew. Have fun!

Roy Lewallen, W7EL

Rick Haub wrote:
>
> I just came into possesion of 4 like new 807 tubes. I'm looking for
> transmitter designs using them. Anyone got any good references?

1024. Re: transmitter designs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-08 00:00:00 UTC
From: Mike Silva <mjsilva@jps.net>
Message-ID: <7m2ncj$p6a$1@its.hooked.net>
Source record: 68770

Any ham magazine from the late '30s thru maybe the early '60s, ARRL and E&E Handbooks, QST CDROMs from the above dates,... Are you looking for a simple MOPA CW transmitter or something more elaborate?

73,
Mike, KK6GM

Rick Haub wrote in message <3784C922.9BA40444@midwestmicro-tek.com>...
>I just came into possesion of 4 like new 807 tubes. I'm looking for
>transmitter designs using them. Anyone got any good references?
>

1025. Re: transmitter designs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-08 00:00:00 UTC
From: cartercook@aol.com
Message-ID: <19990708161740.20728.00001301@ng-fb1.aol.com>
Source record: 68771

>I just came into possesion of 4 like new 807 tubes. I'm looking for
>transmitter designs using them. Anyone got any good references?
>

The earliest xmtr article using an 807 in QST is in the September,1938 issue, pp 14-18 called "A Five Band Switching Exciter with 807 Output". I'm sure there are others in the handbooks as well. If you're interested in this article, I'll get a copy to you.

Carter
W5URW
Carter Cook

1026. WTD: notch filter or plans for notch filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-08 00:00:00 UTC
From: Michael Smith <mjs@nolnet.net>
Message-ID: <729h3.922$cO4.26203@news12.ispnews.com>
Source record: 68772
Cross-posted to: rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.swap,rec.radio.swap

I am looking for a cavity notch filter or plans for building a notch filter. I am not sure if a single notch filter would be tight enough. I am trying to notch out a undesired signal in band. I run a UHF repeater and I have a bad desense problem. I use a good bandpass notch duplexer and have added a DCI bandpass filter (the repeater is in a very high RF environment). I just found the source of my problems, in band. A near by amateur UHF packet station. I need to notch out this frequency that is only about 1.8 MHz away.

Any ideas???

Mike

1027. LPWS 10k! 8401

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-08 00:00:00 UTC
From: Brian Jones <bajones@worcester.demon.co.uk>
Message-ID: <PsNFIQAHCSh3EwPd@worcester.demon.co.uk>
Source record: 68773
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

In article <378451cb.0@news1.mcmail.com>, bajones@worcester.demon.co.uk
writes
>Greetings
>
>The new and improved LPWS web site is just coming up for 10,000 hits! We only
>need a few hundred more. Can you drop by and push us over this milestone before
>the weekend?
>
>http://xxx.xxxxxxxxxxxxxxxx.com
>
>Additions and suggestions welcome!
>
>73s G8ASO
>
>

Greetings

The pirates are, unfortunately, alive and well on Internet as well as
on amateur radio!

The above item was not published by or on behalf of myself. Any
message issued by me originates via demon.co.uk

Brian

--
Brian Jones Worcester, United Kingdom
Amateur radio G8ASO @ G8ASO.GB7GLO.#46.GBR.EU
mailto: bajones@worcester.demon.co.uk

1028. WTD: notch filter or plans for notch filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-08 00:00:00 UTC
From: Michael Smith <mjs@nolnet.net>
Message-ID: <Adah3.1179$X3.68022@typ32b.nn.bcandid.com>
Source record: 68774
Cross-posted to: rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.swap,rec.radio.swap

I am looking for a cavity notch filter or plans for building a notch filter. I am not sure if a single notch filter would be tight enough. I am trying to notch out a undesired signal in band. I run a UHF repeater and I have a bad desense problem. I use a good bandpass notch duplexer and have added a DCI bandpass filter (the repeater is in a very high RF environment). I just found the source of my problems, in band. A near by amateur UHF packet station. I need to notch out this frequency that is only about 1.8 MHz away.

Any ideas???

Mike

Please E-mail responses to: mjs@nolnet.net

Sorry for duplicate forgot E-mail address.

1029. 10m antenna design needed..

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-08 00:00:00 UTC
From: nall <nall@pa.dec.com>
Message-ID: <Pine.OSF.4.05.9907081616560.28975-100000@bogart.pa.dec.com>
Source record: 68775

hello.
i don't know a great deal about antennas (other than basic functionality).
i just got a 10m rig, and want to build an antenna for it. i live in an
apartment, so size is pretty crucial. any pointers to projects such as
this, or jumping off points are greatly appreciated.

thanks.
jonathan.

jonathan n. nall
nall@pa.dec.com
650-853-6508
DTN: 543-6508
KF6UKP

1030. Re: Ham-Homebrew Digest V99 #167

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-09 00:00:00 UTC
From: birdsong@wt.NET
Message-ID: <378566F2.56BC@no-spam.net>
Source record: 68683

> Date: 7 Jul 1999 21:59:57 GMT
> From: dgf@netcom.com (David Feldman)
> Subject: Limiting full-charge output voltage of NiMh battery
>
> Trying out a 12-Cell NiMh battery to run a HF rig here. At full
> charge the battery ends up at about 17V. I am concerned about
> damage to the rig so I bypassed two cells and get full charge
> voltage of about 14V. During transmit, the battery (with two
> cells bypassed) drops to 10.5V or so at voice peaks (100W rig).
> That's expected (the voltage drop) but...
>
> I'd like to find out is how to keep all 12 cells in the battery
> (better voltage during voice peaks, etc.) but not kill the rig
> when the charge is full and the rig is receiving.
>
> I thought of using a power op-amp that would be in saturation
> whenever the supply voltage is below 14V, and set at output of
> 14V when the supply voltage is above 14V, but my current peak
> (20A) might make this not the best solution. A voltage regulator
> doesn't seem like a good idea because I'd like to continue using
> the 12 cell battery until it's voltage drops below 12V. A shunt
> (zener-style) regulator might be OK but it seems a waste to
> force the battery down to an acceptable voltage (14.5V or so?)
> before starting to use it, after charging.
>
> Any other ideas?
>
> 73 Dave WB0GAZ dgf@netcom.com

You might look into a buck-boost switching regulator. Check the Linear Tech web site for some semis and app notes that might help you get started.

1031. FS: G3RUH 1200 baud modem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-09 00:00:00 UTC
From: Gary Lee Calvert <gcalvert@iquest.net>
Message-ID: <cBzh3.1536$y4.4419@news1.iquest.net>
Source record: 68684
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,alt.ham-radio.packet

On ebay auction http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=129247701

1 G3RUH 1200 baud modem. Unfinished project. Assembled but never used. No transformer. All other components are mounted. Meter is also included. Has assembly/instruction booklet for connecting to AEA PK232, PK64, PK87, and Pac-Comm TNC 220. Buyer pays actual shipping from Kokomo, Indiana.

PIX URL at http://members.iquest.net/~gcalvert/images/modem.jpg and
http://members.iquest.net/~gcalvert/images/meter.jpg

73 WB9SMX
--
Gary Calvert
mailto:gcalvert@iquest.net http://www.iquest.net/~gcalvert/home.html

1032. FS: Power Tubes & Sockets

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-09 00:00:00 UTC
From: Marv_E_Ads@Juno.com
Message-ID: <7m3elnrcp1@nnrp1.deja.com>
Source record: 68776

4-1000A used ok, Amperex $100
450TL little used Amperex $100
4-400A used tested good $40 ea
3-400Z weak pair $50
4CX250B used good $20
4CX250F used tested good $20 ea
4CX250FG used tested good $30 (one left)
4X150A pull (one left) $5
4X150D pulls $5 ea
4-125A little used $10 ea.
WL 1B41 Westinghouse (radar spark gap?) $10 ea

and an ....

Eimac 4CW100000D (yes, that is the correct number of 000's)
with Socket mounted in very professionally made subchassis
and FIlament transformer (10V 295A)
plus Radiator and plumbing
$2000 USD plus shipping, if necessary

This tube was used in a piece of test equipment as a series
regulator!, mostly for it's voltage handling capability and dissipation
characteristics. The plate circuit was connected with #22 wire that
really looked out of place!!! :-)

********** SOCKETS **********

Eimac SK 510 sockets(for 4-1000A)
"New" shiny (the filament pins were once connected) $55
New, tarnished from sitting around 30 years $45
Used SK 510 sockets $30 ea
Overused SK 510 socket $15

Johnson 122-275 5 pin giant socket (for 3-400Z, 3-500Z, 4-400A)
used, but very clean & shiny $30 pair

New chimneys for 3-400Z $10 ea

Eimac SK 610 (cathode grounded) 4CX250 family sockets used $30 pair
Eimac SK 606 Chimneys like new! :-) $10 ea.
Eimac SK 626 Chimney $10

Johnson 122-244 4 pin super jumbo tube sockets EIA bases
A4-14, A4-15 & A4-18 New (bright) $12, new (dull) $8,, used $5 ea

Used "ring" style 4 pin sockets with a small metal post similar to
Johnson 122-234, fit 5D21, 705A, 715A/B (per the Johnson catalog) $5

ea

All of the above plus shipping if necessary, naturally! :-)

Contact Marv, WC6W, 310 649 3111 (reasonable hours Pacific Time please) or via: Marv_E_Ads@Juno.com

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1033. Schematic for Rotator pot.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-09 00:00:00 UTC
From: Hansanter <shbcommm@indigo.ie>
Message-ID: <37853D2D.1872F73F@indigo.ie>
Source record: 68777

Hi all,

Can anybody describe or send an image of a circuit that would be used in an antenna rotator/rotor unit to determine the heading of the antenna. I've built my own rotator and I'm curious as to the methods commercially used. I know a potentiometer is commonly used with an analogue meter.

Regards

Terry Gaff

1034. Re: BOB Pleaser: Mosley MPK-3 available

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-09 00:00:00 UTC
From: rjburden@bigpond.com
Message-ID: <378553e2.65327789@news.bigpond.com>
Source record: 68778

It's OK,
he has just gone into my permanenet kill file list!!! He obviously
doesn't have anything of relevance for this group, and therefore one
could assume for any other.

Richard
On Tue, 06 Jul 1999 22:18:39 -0500, "Clifton T. Sharp Jr."
<clifto@corecomm.net> wrote:

>John Habs wrote:
>>
>> This is formatted to please the internet cop Bob Headrick,I will not
>> mention or use the word FORSALE,but I have available to any homebrewer or
>> experimenter who would like to make a three band dipole or even a three band
>> beam a mosley mpk-3.this is all the aluminium and traps to make either the
>> ta-33jr into a full power beam or the ta32jr.I would like to trade either 90
>> george wasingtons or 18 abe lincolns or 9 jacksons or 4 hamiltons and 1
>> jackson or any combination of these items so long as it totals 90 dollars.I
>> will also except in trade a money order filled out in such a way that it
>> reads ninety dollars and no cents. John
>
>And knowing in advance this doesn't belong in this newsgroup, you posted
>it here anyway instead of in rec.radio.swap where it belongs? Or in
>rec.radio.amateur.antennas, where it would still be spam but at least be
>on topic?
>
>So, basically, you're going out of your way to be nasty. Is that it?

1035. Looking for 75m transverter design

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-09 00:00:00 UTC
From: corryAT@eburgDOT.com
Message-ID: <37856ea5.458597213@news.aa.net>
Source record: 68779

Hello to ya'll, anyone have a tried and true design for a 10m to 75m transverter? I have a multi mode handheld transciever that would work great for the IF for a 75m tranvertor. I figured a tranverter would be better/easier then building up a multi mode homebrew rig. Also, any comments on Dans 75m SSB Centenial (sp) qrp kit? Or perhaps some hints or kinks on a 75m transverter would help. I was getting ready to start building one up myself and figured I would ask first just in case any designs are out there already.
-Dave
corry AT eburg DOT com

1036. High Voltage Regulator Circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-09 00:00:00 UTC
From: Dr Mike Addlesee <maddlesee@uk.research.att.com>
Message-ID: <7m4ju3jcp1@pegasus.csx.cam.ac.uk>
Source record: 68780

Hi, I'm looking for a good/elegant (semiconductor based) regulator circuit for output voltages of approximately 350V(@~50mA) and 550V(@~150mA) (input voltage is ~650V). Any recommendations?
--
Mike Addlesee
M0BLP

1037. Re: High Voltage Regulator Circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-09 00:00:00 UTC
From: "Mr. Muckle" <jdwalton@home.com>
Message-ID: <37862C7C.197CE4E8@home.com>
Source record: 68781

Check out the Motorola MC33369 series of HV voltage regulators.

Dr Mike Addlesee wrote:

> Hi, I'm looking for a good/elegant (semiconductor based) regulator circuit
> for output voltages of approximately 350V(@~50mA) and 550V(@~150mA) (input
> voltage is ~650V). Any recommendations?
> --
> Mike Addlesee
> M0BLP

1038. Re: High Voltage Regulator Circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-09 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <K$$RUGAESeh3EwPF@ifwtech.demon.co.uk>
Source record: 68782

Dr Mike Addlesee wrote:
>Hi, I'm looking for a good/elegant (semiconductor based) regulator circuit
>for output voltages of approximately 350V(@~50mA) and 550V(@~150mA) (input
>voltage is ~650V). Any recommendations?

For shunt regulators, there are some ideas in the QEX article
downloadable from my web pages. For a series regulator, there's a
circuit on AG6K's site, http://www.vcnet.com/measures/

Either configuration may be workable, depending on the nature of your
load.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

1039. Where can I find TRW RF power transistors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-10 00:00:00 UTC
From: ross@hypertools.com
Message-ID: <37869b89.33997310@news.willapabay.org>
Source record: 68685

hello -

Does anyone know where I can purchase TRW RF power transistors?

Is TRW still in that line of work?

If not, did TRW sell that business to another company?

I'm looking for a TRW PT4370A, a transistor from some gear built in
the early '80s. (May also need other TRW pieces, depending what else
I find broken...)

73 and thanks for any help
Dave Ross N7EPI ross@hypertools.com

1040. Re: Where can I find TRW RF power transistors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-10 00:00:00 UTC
From: wb4lnm@aol.com
Message-ID: <19990709213110.08945.00004207@ng-fn1.aol.com>
Source record: 68686

>hello -
>
> Does anyone know where I can purchase TRW RF power transistors?
>
> Is TRW still in that line of work?
>
> If not, did TRW sell that business to another company?
>
> I'm looking for a TRW PT4370A, a transistor from some gear built in
>the early '80s. (May also need other TRW pieces, depending what else
>I find broken...)
>
>73 and thanks for any help
>Dave Ross N7EPI ross@hypertools.com
>
>
>
>
>
>
>
>
>Subject: Where can I find TRW RF power transistors?
>Path:
>lobby!newstf02.news.aol.com!portc02.blue.aol.com!howland.erols.net!hub1.i
spnews.com!typ32b.nn.bcandid.com.POSTED!not-for-mail
>From: ross@hypertools.com (David Ross)
>Newsgroups: rec.radio.amateur.homebrew
>Message-ID: <37869b89.33997310@news.willapabay.org>
>X-Newsreader: Forte Free Agent 1.11/32.235
>Lines: 14
>NNTP-Posting-Host: 209.51.89.102
>X-Trace: typ32b.nn.bcandid.com 931568836 209.51.89.102 (Fri, 09 Jul 1999
>21:07:16 EDT)
>NNTP-Posting-Date: Fri, 09 Jul 1999 21:07:16 EDT
>Date: Sat, 10 Jul 1999 01:07:09 GMT
>
>

Most of TRW's RF power line was sold to Motorola Semiconductor Products. Since MSP has now been sold, too, you might want to get what you can find as fast as possible.

Have you talked to Richardson about the RF devices? They are pretty good about cross referencing. I see nothing in my 1979 TRW power BJT catalog named a

PT4370A.

John...

John H. Klingelhoeffer
WB4LNMxx@aol.com (remove xx for real address)

1041. Dentron Clipperton-L bandswitch help....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-10 00:00:00 UTC
From: Tim <tvendt@kear.tds.net>
Message-ID: <01beca85$48ce66e0$1f9347cc@default>
Source record: 68687

Greetings... I have a Clipperton L that has a roasted
bandswitch....actually it roasted many moons ago and I just hardwired the
output tank for 20 mtrs but now would like to get a bandswitch and
reinstall it so I can QSY a little easier. Does anyone have any ideas where
one might latch onto a switch that would work?? I'm wondering if a switch
that works in an Ameritron or the like could be made to work in the
Dentron. Has anyone ever replaced the switch? What did you use???? Thanks
in advance for your help.....
Tim KB1MM

1042. Re: homebrew me this batman

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-10 00:00:00 UTC
From: Mark Johnson <mark5104@bellsouth.net>
Message-ID: <NWEh3.1843$qY3.10527@news4.atl>
Source record: 68688

I like the one about shooting one's self in the feet....Ouch thats a good one!!
Like the man said ! and Like i say piss on them snerts!!
They are every where bitching about nothing just wanting to hear themselfs make noise!
All have that same smelled something rotten look on the face!
One reason I never went and got my license,Ass holes like that are allover the ham radio
bands whining about something.

<TLNixon@revealed.net> wrote in message
news:37840c75.19487037@news.revealed.net...
> Don't feel bad John,
> I posted a "Tongue-in-cheek" message about a 2 meter power mic for
> sale and got similar response.
>
> It's a shame there are people who take themselves far too seriously in
> almost anything one wants to do!
>
> Call them "Purists," "Holier than thou,", or what you called them.
>
> Just ignore them, they are too busy shooting themselves in the feet!
>
> Terry-WB0VQP
>
>
> On Wed, 07 Jul 1999 12:19:46 GMT, jhabs@worldnet.att.net (John Habs)
> wrote:
>
> >When I originally posted my message in this newsgroup as to the
> >forsale of one Mosley MPK-3 kit I thought and still do that I was
> >making a proper posting as to bringing to the attention of homebrewers
> >and experimenters alike a piece of equipment to the group.Then I get
> >E-mail from Bob Headrick and Cliff Sharp to what they think I or we
> >should post in this newsgroup...well opinions are like
> >assholes,everyone has one.I will continue to use the internet and
> >newsgroups the best way that I see fit and hope others will not be
> >intimidated by these two newsgroup cops.I know there will be replies
> >to this post as to the pros and cons and also to the validity of
> >posting this here,but as being the time of the season(July 4th)this is
> >what makes our country so great...Freedom to think and do what you
> >will and not to be forced to think singularily than individually.So
> >Bob and Cliff as you scroll down through the message board if you see
> >something you don't like...just keep going,it is only one line in the

> >row of many. John
>

1043. Re: 10m antenna design needed..

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-10 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <7m7efh$99c$1@plutonium.btinternet.com>
Source record: 68689

Jonathon,

It is always a good idea to begin with the most simple antenna even when you are blessed with a very large back yard.

The most simple antenna can be erected in a few minutes at negligible cost of materials. Get the feel of things with it. Then erect a slightly more complicated antenna and make some comparisons. Keep simple records of signal stength particularly of reception of local and distant radio beacons including date and time of day.

For the 10m band I suggest you begin with a simple dipole, fed in the centre with 50 or 75-ohm coaxial line straight into the rig. Dipole end-to-end length = 5 metres = 200 inches. Not critical within plus / minus 6 inches or so.

The dipole wire can be any sort, bare, enamelled or plastic insulated. Any old scrap stuff will do. Any gage from 26 to 14. The smaller wire diameters will be almost invisible outdoors.

End insulators :- 1.5 to 3 inches of any sort of plastic rod or bar or strip with holes drilled in each end.

The dipole, indoors or outdoors, need not be in a straight line. The ends can be bent downwards to form an inverted U ot V. Or one end bent sideways and the other end bent in another direction. It doesn't matter provided the end is not bent back through an angle greater than 90 degrees..

If you are really stuck for space then bend the ends round to form a square with the side opposite the feeder missing. But don't expect too much from a dipole of thin wire with its ends close together.

Most important characteristic of an antenna is its unobstructed height above ground in terms of wavelength. At one wavelength above ground, in your case 10 metres = 33 feet, you will be going places.

If you havn't enough space for any of the foregoing, come back to this newsgroup.
--
Regards, Reg G4FGQ Click Below.
http://www.btinternet.com/~g4fgq.regp

nall wrote
> i don't know a great deal about antennas (other than basic functionality).
> i just got a 10m rig, and want to build an antenna for it. i live in

an
> apartment, so size is pretty crucial. any pointers to projects such
as
> this, or jumping off points are greatly appreciated.
>
> thanks.
> jonathan.
>
> jonathan n. nall
> nall@pa.dec.com
> 650-853-6508
> DTN: 543-6508
> KF6UKP
>
>

1044. Teflon coated wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-10 00:00:00 UTC
From: jeraa2t@ma.ultranet.com
Message-ID: <3787450a.728841@news.ma.ultranet.com>
Source record: 68690

I haven't been able to find a good supply of Teflon coated 20-12g
wire.
Any suggestions welcome.
Tnx
Jerry Rogich AA2T

1045. FS:HALLICRAFTER cabinets

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-10 00:00:00 UTC
From: John Williams <ac6tsXX@n2.net>
Message-ID: <378752ec.0@wagner.n2.net>
Source record: 68691

```
>-- >I am posting this for a friend, Konrad Wallenda <n6uko@juno.com>
>>Konrad is the treasurer of our local Escondido Amateur Radio Society.
>>Shipping zip 92025 CA. Any replies send to Konrad not me please.
>>>
>>>FOR SALE
>>
>>> 2 Hallicrafter Cabinets SX101 Style, hinged top. No dents or holes
>>> or deep scratches.
>>> $ 35.00 Dollars each
> You pay for shipping
>>
>>Please contact Konrad if interested <n6uko@juno.com>
>>--
>
>
--

---/---
---/---
----/----
-----/-----

AC6TS John Williams
LAT. 33.06.15 LON. -117.03.36 7.030Mhz CW
DM13KC 14.030Mhz CW
```

1046. 3SK122 info required

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-10 00:00:00 UTC
From: David Greenberg <daivi248@iol.co.il>
Message-ID: <7m7rutafm1@news2.inter.net.il>
Source record: 68692

Hi,

Can anybody help in finding the data sheet for the 3SK122 GaAsFET?
Is there any Web site that contain that info?

Thanks

1047. Re: Teflon coated wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-10 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19990710160856704 32@zetnet.co.uk>
Source record: 68693

> I haven't been able to find a good supply of Teflon coated 20-12g
> wire.
> Any suggestions welcome.
> Tnx, Jerry Rogich AA2T
==========
This type of wire is sometimes offered on this NG. It can also be
found at ham radio flea markets.
I bought 2 rolls of AWG 24 (hence slightly thinner than what you
need) at a flea market .
Cost : equiv. US$ 12.- for 250 metres (approx. 800 ft) . Wire is
7 strands ,silver plated
Nice for winding RF toroids.

73 Frank GM0CSZ / KN6WH

Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland UK
e-mail : gm0csz.kn6wh@ukrs.org

1048. Re: Dentron Clipperton-L bandswitch help....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-10 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19990710161515704 32@zetnet.co.uk>
Source record: 68694

> Greetings... I have a Clipperton L that has a roasted
> bandswitch....actually it roasted many moons ago and I just hardwired the
> output tank for 20 mtrs but now would like to get a bandswitch and
> reinstall it so I can QSY a little easier. Does anyone have any ideas where
> one might latch onto a switch that would work?? I'm wondering if a switch
> that works in an Ameritron or the like could be made to work in the
> Dentron. Has anyone ever replaced the switch? What did you use???? Thanks
> in advance for your help.....
> Tim KB1MM
==========
It might be useful for readers of this NG to know what the switch is
supposed to do ,ie number of decks and switch positions. Insulation
is probably ceramic .

73 Frank GM0CSZ / KN6WH

1049. Antenna Solver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-10 00:00:00 UTC
From: ulrich@gsolver.COM
Message-ID: <37877C05.294367C5@gsolver.com>
Source record: 68695

You or individuals in your net/club may be interested in Antenna Solver,

a general purpose antenna structure analysis program. Information
is available at http://www.gsolver.com There is a free fully
functional demo download, and special discounts for Hams

regards
David Fluckiger
KJ5AT

1050. crystal load capacitance ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-10 00:00:00 UTC
From: Don <bjmcpher@usit.net>
Message-ID: <3787886A.3F411A42@usit.net>
Source record: 68696

I'm building a freq counter using a PIC 16F84 chip. These usually have a bout 20pf of capacitance on both the oscillators input and output. I want to use a trimmer (maybe a 10-40pf?) to substitute for one of these caps so I can vary the clock very slightly to get a fine calibration of the counter. Should I put the trimmer on the clock input or the clock output?

Don

1051. HBR web page

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-10 00:00:00 UTC
From: robertc908@aol.com
Message-ID: <19990710154510.06504.00009674@ng-fo1.aol.com>
Source record: 68697

For those of you interested in the HBR Receivers presented in a series of construction articles in QST in the late 50s and 60s, we now have a functional HBR Receiver Web Site at http://www.inetport.com/~talen/
.....with operational links to a great HBR Receiver photo database (and growing).
73's
Bob, W4RLC (formerly WA7OGU)

1052. Re: Where can I find TRW RF power transistors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-10 00:00:00 UTC
From: bw201@torfree.net
Message-ID: <FEo7wz.JoK.0.queen@torfree.net>
Source record: 68698

Motorola bought up the RF division of TRW and continues to produce the PT series of transistors.

David Ross (ross@hypertools.com) wrote:
: hello -

: Does anyone know where I can purchase TRW RF power transistors?

: Is TRW still in that line of work?

: If not, did TRW sell that business to another company?

: I'm looking for a TRW PT4370A, a transistor from some gear built in
: the early '80s. (May also need other TRW pieces, depending what else
: I find broken...)

: 73 and thanks for any help
: Dave Ross N7EPI ross@hypertools.com

1053. Re: crystal load capacitance ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-10 00:00:00 UTC
From: Rocci <rocci@worldnet.att.net>
Message-ID: <3787B23E.5C32042C@worldnet.att.net>
Source record: 68699

First of all, insure that the chip's oscillator circuit excites the
crystal's parallel resonant mode, otherwise you won't be able to pull it at
all. If the Input and Outut pins are connections to an inverter, you're OK.
If there is no inversion, the crystal will come up in the series mode.
Second, be sure that the crystal you're using has been marked for its
parallel resonant frequency. Many garden variety microporcessor clock
crystals from catalogs are marked for their series mode.
Assuming everything is set up as above, you should put your trimmer on the
input side of the oscillator inverter.

Joe
WA3CMQ.

Don wrote:

> I'm building a freq counter using a PIC 16F84 chip. These usually have a
> bout 20pf of capacitance on both the oscillators input and output. I
> want to use a trimmer (maybe a 10-40pf?) to substitute for one of these
> caps so I can vary the clock very slightly to get a fine calibration of
> the counter. Should I put the trimmer on the clock input or the clock
> output?
>
> Don

1054. GE MASTR II

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-10 00:00:00 UTC
From: jmull1997@aol.com
Message-ID: <19990710171412.12226.00001242@ng-fs1.aol.com>
Source record: 68700

I just received a GE MASTR II and was wondering how much would it cost to change it to six meters and what kind of tuning would be involved.....Thanks

1055. Need bandswitch

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-10 00:00:00 UTC
From: zeitler@ibm.net
Message-ID: <3787e76f@news1.us.ibm.net>
Source record: 68701
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

I am looking for a bandswitch that will handle 1500 watts with ease for an HF amplifier. Must be 8 positions minimum with 3 poles. Must be very well built and very rugged.

Lane
Ku7i
San Diego

1056. Earth's Natural Resonant Frequency: TX tests

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-10 00:00:00 UTC
From: Will White <wcw@uswest.net>
Message-ID: <37881F42.F5E50FB8@uswest.net>
Source record: 68702

Has anyone since Tesla tried to modulate, or even generate unmodulated, RF at the planets 0.7 Hz resonant frequency. Now, *that* might yield some interesting DX! Hey, its only 428571428.6 meters! What a loading coil!
--
Will White, KD7BFX

to reply, please click this link mailto:wcw@uswest.net

1057. Re: homebrew me this batman

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-10 00:00:00 UTC
From: Will White <wcw@uswest.net>
Message-ID: <37882035.30A9D447@uswest.net>
Source record: 68703

So why, pray tell, are you still hanging around? The squeaky wheel gets the grease. The no-goodnik, sour-faced braggart hams are the vocal minority. That's what the tuning knob is for! It's a shame you chiucked this great hobby of ours because of a few noisy malcontents.

Mark Johnson wrote:
>
> I like the one about shooting one's self in the feet....Ouch thats a good
> one!!
> Like the man said ! and Like i say piss on them snerts!!
> They are every where bitching about nothing just wanting to hear themselfs
> make noise!
> All have that same smelled something rotten look on the face!
> One reason I never went and got my license,Ass holes like that are allover
> the ham radio
> bands whining about something.

--
Will White, KD7BFX

to reply, please click this link mailto:wcw@uswest.net

1058. Re: homebrew me this batman

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-11 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <3789290E.2260EC92@corecomm.net>
Source record: 68633

```
hitubefi@my-deja.com wrote:
> >I have seen this on other groups as well.I don't know what your
> post was and I don't care.As long as someone stays basically in bounds
> of the tone of the kind of postings that are on a newsgroup,they should
> be able to post what they want.

You know, you've hit on the very reason his posting didn't belong here.

--
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
```

1059. Re: Response of Dielectric Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-11 00:00:00 UTC
From: "Al, N2NKB"
Message-ID: <7mbcln$2jv$1@bgtnsc02.worldnet.att.net>
Source record: 68634

Peter Bolch wrote in message <7m9l04$lt9$1@news.netcologne.de>...
>Hi,
>
>is the filter response of dielectric filters repeated periodically?

Inderdigital yes, and combline has moding depending upon geometry. Most engineers
follow bandpass filters with "clean up" filters that act as low pass filters above
the passband if there is a problem.
Al

1060. Re: PC RF getting into my HF rigs!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-11 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <7mbjif$a7k$1@autumn.news.rcn.net>
Source record: 68635

Sometimes you can reduce monitor noise by changing the resolution.
Make sure your coax cables are routed away from the monitor. Try
placing one of those large ferrite beads over the monitor cable (many
monitors come with them all ready installed).

> > Help! I am going nuts trying to figure out how to stop my PC
monitor
> > from ruining the 15 and 20 meter bands with the awful buzzing.
Any
> > quick and dirty ideas?
> > I'm about to grab a sheet of lead and wrap the darn thing with
it.....
> > Jim KY7DX

1061. Looking for RF Books

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-11 00:00:00 UTC
From: Peter Bolch <nc-bolchpe@netcologne.de>
Message-ID: <7mbrjgqsr1@news.netcologne.de>
Source record: 68636

Hi,

I'm looking for a not too academical book about RF circuits and techniques,
especially for frequencies above 1 GHz. Something like a "RF version" of
"The Art of Electronics" or Tietze/Schenk's "Advanced electronic circuits".

Peter

1062. Re: Where can I find TRW RF power transistors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-11 00:00:00 UTC
From: wizard@eskimo.com
Message-ID: <3787eb9d.258474409@eskinews.eskimo.com>
Source record: 68704

Do you have any specs on this TRW transistor? I have quite a few
different PTXXXX transistors in my junk box.

Technofreak

On 10 Jul 1999 01:31:10 GMT, wb4lnm@aol.com (WB4LNM) wrote:

>>hello -
>>
>> Does anyone know where I can purchase TRW RF power transistors?
>>
>> Is TRW still in that line of work?
>>
>> If not, did TRW sell that business to another company?
>>
>> I'm looking for a TRW PT4370A, a transistor from some gear built in
>>the early '80s. (May also need other TRW pieces, depending what else
>>I find broken...)
>>
>>73 and thanks for any help
>>Dave Ross N7EPI ross@hypertools.com
>>
>>
>>
>>
>>
>>
>>
>>
>>Subject: Where can I find TRW RF power transistors?
>>Path:
>>lobby!newstf02.news.aol.com!portc02.blue.aol.com!howland.erols.net!hub1.i
>spnews.com!typ32b.nn.bcandid.com.POSTED!not-for-mail
>>From: ross@hypertools.com (David Ross)
>>Newsgroups: rec.radio.amateur.homebrew
>>Message-ID: <37869b89.33997310@news.willapabay.org>
>>X-Newsreader: Forte Free Agent 1.11/32.235
>>Lines: 14
>>NNTP-Posting-Host: 209.51.89.102
>>X-Trace: typ32b.nn.bcandid.com 931568836 209.51.89.102 (Fri, 09 Jul 1999
>>21:07:16 EDT)
>>NNTP-Posting-Date: Fri, 09 Jul 1999 21:07:16 EDT
>>Date: Sat, 10 Jul 1999 01:07:09 GMT
>>
>>

>
>Most of TRW's RF power line was sold to Motorola Semiconductor Products. Since
>MSP has now been sold, too, you might want to get what you can find as fast as
>possible.
>
>Have you talked to Richardson about the RF devices? They are pretty good about
>cross referencing. I see nothing in my 1979 TRW power BJT catalog named a
>PT4370A.
>
>John...
>
>
>John H. Klingelhoeffer
>WB4LNMxx@aol.com (remove xx for real address)

1063. Re: Dentron Clipperton-L bandswitch help....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-11 00:00:00 UTC
From: Tim <tvendt@kear.tds.net>
Message-ID: <01becb3a$e7d091e0$699347cc@default>
Source record: 68705

Frank Dinger <frank.dinger@zetnet.co.uk> wrote in article
<19990710161515704 32@zetnet.co.uk>...
> > Greetings... I have a Clipperton L that has a roasted
> > bandswitch....actually it roasted many moons ago and I just hardwired
the
> > output tank for 20 mtrs but now would like to get a bandswitch and
> > reinstall it so I can QSY a little easier. Does anyone have any ideas
where
> > one might latch onto a switch that would work?? I'm wondering if a
switch
> > that works in an Ameritron or the like could be made to work in the
> > Dentron. Has anyone ever replaced the switch? What did you use????
Thanks
> > in advance for your help.....
> > Tim KB1MM
> ====================
> It might be useful for readers of this NG to know what the switch is
> supposed to do ,ie number of decks and switch positions. Insulation
> is probably ceramic .
>
> 73 Frank GM0CSZ / KN6WH
> ======================
> Well, if it'll help... here is the low down on the switch....It is a
three wafer, 5 position switch. It appears that the two rear wafers are
"shorting" type. The rear most wafer has four contacts, four being band
positions and the 5th position is empty. The middle wafer has 5 contacts...
four of them in the same position as the rear one and the 5th contact is
the wiper that shorts the other positions as the switch is turned. the
front wafer has two contacts that are shorted together by the wiper when it
is in the max ccw (160mtr) position. Hope this helps
KB1MM

>
>
>

1064. PC RF getting into my HF rigs!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-11 00:00:00 UTC
From: tatasadasayago <Jcrosley@mocc.com>
Message-ID: <37898196.F99DA5E8@mocc.com>
Source record: 68706

Help! I am going nuts trying to figure out how to stop my PC monitor
from ruining the 15 and 20 meter bands with the awful buzzing. Any
quick and dirty ideas?
I'm about to grab a sheet of lead and wrap the darn thing with it.....
Jim KY7DX

1065. Re: GE MASTR II

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-11 00:00:00 UTC
From: tatasadasayago <Jcrosley@mocc.com>
Message-ID: <37898122.88C54B08@mocc.com>
Source record: 68707

I made this conversion a few years ago with a 29-47mhz Mastr II and it cost me 30.00 for crystals and a bit of retuning. I suggest you get the service manual and crystals and have at it. A Motorola service VMM/test set is invaluable, but any decent DMM will get you by. Hope you get it done,
Jim KY7DX

J Mull1997 wrote:

> I just received a GE MASTR II and was wondering how much would it cost to
> change it to six meters and what kind of tuning would be involved.....Thanks

1066. voice recorder

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-11 00:00:00 UTC
From: ">>>Snokid<<<" <snokid@home.com>
Message-ID: <oSWh3.7786$qd.6801@news.rdc1.mi.home.com>
Source record: 68708

I'm looking for something simple I think....I want to build a digital voice recorder/playback device like MFJ sells...any help?

thanks Bob
KB8VRU

1067. Response of Dielectric Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-11 00:00:00 UTC
From: Peter Bolch <nc-bolchpe@netcologne.de>
Message-ID: <7m9l04$lt9$1@news.netcologne.de>
Source record: 68709

Hi,

is the filter response of dielectric filters repeated periodically?

Peter

1068. Re: Earth's Natural Resonant Frequency: TX tests

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-11 00:00:00 UTC
From: roncook@worldnet.att.net
Message-ID: <37897244.382543728@netnews.worldnet.att.net>
Source record: 68710

And the 1/4-wave at 107142857.15 meters should fit right on the bumper
of my Dodge Spirit...

On Sat, 10 Jul 1999 21:36:33 -0700, Will White <wcw@uswest.net> wrote:

>Has anyone since Tesla tried to modulate, or even generate unmodulated, RF at
>the planets 0.7 Hz resonant frequency. Now, *that* might yield some
>interesting DX! Hey, its only 428571428.6 meters! What a loading coil!

Ron n1zhi
roncook@att.net
cook@amsa.com (office)
n1zhi@nsradio.org
ICQ: 26516311

1069. Re: voice recorder

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-11 00:00:00 UTC
From: Clinton <cpeebles@_nospam_netidea.com>
Message-ID: <37888833.4CE3@_nospam_netidea.com>
Source record: 68711

>>>Snokid<<< wrote:
>
> I'm looking for something simple I think....I want to build a digital voice
> recorder/playback device like MFJ sells...any help?

I have an article from April/95 QST on building a digital voice recorder
from a talking greeting card.

--
Kill the MAI

Remove _nospam_ to reply

Clinton Peebles VE7KNL DN19ie
Salmo, B.C. Canada
E-Mail: cpeebles@netidea.com

1070. Recent thoughts on feeding & phasing 4 square Verticals?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-11 00:00:00 UTC
From: Rod Craddock <rod@gw4slk.freeserve.co.uk>
Message-ID: <7ma3i9$919$1@news4.svr.pol.co.uk>
Source record: 68712

Any body? Roy? Building a 4 square for 40M. 1/4Wave with a small amount of centre loading to keep elements self supporting and manageable.

Rod (GW4SLK)

1071. Re: voice recorder

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-11 00:00:00 UTC
From: "KF4FDJ (Mike in Ft. Myers, FL)" <seven77@gate.net>
Message-ID: <378895B3.BE1D97B9@gate.net>
Source record: 68713

Radio Shack has a stock item which is a digital voice chip. A few peripheral components you could be in business. Looking for a dvr for your rig? There are some soundblaster software implementations also.

73, Mike

">>>Snokid<<<" wrote:
>
> I'm looking for something simple I think....I want to build a digital voice
> recorder/playback device like MFJ sells...any help?
>
> thanks Bob
> KB8VRU

--
__\/__
| . / ^ _ \ .
| |\| (o)(o) |/|
^ --- * -----------------.OOOo--oo--oOOO.------------------ *
||| | | * Mike Gilchrist - KF4FDJ ..... AMSAT Area Coordinator *
|X| | | * P.O. Box 763 ..... AMSAT member #31884 *
[X]~~~|k| * Fort Myers, FL 33902 ..... ARRL member #1781549 *
/ \ |f| * http://www.gate.net/~seven77 telephone 941.772.7907 *
| | |4| * kf4fdj@amsat.org ..... EL96ap *
| P | |f| * I.S. Professional ..... CNA .... Computer Consultant *
| 3 |=|d| * AO10, AO27, FO20, FO29, RS13, RS15, MIR, E Layer *
| D | |j| * Bringing Oscar demos to the Lee County Schools. *
|_____|=| | *
/*X*\ | | * Black holes were created when God divided by zero. *
________|_|_____________________________Oooo._________________________
.oooO ( )
( )) /
\ ((_/
_)

1072. Re: Need bandswitch

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-11 00:00:00 UTC
From: J <ns5n@erols.com>
Message-ID: <37889F8F.AF263BF3@erols.com>
Source record: 68714
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

Have you checked Mouser Electronics? I have found that they have a
surprising amount of electronics parts. Good luck.

--
J Edgar/NS5N & Maureen/KE4GSZ send>>>

1073. CORDLESS PHONE and Scanner Radio Repairs-

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-11 00:00:00 UTC
From: THESHOPT@USA.NET
Message-ID: <3788A6BE.B03C229E@USA.NET>
Source record: 68715
Cross-posted to: rec.radio.scanner,sci.electronics.repair,rec.radio.shortwave,rec.radio.swap,rec.radio.amateur.swap,rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.digital,att.ham-radio

Most reasonable rates anywhere! Licensed Radio Operator -
WB0OAF -
See my home page!

http://www.iw.net/~theshop2/INDEX.html

1074. Re: EMP phenomena (was: Morse code)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-11 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <7maav9$d0h$1@uranium.btinternet.com>
Source record: 68716
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

> Well, much as I hate to disagree with a consultant to Our
Government,
> his physics doesn't work.
==========

Quite clearly, even after all these years, someone is still suffering
from delusions of "reds under the bed".

Reg.

1075. Counter/Stabilizer PLL Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-11 00:00:00 UTC
From: Richard Hosking <richardh@iinet.net.au>
Message-ID: <01becbac$18be7120$711e3bcb@default>
Source record: 68717

I have built 3 versions of this now - the first two work fine but the third appears to have loop instability with the VFO wandering up and down at about 0.2 Hz. The VFO on this occasion used much less capacitance in the tank circuit but the VCO excursion was the same as previous at about 5 KHz for 0-5 V. Loop filter values are as shown at

http://www.iinet.net.au/~richardh/vfostab.htm

I have spent days trying to work out the problem without success!!!
Note that ther micro generates a 2 msec pulse for 10 Hz error up to a max of 10msec for 50 Hz error. Above this the loop unlocks. Each count takes about 120 msec which is the pulse repetition rate.
Any of you professional engineers/knowledgable amateurs out there can give me an analysis of the loop for stability etc as mine is obviously incorrect

Thanks in advance
--
Richard Hosking
VK6BRO
http://www.iinet.net.au/~richardh/VK6BRO.htm
richardhzap@iinet.net.au

Delete "zap" for address
QRP/Amateur Radio/Microcontrollers

1076. Re: PC RF getting into my HF rigs!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-11 00:00:00 UTC
From: J <ns5n@erols.com>
Message-ID: <3788C614.50C4C915@erols.com>
Source record: 68718

One method I have seen (not tried) is to remove the cover from the monitor, and use heavy duty aluminum foil to line the interior. Not recommended for the faint of heart or for the sloppy kit maker as you must avoid any contact with the electronics once the procedure is completed. Don't for get to provide adequate ventilation.

--
J Edgar/NS5N & Maureen/KE4GSZ send>>>

1077. 1N82A diodes needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-11 00:00:00 UTC
From: george2f@aol.com
Message-ID: <19990711123628.13956.00010023@ng-fq1.aol.com>
Source record: 68719

Need a couple of 1N82A diodes. Any help appreciated.

Thanks.

George, W2KRM

1078. Re: EMP phenomena (was: Morse code)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-11 00:00:00 UTC
From: Hawke <proudhawk@uswest.net>
Message-ID: <3788D762.74422EBF@uswest.net>
Source record: 68720
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

YEAH YEAH YEAH!!!!!

Only thing is, it ain't the "soviet union" we have to worry about now,
its the Communist Government of China and their multi-hundred
million man army.

Of course, they are nice to talk to on the radio when big brother
isn't looking over their shoulder.

Hawke

Reg Edwards wrote:

> > Well, much as I hate to disagree with a consultant to Our
> Government,
> > his physics doesn't work.
> ==========
>
> Quite clearly, even after all these years, someone is still suffering
> from delusions of "reds under the bed".
>
> Reg.

--

=NOTICE TO BULK E-MAILERS PLEASE READ THIS BEFORE BULK E-MAILING THIS ADDRESS=
Pursuant to US Code, Title 47, Chapter 5, Subchapter II, p.227, any and all
non-solicited commercial E-mail sent to this address is subject to a
download and archival fee in the amount of $500 US. Anyone who sends
unsolicited commercial e-mail to this account will be charged a $500
proofreading fee. Consider this official notification. Failure to abide
by this will result in legal action.
For a complete summary of this Legislation see

http://thomas.loc.gov/cgi-bin/bdquery/z?d105:SN01618:@@@D

http://www4.law.cornell.edu/uscode/47/227.html

1079. Tracking/homing device or plans needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-11 00:00:00 UTC
From: daveooo@my-deja.com
Message-ID: <7mapqp$3es$1@nnrp1.deja.com>
Source record: 68721

I am in search of a practical, inexpensive homing device using an fm reciever such as a walkman and a range of 1 to 3 miles to be used in conjunction with my local police departments efforts to curb auto burglaries (stereos, amps, speakers, ect). Any plans, devices for sale, schematics, or advice are needed. Thank you.

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1080. Re: PC RF getting into my HF rigs!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-11 00:00:00 UTC
From: "William F. Hagen" <whagen@inreach.com>
Message-ID: <3788E07A.68DF2FCF@inreach.com>
Source record: 68722

turn the computer off!

tatasadasayago wrote:

> Help! I am going nuts trying to figure out how to stop my PC monitor
> from ruining the 15 and 20 meter bands with the awful buzzing. Any
> quick and dirty ideas?
> I'm about to grab a sheet of lead and wrap the darn thing with it.....
> Jim KY7DX

--
Please remove the word 'NOREPLY' from the email address, sorry for the
inconvenience, but it helps keep down the spam.

1081. Re: voice recorder

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-11 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <3788EA6A.70EAF630@teleport.com>
Source record: 68723

I'm not familiar with the MFJ device, so forgive me if this is a bit off track.

I've seen small digital recorders (the type that store the message in solid-state memory rather than on tape) at office supply stores for a moderate price. You might find it less expensive to buy one of these and hack on it than to assemble the parts to build one yourself. This is often true when you want to build one of something which is similar to a mass-produced device.

Roy Lewallen, W7EL

>>>Snokid<<< wrote:
>
> I'm looking for something simple I think....I want to build a digital voice
> recorder/playback device like MFJ sells...any help?
>
> thanks Bob
> KB8VRU

1082. Re: Recent thoughts on feeding & phasing 4 square Verticals?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-11 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <3788EB25.A61A9574@teleport.com>
Source record: 68724

Have you looked at Chapter 8 of the _ARRL Antenna Book_? An article you might find interesting is "The Simplest Phased Array Feed System -- That Works" in the _ARRL Antenna Compendium_, Vol. 2. I realize that ARRL publications may not be as readily available there as here, but I don't know of any equivalents to these in RSGB publications.

Roy Lewallen, W7EL

Rod Craddock wrote:
>
> Any body? Roy? Building a 4 square for 40M. 1/4Wave with a small amount of
> centre loading to keep elements self supporting and manageable.
>
> Rod (GW4SLK)

1083. Re: PC RF getting into my HF rigs!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-11 00:00:00 UTC
From: k6mhe@arrl.net
Message-ID: <3788f30e.19935941@news.mcn.org>
Source record: 68725

On Sun, 11 Jul 1999 23:48:06 -0600, tatasadasayago <Jcrosley@mocc.com>
wrote:

>Help! I am going nuts trying to figure out how to stop my PC monitor
>from ruining the 15 and 20 meter bands with the awful buzzing. Any
>quick and dirty ideas?
>I'm about to grab a sheet of lead and wrap the darn thing with it.....
>Jim KY7DX

I had a problem with computer noise. Mine was coming from the monitor.
What I did was install a good single point ground system. Everything
on the operating table (rig, antenna tuner, keyer, scope,
computer..... everything except the monitor itself as it was housed in
nothing but plastic) was conected to a single point. From that point
I used a short length of #6 solid wire (ï¿½" dia copper tubing or bigger
would be better) was run directly outside the shack - about a 4 foot
run in my case. Outside the wire was connected to a single 8' ground
rod also connected to the ground rod was 12 - #8 solid copper wires
varying in length from as short as 12' to over 70'. These wires were
spread out from the ground rod as one would do with a radial system
and were buried about 2-3" deep in the soil.

After all was installed my noise dropped from about an S-7 to less
than S-1 on the meter. (My S-meter is about 3ï¿½ db per S-unit).

As a side note in connecting up some additional equipment I
inadvertently disconnected the antenna tuner form the ground system.
When I turned on the computer all my noise was back.. Reconnecting the
tuner ground confection resulted it the noise dropping back down to a
very low level.

So, based upon, my experiences I would recommend that you put is a
good ground system. The next thing would to obtain one of those DSP
noise filter units - they can help a lot.

73
Danny, K6MHE

1084. Re: voice recorder

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-11 00:00:00 UTC
From: Jonesy <jonz@rmi.nospam.net>
Message-ID: <7mat5dkas1@news1.rmi.net>
Source record: 68726

Roy Lewallen <w7el@teleport.com> wrote:

> I've seen small digital recorders (the type that store the message in
> solid-state memory rather than on tape) at office supply stores for a
> moderate price. You might find it less expensive to buy one of these and
> hack on it than to assemble the parts to build one yourself. This is
> often true when you want to build one of something which is similar to a
> mass-produced device.

I bought a half-dozen or so "3-msg/30 sec total" memo recorders from
/I believe/ Electronic Goldmine for Very Little Money.
I lashed up a prototype to see how well they would drive the mic line
and how good (poor) the audio would be. There was more than enough
audio to drive the mic line -- so, with an output level pot for control,
I did an On The Air test and received very good audio report(s).
Now it's on to designing some timing and control logic with a
Microchip Technology 16F84 or the such.
I not only want to build a "Dead Band CQ Caller", but, as well, a
"First and Third" caller for 2m SSB skeds. With the latter, I need
'accurate to the second' control with 60 second repetitions.

I've looked at the MFJ device -- and, for what little it delivers,
I can't justify spending _my_ money on it.

Ahhh, but it's Summer now and the Colorado Rocky Mountains beckon
more than the work bench. I'll get back at it this Fall -- I want
to have it ready for the November Leonids...

73
Jonesy W3DHJ

--
SK

--
Marvin L. Jones jonz<AT>rmi.net
Gunnison, Colorado
173 days to go until the Year 2000 -- So what!
539 days to go until the 3rd Millennium of the C.E.

1085. Re: Recent thoughts on feeding & phasing 4 square Verticals?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-11 00:00:00 UTC
From: Rod Craddock <rod@gw4slk.freeserve.co.uk>
Message-ID: <7matqbuef1@news4.svr.pol.co.uk>
Source record: 68727

Roy Lewallen <w7el@teleport.com> wrote in message
news:3788EB25.A61A9574@teleport.com...
> Have you looked at Chapter 8 of the _ARRL Antenna Book_? An article you
> might find interesting is "The Simplest Phased Array Feed System -- That
works" in the _ARRL Antenna Compendium_, Vol. 2.

Yes thanks, got that Roy, those books are just as readily available as the RSGB ones here. Using eznec and I've seen the model you provided of that. BTW I made quite a successful 6 band quad (6 meters thro' 20 meters) modelled on eznec. If anybody wants the .ez file for that I'll attach it to an email.

Thanks 73s

Rod

1086. FS:(2) Henry RF Decks

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-11 00:00:00 UTC
From: n4jzh@amsat.org
Message-ID: <3788e918.58509562@news.mindspring.com>
Source record: 68728

STILL AVAILBILE
FS: (2)each Henry 19' Rack mount RF Decks
will support a single 3cx3000A7 deck comes with
Output Tune & Load, Plate Choke, Socket and
Filament Transformer that supports 7.5v@51.5amps
also has dual metered Bird line section and Blower,Plate choke.
Gold Anodized case. $550.00 each shipped in the lower 48.
73 all n4jzh
n4jzh@amsat.org

1087. FS: RCA 6130/3C45 tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-11 00:00:00 UTC
From: ovrreactor@aol.com-nospam
Message-ID: <19990711174009.07889.00004682@ng-cj1.aol.com>
Source record: 68729

I am selling one (1) RCA 6130/3C45 tube, NOS in new white box. $25, shipping included, US 48 only.

Interested? Respond by email.

Regards,
Tom Mitchell
email - OvrReactor@aol.com

1088. FS: RCA 7360 tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-11 00:00:00 UTC
From: ovrreactor@aol.com-nospam
Message-ID: <19990711174050.07889.00004684@ng-cj1.aol.com>
Source record: 68730

I am selling one (1) NIB/NOS RCA 7360 tube. $25, shipping included, US 48 only.

Interested? Respond by email.

Regards,
Tom Mitchell
email - OvrReactor@aol.com

1089. Re: PC RF getting into my HF rigs!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-11 00:00:00 UTC
From: larryc@northwest.com
Message-ID: <3788C0F1.DCE@northwest.com>
Source record: 68731

try turning off the computer while you operate.

As you have discovered, both your computer eqmt and the radio gear have
toilet paper for shielding.

==========

tatasadasayago wrote:
>
> Help! I am going nuts trying to figure out how to stop my PC monitor
> from ruining the 15 and 20 meter bands with the awful buzzing. Any
> quick and dirty ideas?
> I'm about to grab a sheet of lead and wrap the darn thing with it.....
> Jim KY7DX

1090. Re: BOB Pleaser: Mosley MPK-3 available

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-11 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <3789289A.698FBAF9@corecomm.net>
Source record: 68732

John Habs wrote:
> Clifton T. Sharp Jr. wrote in message <3782C70F.5F416E71@corecomm.net>...
> >And knowing in advance this doesn't belong in this newsgroup, you posted
> >it here anyway instead of in rec.radio.swap where it belongs? Or in
> >rec.radio.amateur.antennas, where it would still be spam but at least be
> >on topic?
> >
> >So, basically, you're going out of your way to be nasty. Is that it?
>
> And you have the balls to sign off with a quote on free speech?

Obviously you're one of those idiots who think "free speech" means "any
damn thing I want to do, regardless of how it affects others".

Obviously you can't defend your continuing, deliberate theft of the Usenet
shared resource, so you resort to a personal attack. You need to keep
attention off the bad thing you keep doing, so you point the finger at
someone else and make accusations.

READ the quote on free speech I sign off with. If you ever manage to figure
out what it means, you'll have one more reason to enjoy your misdeeds. It's
always more fun to hurt people when you know how much it hurts them.

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

1091. FS: assorted 12BY7A's

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-12 00:00:00 UTC
From: ovrreactor@aol.com-nospam
Message-ID: <19990711203201.12931.00009519@ng-fx1.aol.com>
Source record: 68637

I am selling a total of seven (7) 12BY7A's. Here's what I have;

(2) 12BY7A - RCA - matched pair Tektronix box / label - NOS/NIB
(2) 12BY7A - RCA - matched pair Tektronix box / label - NOS/NIB
(1) 12BY7A - Sylvania - NOS, new white box
(1) 12BY7A - RCA - Tektronix label - Used, boxed, tests strong
(1) 12BY7A - Matsushita - Used, boxed, tests strong

$50 all, shipping included, US 48 only.

Interested? Please respond by email.

Regards,
Tom Mitchell
email - OvrReactor@aol.com

1092. LED VSWR design wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-12 00:00:00 UTC
From: Jim@j1mbo.force9.co.uk
Message-ID: <378c7f20.178737809@news.force9.net>
Source record: 68638

Hi all.

I'm looking for a remote LED VSWR meter kit or design for my mobile
intallation.

Anything would be usefull.

Thanks
g7uyp@qsl.net

Jim Balls M0CKE / G7UYP
Holbeach
Lincs
ENGLAND

1093. Re: Earth's Natural Resonant Frequency: TX tests

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-12 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <37899971.23565823@news.atl.bellsouth.net>
Source record: 68639

On Sat, 10 Jul 1999 21:36:33 -0700, Will White <wcw@uswest.net> wrote:
>Has anyone since Tesla tried to modulate, or even generate unmodulated, RF at
>the planets 0.7 Hz resonant frequency. Now, *that* might yield some
>interesting DX! Hey, its only 428571428.6 meters! What a loading coil!

Actually, Tesla excited the global electrosphere. Its resonant frequency is 7.92 Hz.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

1094. Re: homebrew me this batman

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-12 00:00:00 UTC
From: Mark Johnson <mark5104@bellsouth.net>
Message-ID: <VWgi3.7698$bt1.37837@news1.atl>
Source record: 68640

I find Myself being content with just monitoring the ham bands and having
fun doing it.
As for talking I find My trusty CB always there if I need to talk or get
traffic reports
And there is no code test or for that matter any test at all...believe Me I
can pass the test
now no problem I just seem to miss the exam dates and loose interest for a
few more years
at a time.. working in electronics seems to make me less interested in
taking electronic theory
test just to talk on 2 meters...I would rather just sit back and listen . on
any band or frequency
I choose or scan several thousand at a time on one of six scanners rigged up
with antennas on my towers...I may in the future get My ham ticket if I can
ever remember the exam dates and times...I do enjoy listening just fine for
now and I am gathering assorted equipment for the future
when I will transmit..you may have noticed I am rather out spoken and would
probably just make
some snert mad and I surly don't won't that to happen on the air!. I know
some really nice Ham operators and listen to them often, Even helped some
with technical problems with there stations, Beside I can talk on here and
No one can Key on Me !! 73's from Ga.

Will White <wcw@uswest.net> wrote in message
news:37882035.30A9D447@uswest.net...
> So why, pray tell, are you still hanging around? The squeaky wheel gets
the
> grease. The no-goodnik, sour-faced braggart hams are the vocal minority.
> That's what the tuning knob is for! It's a shame you chiucked this great
hobby
> of ours because of a few noisy malcontents.
>
> Mark Johnson wrote:
> >
> > I like the one about shooting one's self in the feet....Ouch thats a
good
> > one!!
> > Like the man said ! and Like i say piss on them snerts!!
> > They are every where bitching about nothing just wanting to hear
themselfs
> > make noise!
> > All have that same smelled something rotten look on the face!
> > One reason I never went and got my license,Ass holes like that are
allover

> > the ham radio
> > bands whining about something.
>
>
> --
> Will White, KD7BFX
>
> to reply, please click this link mailto:wcw@uswest.net

1095. Re: homebrew me this batman

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-12 00:00:00 UTC
From: Mark Johnson <mark5104@bellsouth.net>
Message-ID: <61hi3.7711$bt1.37729@news1.atl>
Source record: 68641

```
Get over it <<<<<((((SNERT))))>>>>>

Clifton T. Sharp Jr. <clifto@corecomm.net> wrote in message
news:3789290E.2260EC92@corecomm.net...
> hitubefi@my-deja.com wrote:
> > >I have seen this on other groups as well.I don't know what your
> > post was and I don't care.As long as someone stays basically in bounds
> > of the tone of the kind of postings that are on a newsgroup,they should
> > be able to post what they want.
>
> You know, you've hit on the very reason his posting didn't belong here.
>
> --
>
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-
+-+
> | Cliff Sharp | "Speech isn't free when it comes postage-due."
|
> | WA9PDM | -- Jim Nitchals, founder, FREE
|
> +-+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
```

1096. Re: PC RF getting into my HF rigs!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-12 00:00:00 UTC
From: Jones <no_email@none.com>
Message-ID: <7mc72d$md7$1@news.orbitworld.net>
Source record: 68642

tatasadasayago wrote
>Help! I am going nuts trying to figure out how to stop my PC monitor
>from ruining the 15 and 20 meter bands with the awful buzzing.

This ain't quick or dirty but you might consider a laptop. If you're running simple stuff like logging and pactor ect. a 486 will usually work, and they're going at swapmeets for $50 to $100. Those LCD screens are real quiet...

1097. Photo-etch

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-12 00:00:00 UTC
From: Harry SM0VPO <harryvpo@hotmail.com>
Message-ID: <3789B1EB.4C228B18@hotmail.com>
Source record: 68643

Hello all,

I have been making and supllying PCB's for quite a long time but I keep being asked for PCB's with "solder resist". I have ben searching the net for suitable materials and there is no-way will I start mucking about with silk-screening.

Does anyone know of a solder-resist material that can be used with simple photo-etch methods; ie. a spray-on photosensitive solder-resist material that can be developed in the normal manner using a weak alkali solution?

Has anyone tried using normal photoetch-resist as a solder resist? I would think that it could work but may not be so durable.

Best regards from Harry - SM0VPO

http.//sm0vpo.8m.com

1098. Re: Looking for RF Books

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-12 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <3789B946.C2FCD527@teleport.com>
Source record: 68644

Although it doesn't concentrate on microwaves, Hawyard's "Introduction to Radio Frequency Design" sounds close to what you're looking for. It's available from the ARRL. There's also quite a bit of good information in "The ARRL UHF/Microwave Experimenter's Manual".

"Microwave Circuit Design Using Linear and Nonlinear Techniques" by Vendelin, Pavio, and Rohde (Wiley, ISBN 0-471-60276-0) is a standard, although it's perhaps a bit on the "academical" side.

Roy Lewallen, W7EL

Peter Bolch wrote:
>
> Hi,
>
> I'm looking for a not too academical book about RF circuits and techniques,
> especially for frequencies above 1 GHz. Something like a "RF version" of
> "The Art of Electronics" or Tietze/Schenk's "Advanced electronic circuits".
>
> Peter

1099. Re: Earth's Natural Resonant Frequency: TX tests

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-12 00:00:00 UTC
From: Harry SM0VPO <harryvpo@hotmail.com>
Message-ID: <3789B94F.47B2621E@hotmail.com>
Source record: 68645

It would be interesting to know what modulation you would use. Would it be
sssssssssssssssssssssssssssssssssssssssssslllllllllllllllllllllllllllllllllllllllllloooo
oooooooooooooooooooooooooooooowwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwww
mmmmmmmmmmmmmmmmmmmmmooooooooooooooooooooooooooooorrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrssssss
sssssssssssssssssssssssssssssssseeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeee?????????????
??????????????????????????????

Will White wrote:

> Has anyone since Tesla tried to modulate, or even generate unmodulated, RF at
> the planets 0.7 Hz resonant frequency?

1100. Re: Where can I find TRW RF power transistors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-12 00:00:00 UTC
From: Harry SM0VPO <harryvpo@hotmail.com>
Message-ID: <3789C03A.3058E9BF@hotmail.com>
Source record: 68646

There are two companies that I would reccomend: "CirKit" and "Mainline", both of whom are resident in the UK and other countries around the world (and I have no financial interest in them or any other company).

Mainline are almost certain to stock them since they specialise in RF devices. They even stock HF RF PA ferrite transformers as is found in most commercial rigs. They are not a suitable source if seeking common transistors such as the 2N2222 and the BC547 etc. Mainline Electronics Supply, Inc., 2430 Von Esch Road, Joliet, II. 60431 Tel:(815) 436-3900, Fax: (815) 436-1959. I do know the UK branch has these devices.

CirKit (Broxbourne) have larger stocks of the more common devices and components including many common RF devices so they may have yours too. It is well worth getting their catalogue and you can contact them at: CirKit Distributions Ltd, Park Lane, Broxbourne, Hertfordshire EN10 7NQ . Telephone +44 (0)1992 441306, Fax: 01992 471314.

Best regards form Harry - SM0VPO

http://sm0vpo.8m.com

David Ross wrote:

> hello -
>
> Does anyone know where I can purchase TRW RF power transistors?
>
> Is TRW still in that line of work?
>
> If not, did TRW sell that business to another company?
>
> I'm looking for a TRW PT4370A, a transistor from some gear built in
> the early '80s. (May also need other TRW pieces, depending what else
> I find broken...)
>
> 73 and thanks for any help
> Dave Ross N7EPI ross@hypertools.com

1101. Re: Looking for RF Books

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-12 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3789C4DA.4DDD7C89@mwci.net>
Source record: 68647

Peter Bolch wrote:

> Hi,
>
> I'm looking for a not too academical book about RF circuits and techniques,
> especially for frequencies above 1 GHz. Something like a "RF version" of
> "The Art of Electronics" or Tietze/Schenk's "Advanced electronic circuits".
>
> Peter

The ARRL has "UHF/Microwave Experimenter's Manual" and "UHF/Microwave Projects Manual".

They are both excellent and practical.

Bill W0IYH

1102. Re: voice recorder

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-12 00:00:00 UTC
From: spam@nospam.com
Message-ID: <3789e4fc.21075417@news.lin.foa.se>
Source record: 68648

Try the ISD chips they come in various flavours, you can trade
sampling rate (speech quality) against recording time.

The chip contains all but a few external components and works very
well has built in A/D-D/A, eeprom and audio output amp. I guess the
price would be something like 10 USD for the ISD1416 or 1420, this
gives you 14 or 20 seconds of memory that can be segmented in up to 64
parts!

There is a bigger brother the ISD 3000 series with up to 180 seconds
recording time and costs 25 dollar.

The most spectacular thing is the messages are stored in EEPROM which
keeps the data even when power is switched OFF!!

You need a micrphone, some resistors a few capacitors and some
switches to complete the design! If I recall correctly the article was
written i QST some 10 years ago. Keep looking

Good Luck
On Sun, 11 Jul 1999 06:30:44 GMT, ">>>Snokid<<<" <snokid@home.com>
wrote:

>I'm looking for something simple I think....I want to build a digital voice
>recorder/playback device like MFJ sells...any help?
>
>thanks Bob
>KB8VRU
>
>

1103. Re: LED VSWR design wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-12 00:00:00 UTC
From: "Mr. Muckle" <jdwalton@home.com>
Message-ID: <378A2484.211DAA69@home.com>
Source record: 68649

National semi makes a neat little 10 step voltage divider chip - I think that it's the LM3915 or LM3916 - they have three - one with linear steps, one with 3dB steps and one with VU type steps. The chip easily interfaces a LED bargraph or discrete LED's. Just replace the meter in a canned design with the LED's.

Jimbo wrote:

> Hi all.
>
> I'm looking for a remote LED VSWR meter kit or design for my mobile
> intallation.
>
> Anything would be usefull.
>
> Thanks
> g7uyp@qsl.net
>
> Jim Balls M0CKE / G7UYP
> Holbeach
> Lincs
> ENGLAND

1104. URGENT all *junk* collectors.... HP/Polaroid stuff FREE

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-12 00:00:00 UTC
From: spam@nospam.com
Message-ID: <3789f5c5.25372996@news.lin.foa.se>
Source record: 68650

While going thru the junkpile at the office several interesting
devices were found. I have "lmited" space (my "interesting stuff"
space is full) so if you are interested in any of these gadgets please
respond IMMEDIATELY as I do not know when they ship the stuff for
destruction, it might be tomorrow.....

1 complete Polaroid camera with optics for older (and newer)
oscilloscopes

1 complete Polaroid camera with options for older (and newer)
oscilloscopes, in wooden box like new!!!

1 old Polaroid camera with fold-out optics used but problably OK uses
same film-pack as the above???

2l HP 9825 BASIC instrument controller + plotter + printer.....

2 HP5110 (?) HP-IB to fiber optics converter plus fibre optic cable
one working one is not

1 HP 5105 Direct synthesizer, the grand-dad of all direct synths
problably working

Most of these items are HEAVY as you know and shipping is difficult!
The items are in Link&#65533;ping SWEDEN. Let me know if you need/want the
stuff and if you care to offer some cash for my trouble!!

Hurry, on friday it's probably to late!!

contact me at lasse.moell@swipnet.se.nospam

and do delete te nospam in my mail-adress

I HATE TO SEE GOOD WORKING INSTRUMENTS BEEING SCRAPPED!!!!!

/Lasse SM5GLC

1105. yaesu 757gx

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-12 00:00:00 UTC
From: Ken Gubbins <kenny@two-stroke-addicts.freeserve.co.uk>
Message-ID: <7mcv2l$sl8$1@news5.svr.pol.co.uk>
Source record: 68651

does anyone know where i can get a 3 pin remote plug for cat control for my radio so i can computer control it
ken

1106. For Sale: This Newsgroup!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-12 00:00:00 UTC
From: "Christopher W. Buckley" <cwbuckle@mtu.edu>
Message-ID: <7md2msmvg1@campus1.mtu.edu>
Source record: 68652

For Sale: rec.radio.amateur.homebrew

Post whatever you want, whenever you want. You
can finally have the right to press whatever keys
on your keyboard that you feel you would enjoy
pressing.

Just send one penny to the owner of this group-
err. Wait, nobody really *owns* a group.....

Never mind, just post whatever you want. Those
who don't like what a particular person posts
can just add them to their blocked author list,
killfile, or ignore list....

--
---- ---- ---- ---- ---- ----
Chris Buckley -- KC0DBY
Vice President / Treasurer
Husky Amateur Radio Club -- W8YY (906)487-1303
Computational Mathematics Consultant
MTU Math Science Department (906)487-3406
Electrical Engineering Undergraduate
Michigan Technological University
cwbuckle@mtu.edu @ Da House -- (906)487-6996
---- ---- ---- ---- ---- ----

Job Security:

The ability to create a system that
is extremely vital to operation, and
at the same time is so complicated
that only you could hope to ever begin
to understand it.

1107. Re: Filter Capacitance?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-12 00:00:00 UTC
From: gord <smits@sprint.ca>
Message-ID: <3Hoi3.11119$jl.17470966@newscontent-01.sprint.ca>
Source record: 68653

and really, a regen??

Hmmm...

>
> 1.5 amps for a regen receiver? Howcum? One should run with MILLI
>amps, I would think.
>
> 73,
> Don, W6JL

1108. Re: RTTY decoder software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-12 00:00:00 UTC
From: gord <smits@sprint.ca>
Message-ID: <qNoi3.11122$jl.17475033@newscontent-01.sprint.ca>
Source record: 68654

might be easier to use the parallel port. its way easier to access this than the serial in BASIC (or whatever).

good luck

1109. WTB-Ten-Tec Century 22

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-12 00:00:00 UTC
From: Hanson Family <hansfam@midcoast.com>
Message-ID: <uSoi3.62$mE.523@newsfeed.slurp.net>
Source record: 68655

Wanted Century22. hansfam@midcoast.com

1110. Re: Human power (was amp'd crystal radio)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-12 00:00:00 UTC
From: wagray@taz.dra.hmg.gb
Message-ID: <7md5f6$88i$1@trog.dera.gov.uk>
Source record: 68656
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

In article <3786b77c.4118330@netnews.worldnet.att.net>, notjimbob@worldnet.att.net (James Meyer) writes:
:On Sun, 04 Jul 1999 20:15:15 -0700, dakidd@primenet.com (Don Bruder)
:wrote:
:
:>Makes me think of the scene from the beginning of Soylent Green where the
:>old guy is pedalling away merrily as he watches the tube and discusses the
:>price of a pint of Maple Syrup...
:
: I wonder how one goes about making "Maple Syrup" from corpses.

1. put corpses in hole, backfill
2. plant maple trees on top
3. wait 20 years

(In the old days, vines and fruit trees were always planted over
an animal carcass, donkey, sheep, hitch-hiker, etc.)

Walter

Disclaimer: My employer is not responsible for the above.
If you want to email me, please use a valid From: address.

1111. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-12 00:00:00 UTC
From: gord <smits@sprint.ca>
Message-ID: <g_oi3.11152$jl.17482742@newscontent-01.sprint.ca>
Source record: 68657

My Mom used to have one when she was a girl in Holland..

Frank Dinger wrote in message <19990701193852704 32@zetnet.co.uk>...
>The message <930742420.888.36@news.remarQ.com>
> from "Olin Lathrop" <ogl@cognivis.com> contains these words:
>
>
>> NO SPAM wrote in message <37791DE7.7E5403A3@mail.rsccd.org>...
>> >One old German guy that works here said that in WW2 he had a
>> >flashlight that had a generator that was powered by squeezing the
>> >handle. I think I've seen something like that in an outdoors company
>> >catalog.
>
>> Yes, I've got one of those inherited from my mother who lived in Berlin
>> during WW2. Pretty cool actually, the light is bright enough to be of
some
>> use.
>===============
>These were also used in the Netherlands during WW2 , known as
>'Knijpkat' = 'Squeeze Cat' .
>
>Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland UK
>e-mail : gm0csz.kn6wh@ukrs.org
>
>
>
>

1112. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-12 00:00:00 UTC
From: gord <smits@sprint.ca>
Message-ID: <_Yoi3.11148$jl.17481786@newscontent-01.sprint.ca>
Source record: 68658
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

let me know when they come up with a viable "wind-up" car!!!!

1113. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-12 00:00:00 UTC
From: gord <smits@sprint.ca>
Message-ID: <J4pi3.11163$jl.17486267@newscontent-01.sprint.ca>
Source record: 68659
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Rich Grise wrote in message <377DD13D.775E@entheosengineering.com>...
>Well, I was thinking decadence in terms of saving a buck
>and a half on batteries - but I've read SF stories about
>post-holocaust where everybody had to take turns pedaling
>the air recycler in the shelter and stuff.
>
>Inventions you haven't made any money on? How about:
>
>A steam car that uses an instant-heat propane boiler and
>a blower (as in supercharger, like on racing engines, and
>Deisel big rigs) run as a positive expansion turbine?

Whose gonna chip the ice block up? I live in Canada. Steams OUT.

>
>A recumbent bicycle a la
>http://www.entheosengineering.com/images/Recumbent-bike-draft-1.gif
>where the pedals pivot instead of circling a crankshaft.

Why not just start with rotary motion... pedaling? Seems to me there'd be a
lot of waste converting the "pivot" motion back to rotary.

>
>A turbine-powered (a la Kirby Turbo-brush) paint scraper thing
>for house-painting, where the turbine vibrates a beater-bar
>type thing, and it just sticks on the end of a shop-vac hose.
>
>I got a million of 'em, including about a half-dozen that I've
>done for companies that have since gone belly-up. Wonder if
>I'm some kind of jinx?

Hmmm. I wonder why they went belly up?

>
>:)
>Cheers!
>Rich
>
>Tom MacIntyre wrote:
>>
>> Rich Grise <off-duty@entheosengineering.com> wrote:
>>
>> >The height of decadence, of course, would be a generator
>> >on your exercise bike/treadmill/stepmaster/etc.

>> >
>> No, that would be an example of reponsible use of normally exerted
>> energy which is diverted/recycled into a usable form...I have thought
>> about this very thing, on a larger scale...if it won't save the
>> planet, it'll slow down the demise...Rich, I'm glad that some people
>> are thinking with me; sort of...if this flies as an idea, financially,
>> it won't be the first time that I have not made a cent on something
>> that I have come up with...always, with the help of others, right...
>>
>> Tom
>>
>> >Cheers!
>> >Rich

1114. Re: Human power (was amp'd crystal radio)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-12 00:00:00 UTC
From: gord <smits@sprint.ca>
Message-ID: <I6pi3.11168$jl.17487267@newscontent-01.sprint.ca>
Source record: 68660
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Krusty The Klown wrote in message <378175FB.856F38F8@not.com>...
>J wrote:
>
>> Popular Electronics did an article or two years ago about someone
>> utilizing a bicycle/generator system in configuration with a
>> television. If the kids wanted to watch a program, they had to peddle
>> away during the program to provide enough current for the set. I have
>> seen similar units in use for Field Day, and they do work.
>
>I have a quarter slot on the TV my kids watch. Makes me about $2 an
>hour...
>

I Love It!

1115. Re: For Sale: This Newsgroup!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-12 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <378A2372.4C920C8@corecomm.net>
Source record: 68661

```
Christopher W. Buckley wrote:
> For Sale: rec.radio.amateur.homebrew
>
> Post whatever you want, whenever you want. You
> can finally have the right to press whatever keys
> on your keyboard that you feel you would enjoy
> pressing.
>
> Just send one penny to the owner of this group-
> err. Wait, nobody really *owns* a group.....
>
> Never mind, just post whatever you want. Those
> who don't like what a particular person posts
> can just add them to their blocked author list,
> killfile, or ignore list....

Go away, sociopathic troll.

--
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
```

1116. Forgery? [was: "LPWS 10k! 8401"]

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-12 00:00:00 UTC
From: John Mock <kd6pag@qsl-nojunk.net>
Message-ID: <87so6tbwk0.fsf_-_@mongrel.kd6pag.ampr.org>
Source record: 68662
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

The pirates are, unfortunately, alive and well on Internet as well as
on amateur radio!

The above item was not published by or on behalf of myself. Any
message issued by me originates via demon.co.uk

However, the place to complain is the Internet Service Provider (ISP) of
the offending user, e.g. 'mcmail.com'. This information can be found from
the 'Path:' field of the full header:

From: bajones@worcester.demon.co.uk
Newsgroups: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,
uk.radio.amateur
Subject: LPWS 10k! 8401
NNTP-Posting-Host: 195.44.2.37
Message-ID: <378451cb.0@news1.mcmail.com>
Date: 8 Jul 1999 08:22:51 GMT
X-Trace: 8 Jul 1999 08:22:51 GMT, 195.44.2.37
>> Path: vnetnews.value.net!nntp.primenet.com!nntp.gctr.net!news.maxwell.syr.edu!dispose.n
ews.demon.net!demon!peernews!news1.mcmail.com!195.44.2.37
Lines: 13
Xref: vnetnews.value.net rec.radio.amateur.equipment:118235
rec.radio.amateur.homebrew:48411 rec.radio.amateur.misc:184106 uk.radio.amateur:55297

The customary address to complain to would be 'abuse@mcmail.com', and if
that fails, try 'postmaster@mcmail.com'. Be polite, firm and direct.

When you complain here about an individual, you are posting off-topic, which
is also inappropriate to the newsgroups you're posting to. If you have a
net abuse problem, then bring it up in one of the net abuse newsgroups,
where such things are discussed; not here. Complain to the ISP, who can do
something about it, not to us.

-- KD6PAG (Networking Old-Timer, "RF Newbie")

P.S. If the ISP is not cooperative and the abuse is very serious, then
complain to the upstream ISP. There are also some other ways of dealing
with such postings, but such methods may be as questionable as the original
posting...

Attachment: 'traceroute' showing responsible ISP for offensive posting.
---
traceroute to 195.44.2.37 (195.44.2.37), 30 hops max, 40 byte packets
1 ts05.wci.value.net (209.182.135.15) 123.33 ms 143.928 ms 109.801 ms
2 gw01.wci.value.net (209.182.135.1) 129.763 ms 108.137 ms 109.796 ms
3 core1-serial4-2.san-francisco.best.net (209.24.210.9) 159.772 ms 138.121 ms 129.785 ms

```
4 core1-hssi8-0-0.mv.best.net (206.86.228.89) 129.782 ms 177.045 ms 139.808 ms
5 p8-0-0.cr1.mtvwca.pacific.verio.net (205.149.170.66) 139.805 ms 153.909 ms 159.771 ms
6 p12-0-0.br1.plalca.pacific.verio.net (209.157.181.162) 149.811 ms 137.094 ms 149.786 ms
7 g0.pao5.verio.net (129.250.15.14) 139.789 ms 147.414 ms 139.817 ms
8 pao5.iad2.verio.net (129.250.2.10) 199.768 ms 207.534 ms 209.712 ms
9 iad2.iad0.verio.net (129.250.2.153) 199.747 ms 198.106 ms 209.771 ms
10 tip2-mae-east.cwix.net (192.41.177.183) 199.792 ms 197.488 ms 199.747 ms
11 g-dcb-br-01-pos11-0-0.gn.cwix.net (207.124.121.10) 199.775 ms 196.278 ms 189.792 ms
12 207.124.125.29 (207.124.125.29) 219.766 ms 207.766 ms 209.736 ms
13 207.124.125.149 (207.124.125.149) 219.791 ms 218.007 ms 219.751 ms
14 g-nyd-br-02-fe9-0.gn.cwix.net (207.124.127.2) 289.753 ms 197.644 ms 199.749 ms
15 207.124.122.86 (207.124.122.86) 269.772 ms 268.002 ms 269.739 ms
16 195.44.192.17 (195.44.192.17) 3279.15 ms 3357.28 ms 3279.12 ms
17 main2-gw3.cwci.net (195.44.199.210) 279.734 ms 267.34 ms 270.103 ms
18 main-crt1-gw1.cwci.net (195.44.50.69) 269.428 ms 267.449 ms 279.85 ms
19 dialup-gw1.mcl.net (194.6.80.4) 289.7 ms 287.172 ms 269.777 ms
20 as-eth-41.mcmail.com (195.44.0.71) 299.727 ms 277.388 ms 259.79 ms
21 asn2-37.mcmail.com (195.44.2.37) 419.716 ms 407.448 ms 399.749 ms
==============================================================================
```

1117. Re: Tracking/homing device or plans needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-12 00:00:00 UTC
From: "Laszlo I. Morocz" <kf4pv@spammenotlmorocz.com>
Message-ID: <01becc8f$bdb814e0$c3f11e26@p133>
Source record: 68663

Look in the ARRL Handbook and Antenna Book, especially for the
"Double-Ducky" (very adaptable for what you need), or in "Transmitter
Hunting, Radio Direction Finding Simplified" by K0Ov and WB6UZZ published
by TAB Books (ISBN 0-8306-2701-4). Very good stuff in all 3.

73, Laszlo KF4PV/3

--
To reply, remove the text spammenot from the e-mail address.

daveooo@my-deja.com wrote in article <7mapqp$3es$1@nnrp1.deja.com>...
> I am in search of a practical, inexpensive homing device using an fm
> reciever such as a walkman and a range of 1 to 3 miles to be used in
> conjunction with my local police departments efforts to curb auto
> burglaries (stereos, amps, speakers, ect). Any plans, devices for
> sale, schematics, or advice are needed. Thank you.
>
>
> Sent via Deja.com http://www.deja.com/
> Share what you know. Learn what you don't.
>

1118. Re: RTTY decoder software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-12 00:00:00 UTC
From: "Christopher W. Buckley" <cwbuckle@mtu.edu>
Message-ID: <7mdel0gcl4@campus1.mtu.edu>
Source record: 68664

This is correct. I have found the people at Maxim to be very helpful
when requesting samples of there MAX232/E series of chips. These
perform the voltage level conversion quite well.

On Wed, 07 Jul 1999 20:08:43 GMT , ve6inm@telusplanet.net spewed forth to
rec.radio.amateur.homebrew:
:vtn>The serial port (COM) on most PC's runs with RS-232 standards. That
:vtn>would mean using 12V rather than TTL at 5V.
:vtn>73 de VE6INM
:vtn>In article <7lltb0$n5n$1@neptunium.btinternet.com>,
:vtn> "David Cunningham" <D.L.C@btinternet.com> wrote:
>> I am constructing a RTTY decoder using an NE567 PLL and require the
:vtn>software
>> to convert the pulses from the decoder into text. I assume that I will
>> connect the output of the NE567 decoder to the data input pins on the
:vtn>COM
>> port of my computer. Are TTL level signals compatible with the COM
:vtn>port, or
>> do I require 12v pulses?
>>
>>

:vtn>Sent via Deja.com http://www.deja.com/
:vtn>Share what you know. Learn what you don't.

--
---- ---- ---- ---- ---- ----
Chris Buckley -- KC0DBY
Vice President / Treasurer
Husky Amateur Radio Club -- W8YY (906)487-1303
Computational Mathematics Consultant
MTU Math Science Department (906)487-3406
Electrical Engineering Undergraduate
Michigan Technological University
cwbuckle@mtu.edu @ Da House -- (906)487-6996
---- ---- ---- ---- ---- ----

Job Security:

The ability to create a system that
is extremely vital to operation, and
at the same time is so complicated
that only you could hope to ever begin
to understand it.

1119. Re: For Sale: This Newsgroup!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-12 00:00:00 UTC
From: "Christopher W. Buckley" <cwbuckle@mtu.edu>
Message-ID: <7mdf0fgcl5@campus1.mtu.edu>
Source record: 68665

HAHAHA!

Add me to your killfile, and I will. Otherwise,
learn to live with the anarchy that is, and the
sarcasm I will spew to the self appointed group
enforcers!

On Mon, 12 Jul 1999 12:18:42 -0500 , Clifton T. Sharp spewed forth to
rec.radio.amateur.homebrew:
:CT SJ>Christopher W. Buckley wrote:
>> For Sale: rec.radio.amateur.homebrew
>>
>> Post whatever you want, whenever you want. You
>> can finally have the right to press whatever keys
>> on your keyboard that you feel you would enjoy
>> pressing.
>>
>> Just send one penny to the owner of this group-
>> err. Wait, nobody really *owns* a group.....
>>
>> Never mind, just post whatever you want. Those
>> who don't like what a particular person posts
>> can just add them to their blocked author list,
>> killfile, or ignore list....

:CT SJ>Go away, sociopathic troll.

:CT SJ>--
:CT SJ>+-+
:CT SJ>| Cliff Sharp | "Speech isn't free when it comes postage-due." |
:CT SJ>| WA9PDM | -- Jim Nitchals, founder, FREE |
:CT SJ>+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+

--
---- ---- ---- ---- ---- ----
Chris Buckley -- KC0DBY
Vice President / Treasurer
Husky Amateur Radio Club -- W8YY (906)487-1303
Computational Mathematics Consultant
MTU Math Science Department (906)487-3406
Electrical Engineering Undergraduate
Michigan Technological University
cwbuckle@mtu.edu @ Da House -- (906)487-6996
---- ---- ---- ---- ---- ----

Job Security:

The ability to create a system that
is extremely vital to operation, and
at the same time is so complicated
that only you could hope to ever begin
to understand it.

1120. Re: voice recorder

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-12 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19990712210335704 32@zetnet.co.uk>
Source record: 68666

> I'm not familiar with the MFJ device, so forgive me if this is a bit off
> track.
> I've seen small digital recorders (the type that store the message in
> solid-state memory rather than on tape) at office supply stores for a
> moderate price. You might find it less expensive to buy one of these and
> hack on it than to assemble the parts to build one yourself. This is
> often true when you want to build one of something which is similar to a
> mass-produced device.
> Roy Lewallen, W7EL

==========
Most of these units ,as the talking greeting cards use parts made by
ISD (Information Storage Devices Inc.)
San Jose, CA 95134.
They are called Single-Chip Voice Record/Playback Devices

ISD1000 Analogue Storage ICs
Model ISD1012A 12 seconds recording/playback
1016A 16
1020A 20
3 pcs in cascade give 1minutes recording/playback

These ICs can among other purposes be used for a 'parrot' repeater.
Has been published in QST
They are ideal for 'lazy' contesters providing pre-recorded short
messages ,like CQ Contest KX6XXX

They are also available in Europe, incl UK
A good article on basics : Electronics + Wireless World ,Feb 1992 ;
pages 110 thru 113

73 Frank GM0CSZ / KN6WH

1121. Stancor A-3849 audio transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-12 00:00:00 UTC
From: robertc908@aol.com
Message-ID: <19990712181759.15727.00014476@ng-fp1.aol.com>
Source record: 68667

Does anyone have the information for the secondary taps for the Stancor A-3849 audio output transformer?

Thanks
Bob, W4RLC

1122. Re: Photo-etch

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-12 00:00:00 UTC
From: J <ns5n@erols.com>
Message-ID: <378A7A65.DB866D14@erols.com>
Source record: 68668

I have used a Sharpie permanent marker in emergencies.

--
J Edgar/NS5N & Maureen/KE4GSZ send>>>

1123. Need info on 1n1442 diode

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-12 00:00:00 UTC
From: John Habs <jhabs@worldnet.att.net>
Message-ID: <7me0fm$5qu$1@bgtnsc03.worldnet.att.net>
Source record: 68669

need info like current handling,piv and working voltage.I want to solid state my tube receiver and I have a pair of these in the junk box. John

1124. Re: PC RF getting into my HF rigs!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-12 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <7me2vh$1nq$1@autumn.news.rcn.net>
Source record: 68670

All monitors and all PCs do not have this problem. I have a PC and a monitor sitting right next to my IC-761 and have never had any kind of interference on any band.

Jones <no_email@none.com> wrote in message news:7mc72d$md7$1@news.orbitworld.net...
>
> tatasadasayago wrote
> >Help! I am going nuts trying to figure out how to stop my PC monitor
> >from ruining the 15 and 20 meter bands with the awful buzzing.
>
> This ain't quick or dirty but you might consider a laptop. If you're running
> simple stuff like logging and pactor ect. a 486 will usually work, and they're
> going at swapmeets for $50 to $100. Those LCD screens are real quiet...
>
>

1125. Re: Need info on 1n1442 diode

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-12 00:00:00 UTC
From: "Thomas C. Sefranek" <tcs@cmcorp.com>
Message-ID: <378A8278.5D49C1DD@cmcorp.com>
Source record: 68671

John Habs wrote:

> need info like current handling,piv and working voltage.I want to solid
> state my tube receiver and I have a pair of these in the junk box. John

1N1442 Silicon 400PIV 1.2Vf .75A. .5maIr

--
Thomas C. Sefranek WA1RHP
ARRL Instructor, Technical Specialist, VE Contact.
http://hamradio.cmcorp.com/41_Repeater/repeater.html
http://hamradio.cmcorp.com/inventory/Inventory.html

1126. Re: PC RF getting into my HF rigs!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-12 00:00:00 UTC
From: John Habs <jhabs@worldnet.att.net>
Message-ID: <7me9dahmm1@bgtnsc02.worldnet.att.net>
Source record: 68672

Go and get yourself a line filter from a old computer power supply(I robbed mine from an old okidata dot matrix printer) and install where you presently plug the a.c. into monitor(remove old socket first)this cured my problem here and I have monitor and pc next to operating desk. John

tatasadasayago wrote in message <37898196.F99DA5E8@mocc.com>...
>Help! I am going nuts trying to figure out how to stop my PC monitor
>from ruining the 15 and 20 meter bands with the awful buzzing. Any
>quick and dirty ideas?
>I'm about to grab a sheet of lead and wrap the darn thing with it.....
>Jim KY7DX
>

1127. doppler..

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-12 00:00:00 UTC
From: kc8ffv <kc8ffv@usxchange.net>
Message-ID: <931835261.978.7@news.remarQ.com>
Source record: 68673
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I am looking for instructions on how to make my own doppler system for RDFing.. Also looking for everyones suggestions on antennas for df'ing

1128. Re: doppler..

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: egriffin@ctc.net
Message-ID: <378d30bc.2845495@news.infoave.net>
Source record: 68583
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Ramsey is making a kit based on the unit featured in the last couple issues of QST. The article has enough info to make your own if you want to go that route. I hope to get my Ramsey unit finished in time for our hunt this weekend.

As to antennas, my favorites are the ones made from pvc with metal measuring tape for the elements. They are detailed on a web site, but I don't have the url handy. If you don't find it with a simple search let me know and I'll send it to you. If you have a dual band receiver, make yourself a "440" version of the tape antenna. You can hunt for the third harmonic when you get in close. It works great.

73
Ed

On Mon, 12 Jul 1999 19:24:38 -0400, "kc8ffv" <kc8ffv@usxchange.net>
wrote:

>I am looking for instructions on how to make my own doppler system for
>RDFing.. Also looking for everyones suggestions on antennas for df'ing
>

KMA Antennas
VHF - UHF - HF log periodics & yagis
http://www.qsl.net/w4kma

Dayton fleamarket spaces
2828 - 2831

1129. UN to Tax Internet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: "Mr. Muckle" <jdwalton@home.com>
Message-ID: <378B69EF.5DD2604C@home.com>
Source record: 68584

A little off topic for ham newsgroups, but see this morning's New York Times. The UN is proposing to tax the internet - a penny per e-mail - to raise money for the "Internetless". Did Al Gore think this up?

It'll force folks to QSO again!

1130. Re: 3SK122 info required

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: ve6inm@telusplanet.net
Message-ID: <7mfem4ifl1@nnrp1.deja.com>
Source record: 68585

You might want to try <http://icmaster.com>. They have a lot of info on
IC's and you might get lucky on the FET.
73 de Glenn (VE6INM)

In article <7m7rutafm1@news2.inter.net.il>,
"David Greenberg" <daivi248@iol.co.il> wrote:
> Hi,
>
> Can anybody help in finding the data sheet for the 3SK122 GaAsFET?
> Is there any Web site that contain that info?
>
> Thanks
>
>

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1131. Re: Ic706 t\r relay help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: gfiber@news.cmc.net
Message-ID: <378b3496.2016639@news.cmc.net>
Source record: 68586

On Tue, 13 Jul 1999 03:24:33 GMT, "Tim" <tvendt@kear.tds.net> wrotf:

>Hi.... I have an IC-706 that won't key an amp. I built an interface for it
>but it seems that it may have been used on an amp that drew more than 20ma
>and probably blew the t\r switch in the 706. Does anyone know if the tr
>relay is a mechanical relay or are they using a transistor switch. if you
>have any info on this it would be appreciated. I don't have a service
>manual for this but I am technically adept (more or less).. I fix pro-sound
>gear for a living... if this has happened to someone in the past and you
>have fixed it, please let me know what you did.... one of the tests I have
>done is to measure the resistance across pins 2 and 3 on the 13 pin din
>plug keyed and unkeyed and the resistance doesn't change from several
>megohms. It should drop to somewhere around <1 ohm.... if i short pins 2&3
>together, the amp keys to TX. Please e-mail me at ....
>tvendt@kear.tds.net
>Thanks in advance
>Tim KB1MM

There is no relay in the 706 series. Pin 3 is connected to a
transistor and it goes low to less than 1 volt when you press the PTT
button of the mic or press the CW key. I would use an opto isolator
connected from 13.8 volts to Pin 3 then do with the output as you
require. Almost every time you connect a relay directly to Pin 3 you
will blow the internal transistor unless you protect for the back emf
generated by the relay with at least a snubber diode.

The Pin 3 can only sink a maximum of 20 mA as listed on page 6 of the
706 operators manual.

Ameritron has built up a two transistor switching device model ARB-702
which works well with the 706.

Hope this helps

Gary Fiber

Washington State Resident

1132. URGENT update on FREE *junk* HP R/S Schlumberger Polaroid

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: spam@nospam.com
Message-ID: <378b3899.20103754@news.lin.foa.se>
Source record: 68587

I did check today only to discover even more interesting devices!
Updated list:
Polaroid C30 scope camera
Polaroid Shackman scope camera
HP 12050 IR-HPIB link including opto fiber cable, one unit defunk
HP5105 plus 5110(?) Direct synth with reference signalsource
R/S 0-100 dB attenuator BIG 19 inch wide High power?? Very big
connectors!!
R/S Noise generator
R/S ESM180 VHF AM/FM receiver 31,5 kg!
Schlumberger precision signal source 0-30 MHz
HP 9825 Instrument controller with plotter, printer ....
Tek squrare wave generator calibrator ??
Apple Mac plus

All units are FREE, as it will be shipped to scrap within a few
days!!!

You pick up, smaller items might be shipped at your COST!!!
All junk located at LINK PING SWEDEN

Contact me ASAP lasse.moell@swipnet.se.nospam and remove the usual
nospam from my adress!

My estimate is this will be shipped to scrap-yard on friday at the
latest....

I HATE TO SEE INSRUMENTS BEEING SCRAPPED!

1133. How do I read toroid core

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: Alex <aturner@netunlimited.net>
Message-ID: <7mfedl$v6r$1@news.netunlimited.net>
Source record: 68588

Just getting back into ham radio after a long layoff and am trying some homebrewing. Question: How do you read the designations for the cores from Amidon,etc. Such as T50-2. I think part of it is the size but I'm interested in knowing whaich core is best for which freq. Can someone point me in the right direction to find this info. thanks

Al,N4BYJ
aturner@netunlimited.net

1134. Re: doppler..

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: Clint Bradford <clint@clintbradford.com>
Message-ID: <7mfl5t$lc3$1@nnrp1.deja.com>
Source record: 68589
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <931835261.978.7@news.remarQ.com>,
"kc8ffv" <kc8ffv@usxchange.net> wrote:
> I am looking for instructions on how to make my own doppler system for
> RDFing.. Also looking for everyones suggestions on antennas for
> df'ing

Here's an informative site:

http://www.pe.net/~dopplers/

- Clint Bradford, ATTENTION to Details
http://www.clintbradford.com

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1135. Flat Coax?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: David Green <djgreen@hooked.net>
Message-ID: <7mflss$9il$1@its.hooked.net>
Source record: 68590
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hello All;
I'm in search of a short section of "flat coax" HF feed (for 20M
operation;possible
100W transfer energy) that can be tightly pressed between a vehicle window
and
the adjacent rubber seal. The wife has make it very clear there will be no
holes
added to "her" :-) van for a direct coaxial antenna feed.

Any suggestions, ideas? Do such items exist?

Currently, the side window pressure fit to surrounding rubber appears to be
so tight
as to not provide the space necessary to accommodate the smaller Beldon 58/U
coax without possible overstress of the surrounding glass.

Suggestions, comments would be greatly appreciated.

Thanks in advance,

Dave Green
KK6KM
djgreen@hooked.net

1136. Re: How do I read toroid core

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <378B5731.43B76378@mwci.net>
Source record: 68591

Alex wrote:

> Just getting back into ham radio after a long layoff and am trying some
> homebrewing. Question: How do you read the designations for the cores from
> Amidon,etc. Such as T50-2. I think part of it is the size but I'm interested
> in knowing whaich core is best for which freq. Can someone point me in the
> right direction to find this info. thanks

Suggest you go to

http://www.amidon.com

and get all the info.

Bill W0IYH

1137. Help!-Need specs for Eimac 2-450A

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: Pinky & The Brain <odin@webspan.net>
Message-ID: <931882753.758.41@news.remarQ.com>
Source record: 68592
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Picked up one of these beasties as a curio for the shack but would like to know what its original use was!!! She's a BIG sucker!!!!!!!!! Glass with a 4 pin base, 13 inches OAL by 4.5 inch DIA. Large plate cap at the top! Any help greatly appreciated!!!

TNX a Bunch!

Steve

1138. Hello all...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: john_mason@mohawkind.COM
Message-ID: <00a701becd49$fb6d3ee0$1332140a@Mohawk>
Source record: 68593

Hello one and all...

My name is John, K4JJM, and I'm fairly new to ametuer radio... I'd like to learn a little about radio circuits and basic (very basic) electronics. I'm a computer programmer by trade and have a very limited knowledge of the actual hardware under the hood.

I'd like to learn about RX/TX circuits and how they combine to receive/transmit radio signals.

Does anyone have suggestions (I know I'm asking for it now!) on books that I might look into to learn the basics of radio circuitry without spending a couple of years learning the theory behind it all? I'd like to find something with hands-on applications. I've been concidering the ARRL Handbook, but I wonder if it might be a bit advanced for me. I'd like to find something that has usefull projects to apply the circuits that I learn... I don't want to build a remote switch for a lamp or a digital egg timer!

I'm interested in QRP and I'm in the process of learning my code to get privileges on the HF bands. I would like to build a simple receiver and eventually a QRP transmitter... Any suggestions?

Also, what type of test equipment will I need to start this "hobby"? Are there good kits/projects available for some of the test equipment? I all I have right now is a digital VOM and a cheap soldering iron... I'm sure I will need much more to be proficient! But just like everyone else... It's hard to justify "hobby" expenses to the household "Chief Finance Officer"!

Thanks,
John... K4JJM.

1139. Re: Tracking/homing device or plans needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: Robert Lyons <boblyons@umich.edu>
Message-ID: <378B66AB.B31BCBDD@umich.edu>
Source record: 68594

daveooo@my-deja.com wrote:
>
> I am in search of a practical, inexpensive homing device using an fm
> reciever such as a walkman and a range of 1 to 3 miles to be used in
> conjunction with my local police departments efforts to curb auto
> burglaries (stereos, amps, speakers, ect). Any plans, devices for
> sale, schematics, or advice are needed. Thank you.
>
> Sent via Deja.com http://www.deja.com/
> Share what you know. Learn what you don't.

Check out your local hobby store for model rocket tracking
transmitters. They're low power, but might serve your needs.

1140. Re: How do I read toroid core

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <378B5C04.C02F557A@mwci.net>
Source record: 68595

William E. Sabin wrote:

> Alex wrote:
>
> > Just getting back into ham radio after a long layoff and am trying some
> > homebrewing. Question: How do you read the designations for the cores from
> > Amidon,etc. Such as T50-2. I think part of it is the size but I'm interested
> > in knowing whaich core is best for which freq. Can someone point me in the
> > right direction to find this info. thanks
>
> Suggest you go to
>
> http://www.amidon.com
>
> and get all the info.

Correction: http://www.bytemark.com/amidon/content0.htm

> Bill W0IYH

1141. Re: why did i become a licensed operator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: Robert Lyons <boblyons@umich.edu>
Message-ID: <378B6854.67DCE00@umich.edu>
Source record: 68596

xtreme wrote:
>
> $1000 down the tubes and its so damn boring!
> N9YIM

Yup, you gotta wonder why you did it in the first place if you now find it so boring. What do you actually do with radio? Have you made any friends? tried building anything? pushed yourself to learn something new and hard? Do you volunteer to help out at service functions? I see you're a technician. Were you hoping for world-spanning communication? if so, try upgrading. Read the ARRL Handbook for ideas on things you might do. Does it bore you to read that? Maybe you're not cut out for amateur radio in the first place.

So - ask yourself - why DID you get that license?

Bob, KI8AB

1142. Re: Looking for RF Books

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <7mfpvc$7qg@dfw-ixnews16.ix.netcom.com>
Source record: 68597

In article <7mbrjgqsr1@news.netcologne.de>,
Peter Bolch <nc-bolchpe@netcologne.de> wrote:
>I'm looking for a not too academical book about RF circuits and techniques,
>especially for frequencies above 1 GHz. Something like a "RF version" of
>"The Art of Electronics" or Tietze/Schenk's "Advanced electronic circuits".

Also, "RF Circuit Design" by Chris Bowick, which is now published by Newnes.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

1143. Downconverter Solution Using Off-the-Shelf Integrated Circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: lagniappe <lagniappe@my-deja.com>
Message-ID: <7mftia$p6g$1@nnrp1.deja.com>
Source record: 68598

If there is anyone familiar with the current offerings of RFIC manufacturers, I would appreciate your help.

I'm designing a block downconverter (fixed LO) from 1.2 GHz to 440 MHz. My application is low-power battery-operated mobile. I will build it into a small housing on the inside portion of a glass-mount L-Band antenna, with a small probe to retransmit the signal in the 70-cm band. You can think of it as a one-way transverter with microwatt output power.

The idea is that I'd just reach up and turn it on, then use my 440 HT to listen to 1.2 GHz inside my car without having to remove the rubber-duck antenna. Actually I can't remove it, since it's an Alinco DJS-41T. Since the range will be only a foot or so, a power level that would be undetectable across the street should work fine.

In keeping with the small size and low-power requirements, I was wondering if there is a commercial IC that I might make use of, maybe something from a 900-MHz or 2.4-GHz cordless phone. Ideally I'd like something with minimal off-chip components (maybe just L-C filtering for RF and IF), built-in PLL/VCO with frequency stability using easily-obtained crystal, reasonable NF at 1.2 GHz, and, of course, available cheap on the secondary market.

What is out there that I should be looking into?

best regards,

Martin

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1144. Helical Antenna question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <378B64A7.5460B82B@midwestmicro-tek.com>
Source record: 68599

I live in an apartment so I don't have the room for a big antenna. I'm only interested in working 80 and 40 meters so this makes for even more problems. I looked into different designs for apartment dwellers and I think that the helical is the best for my situation. My question is, can I wrap both the 80 and the 40 meter on the same form and then switch between them?

1145. S-meters... Where do they go?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <378B62C4.4AC86535@midwestmicro-tek.com>
Source record: 68600

First off thanks to every one who responded to my Tansmitter Design post, I got a number of good leads and David sent a lot of good stuff, thanks guys.

Okay, I'm building the Mate to the Mighty Midget from a 1966 QST magazine article. I want to add an S-meter to it and the design that I have needs to be hooked into the AGC circuit, well the MMM doesn't have an AGC. It does, however, have a 20k pot to manualy adjust the gain. Where should I hook the S-meter into?

1146. Re: Hello all...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.SOL.4.10.9907131309260.18996-100000@Stratus.CAM.ORG>
Source record: 68601

It is worth having the ARRL Handbook. It has both basics and advanced material. Even if it looks too complicated, it's a great reference to have around as you deal with simpler material that leads you to ask questions.

However, the Handbook has gotten quite expensive in recent years. You might be able to track down an older edition for significantly less. I picked up a 1969 edition two months ago for fifty cents at a local library used book sale. The basics have remained the same after thirty years, though that is pusshing it's usefulness to a beginner. A ten or fifteen year old edition should probably still be useful, especially when the price drops a fair amount. Hamfests are a good place to find them, along with other used electronic books. The ARRL keeps a list of upcoming hamfests at their website at http://www.arrl.org

You might also find a copy at your local library. Not as convenient as having a copy at home, but quite a bit less expensive. Once you've borrowed it a few times, you'll either feel it really is beyond you at the moment, or find that it's something you do want around.

The ARRL has some less expensive books that you might find more approachable. Doug DeMaw's W1FB's Design Notebook looks like a good starting book. I say "looks" because it's been so long since I was a begninner I can't really judge.

His W1FB's QRP Notebook is along the same lines, though I'd say it's aimed at a somewhat more advanced readership.

Neither of these books are detailing full projects. There are simple receivers and transmitters, but the detail is mostly the schematic.

QRP Classics from the ARRL is a collection of articles from QST about low power equipment, and the stuff tends to be simple. Because they are complete articles, they probably are more useful to someone starting out. I think it's out of print, however. QRP Power is the replacement, with mostly different articles. Though the equipment seems more complicated than in QRP Classics.

An important trick to saving money is understanding the circuitry. Then you can scrounge up parts and use what you have rather than track down the exact parts in the article and pay full price for them. This takes time and experience, but in the end it's worth it.

The first few things I ever tried to build did not work, and I did not have the experience or knowledge to figure out what was wrong. In retrospect, I suspect my lack of soldering ability had a lot to do with it, but I was also burdened with some substitute parts that the counter

clerk at the electronic store made to help me save some money. Who knows if they were really suitable substitutes?

The first thing I got to work was a code practice oscillator that I built by twisting wires together (which did not make it very transportable). The parts for it came out of a table radio and the transistor came from a "computer circuit board" (this was in 1972). I actually cut up the board to get the transistor, rather than desolder it. The fact that it did work pushed me further. The fact that I had somehow picked up enough to know I could make things without exact parts (and learned enough to pick parts that probably would work) allowed me to make the attempt.

You might consider all first projects to be throwaways. Use them to learn to solder well, and learn from experience. Try to scrounge parts, be it from discarded equipment or from fellow hams, and the cost will be low enough that any problems will not be a problem. Concentrate on getting the electronics working, not a fancy case that will add considerably to the cost.

Michael VE2BVW

On 13 Jul 1999, John Mason
wrote:

> Hello one and all...
>
> My name is John, K4JJM, and I'm fairly new to ametuer radio... I'd like to
> learn a little about radio circuits and basic (very basic) electronics. I'm
> a computer programmer by trade and have a very limited knowledge of the
> actual hardware under the hood.
>
> I'd like to learn about RX/TX circuits and how they combine to
> receive/transmit radio signals.
>
> Does anyone have suggestions (I know I'm asking for it now!) on books that I
> might look into to learn the basics of radio circuitry without spending a
> couple of years learning the theory behind it all? I'd like to find
> something with hands-on applications. I've been concidering the ARRL
> Handbook, but I wonder if it might be a bit advanced for me. I'd like to
> find something that has usefull projects to apply the circuits that I
> learn... I don't want to build a remote switch for a lamp or a digital egg
> timer!
>
> I'm interested in QRP and I'm in the process of learning my code to get
> privileges on the HF bands. I would like to build a simple receiver and
> eventually a QRP transmitter... Any suggestions?
>
> Also, what type of test equipment will I need to start this "hobby"? Are
> there good kits/projects available for some of the test equipment? I all I
> have right now is a digital VOM and a cheap soldering iron... I'm sure I
> will need much more to be proficient! But just like everyone else... It's
> hard to justify "hobby" expenses to the household "Chief Finance Officer"!

>
>
> Thanks,
> John... K4JJM.
>
>
>
>
>

1147. Re: Flat Coax?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <378B7BBC.A6CACBDE@erols.com>
Source record: 68602
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

How about going through the rubber gromets in the firewall or a rubber
drain plug in the floorboard (sometimes under the back seat) or behind
the seat into the trunk. Never heard of any flat coax.

David Green wrote:
>
> Hello All;
> I'm in search of a short section of "flat coax" HF feed (for 20M
> operation;possible
> 100W transfer energy) that can be tightly pressed between a vehicle window
> and
> the adjacent rubber seal. The wife has make it very clear there will be no
> holes
> added to "her" :-) van for a direct coaxial antenna feed.
>
> Any suggestions, ideas? Do such items exist?
>
> Currently, the side window pressure fit to surrounding rubber appears to be
> so tight
> as to not provide the space necessary to accommodate the smaller Beldon 58/U
> coax without possible overstress of the surrounding glass.
>
> Suggestions, comments would be greatly appreciated.
>
> Thanks in advance,
>
> Dave Green
> KK6KM
> djgreen@hooked.net

1148. Breadboard PC pads

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: Michael Young <nobody@all.org>
Message-ID: <931889625.574.43@news.remarQ.com>
Source record: 68603

Some breadboard PC's have only isolated circular pads. How are these used? They seem to be good only for soldering practice. :-)

Thanks.

Michael.

1149. Old integrated circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7mg3fcngl1@plutonium.btinternet.com>
Source record: 68604

Does anyone have any info on either the TA300 audio amplifier or the
719HC7441 IF amplifier?

1150. Re: Flat Coax?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: Alan Price <career1@home.com>
Message-ID: <378B9452.9FFAFAC5@home.com>
Source record: 68605
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Have you considered divorce?
Alan
W1HYV
FYI married 33 years. By the way, to the same woman.

David Green wrote:
>
> Hello All;
> I'm in search of a short section of "flat coax" HF feed (for 20M
> operation;possible
> 100W transfer energy) that can be tightly pressed between a vehicle window
> and
> the adjacent rubber seal. The wife has make it very clear there will be no
> holes
> added to "her" :-) van for a direct coaxial antenna feed.
>
> Any suggestions, ideas? Do such items exist?
>
> Currently, the side window pressure fit to surrounding rubber appears to be
> so tight
> as to not provide the space necessary to accommodate the smaller Beldon 58/U
> coax without possible overstress of the surrounding glass.
>
> Suggestions, comments would be greatly appreciated.
>
> Thanks in advance,
>
> Dave Green
> KK6KM
> djgreen@hooked.net

1151. Re: Breadboard PC pads

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: James Horn <jimhorn@svn.net>
Message-ID: <378b9698.0@news1.svn.net>
Source record: 68606

Hi Michael -

Actually, they're quite useful indeed. The 'pad per hole' boards allow you to solder most PCB mountable parts easily. Then you wire point-to-point using any of a variety of techniques. I happen to like using an 800 degree F soldering iron tip and around 30 AWG magnet wire - the heat will vaporize the insulation and allow soldering directly. The microprocessor controlled Engine Monitoring System for the Rutan / Yeager Voyager (World Flight, 1986) was built just that way.

So what does the protoboard provide in all this? By soldering the parts in, there are no flea clips or kluges to keep them well mounted. Many such boards have a continuous ground plane on the component side that is easy to use for any pins that need grounding. You don't need to drill holes or have to connect only to the various device pins (the pads make soldering much easier).

Give 'em a try - you may be pleasantly surprised!

Jim Horn WB9SYN/6 Been building circuits for 30+ years...

1152. Re: Flat Coax?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: "Mr. Muckle" <jdwalton@home.com>
Message-ID: <378BD5DF.7E2C649B@home.com>
Source record: 68607
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Why not use a balun and twin-lead and an antenna with 300 ohm impedance?

Buying your own van would be cheaper than divorce.

David Green wrote:

> Hello All;
> I'm in search of a short section of "flat coax" HF feed (for 20M
> operation;possible
> 100W transfer energy) that can be tightly pressed between a vehicle window
> and
> the adjacent rubber seal. The wife has make it very clear there will be no
> holes
> added to "her" :-) van for a direct coaxial antenna feed.
>
> Any suggestions, ideas? Do such items exist?
>
> Currently, the side window pressure fit to surrounding rubber appears to be
> so tight
> as to not provide the space necessary to accommodate the smaller Beldon 58/U
> coax without possible overstress of the surrounding glass.
>
> Suggestions, comments would be greatly appreciated.
>
> Thanks in advance,
>
> Dave Green
> KK6KM
> djgreen@hooked.net

1153. Re: Flat Coax?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <378B9C1F.E3831E52@erols.com>
Source record: 68608
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Divorce would probably mean he wouldn't have a car to put the rig into
or enough money to purchase round coax.

Alan Price wrote:
>
> Have you considered divorce?
> Alan
> W1HYV
> FYI married 33 years. By the way, to the same woman.
>
> David Green wrote:
> >
> > Hello All;
> > I'm in search of a short section of "flat coax" HF feed (for 20M
> > operation;possible
> > 100W transfer energy) that can be tightly pressed between a vehicle window
> > and
> > the adjacent rubber seal. The wife has make it very clear there will be no
> > holes
> > added to "her" :-) van for a direct coaxial antenna feed.
> >
> > Any suggestions, ideas? Do such items exist?
> >
> > Currently, the side window pressure fit to surrounding rubber appears to be
> > so tight
> > as to not provide the space necessary to accommodate the smaller Beldon 58/U
> > coax without possible overstress of the surrounding glass.
> >
> > Suggestions, comments would be greatly appreciated.
> >
> > Thanks in advance,
> >
> > Dave Green
> > KK6KM
> > djgreen@hooked.net

1154. Re: PSK31 and Kenwood TS-570-S--Info Sought

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: rick <rick@netgsi.com>
Message-ID: <q5Ni3.7036$Li1.17555931@news-read1.qis.net>
Source record: 68609

I have not checked this newsgroup for a bit. I am also interested in this mode with this radio. Not sure what the last response was referring to. Yes small parts can be mail ordered, but what is needed?

1155. Re: Flat Coax?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: "Charles H. Reichert" <reichert@cig.mot.com>
Message-ID: <378B9A28.5E23107C@cig.mot.com>
Source record: 68610
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Maybe you're looking for "Twin Lead Cable"
sometimes referred to as "Ribbon Cable".
Generally this is 200 to 300 Ohm but did see
75 ohm once.

Chuck KD9JQ

kd9jq@imaxx.net
http://www.imaxx.net/~kd9jq

David Green wrote:
>
> Hello All;
> I'm in search of a short section of "flat coax" HF feed (for 20M
> operation;possible
> 100W transfer energy) that can be tightly pressed between a vehicle window
> and
> the adjacent rubber seal. The wife has make it very clear there will be no
> holes
> added to "her" :-) van for a direct coaxial antenna feed.
>
> Any suggestions, ideas? Do such items exist?
>
> Currently, the side window pressure fit to surrounding rubber appears to be
> so tight
> as to not provide the space necessary to accommodate the smaller Beldon 58/U
> coax without possible overstress of the surrounding glass.
>
> Suggestions, comments would be greatly appreciated.
>
> Thanks in advance,
>
> Dave Green
> KK6KM
> djgreen@hooked.net

1156. Re: Flat Coax?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: No-Code Amateur <nocode@my-deja.com>
Message-ID: <7mgcm0vrj1@nnrp1.deja.com>
Source record: 68611
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <378B9C1F.E3831E52@erols.com>,
> > David Green wrote:
> > >
> > > Hello All;
> > > I'm in search of a short section of "flat coax"
> > > HF feed (for 20M operation;possible 100W transfer
> > > energy) that can be tightly pressed between a
> > > vehicle window and the adjacent rubber seal.
> > > The wife has make it very clear there will be no
> > > holes added to "her" :-) van for a direct coaxial
> > > antenna feed.

> Alan Price wrote:
> >
> > Have you considered divorce?
> > Alan
> > W1HYV
> > FYI married 33 years. By the way, to the same woman.

Bob Lewis <aa4pb@erols.com> wrote:
> Divorce would probably mean he wouldn't have
> a car to put the rig into or enough money to
> purchase round coax.

No Bob; the way the courts work she would get the
car, the money, and the 'RIG'. Does the old Jerry
Reed song She got the gold mine, I got the shaft,
ring a bell with you?! ;)

Let's put "Courtesy and Good Manners" back into Amateur Radio!
Stop bad mouthing the (No-Code) Technician Class Amateur Operators!!!

Accused of being a CB'r ? Find out about the "New" discrimination!
- http://www.angelfire.com/ok2/cb -

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1157. packet radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: mario_cordina@hotmail.com
Message-ID: <378ba67d.1075543@news.maltanet.net>
Source record: 68612

Hi ppl
I just got my amateur radio callsign and i am interested in getting started in packet radio. I decided to build my own TNC around the TCM3105 IC and gonna use baycom software. IS there anyone out there who can e-mail me a circuit diagram and pcb layout and artwork to build the TNC??
If you have any info please e-mail me at mario_cordina@hotmail.com
thanks
Mario Cordina 9H5MR

1158. Re: Help!-Need specs for Eimac 2-450A

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: Marv_E_Ads@Juno.com
Message-ID: <7mgffg$v9$1@nnrp1.deja.com>
Source record: 68613
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

In article <931882753.758.41@news.remarQ.com>,
"Pinky & The Brain" <odin@webspan.net> wrote:
> Picked up one of these beasties as a curio for the shack but would
like to
> know what its original use was!!! She's a BIG sucker!!!!!!!!! Glass
with a 4
> pin base, 13 inches OAL by 4.5 inch DIA. Large plate cap at the top!
Any
> help greatly appreciated!!!
>
> TNX a Bunch!
>
> Steve
>
>

Hi Steve,
It's a rectifier.

30KV PIV / 1 AMP average output / 8A peak
7.5V @ 25A on the filament

73,
Marv WC6W

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1159. Re: Flat Coax?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: brian@beast.amd.com
Message-ID: <7mgboh$e04$1@amdint2.amd.com>
Source record: 68614
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Get some scrap plexiglass approximately the same thickness as your car
window. Trace the shape of the window's top edge onto a piece of
cardboard and then cut three sections of plexiglass the same shape as
the hole that is formed when you roll the window down about an inch.
Glue these into a sandwich with your favorite sticky goo such that
they form a "pocket" that seats nicely to the top curve of the
window. Drill hole for the coax in the plexiglass and then wedge it
into place by rolling the window up to clamp it between the top of the
window and the rubber seal. If you don't want to trap the plexiglass
onto the feed line, you can make a slot instead of a hole, but a slot
will leak more.

Brian McMinn
we5tx

In article <7mflss$9il$1@its.hooked.net>,
David Green <djgreen@hooked.net> wrote:
>Hello All;
>I'm in search of a short section of "flat coax" HF feed (for 20M
>operation;possible
>100W transfer energy) that can be tightly pressed between a vehicle window
>and
>the adjacent rubber seal. The wife has make it very clear there will be no
>holes
>added to "her" :-) van for a direct coaxial antenna feed.
>
>Any suggestions, ideas? Do such items exist?
>
>Currently, the side window pressure fit to surrounding rubber appears to be
>so tight
>as to not provide the space necessary to accommodate the smaller Beldon 58/U
>coax without possible overstress of the surrounding glass.
>
>Suggestions, comments would be greatly appreciated.
>
>Thanks in advance,
>
>Dave Green
>KK6KM
>djgreen@hooked.net
>
>
>
>

1160. Lost URL of Large Loop

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <01becd83$69f92ca0$32874d0c@default>
Source record: 68615

Hi

I lost the URL of a commercial page that had three different loops for sale.
It showed pictures of them with specs and prices, the largest loop was made with 5" diameter aluminum and had a very high Q. The picture showed the loop above a forklift truck.
The company made other antennas also, the loops were only part of their site.

Thanks for your help
Mike

1161. ARRL HANDBOOKS AND QST PUBLICATIONS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: REV <rev-1234@cybertrails.com>
Message-ID: <SpQi3.45$JF2.1312329764@mick.cybertrails.com>
Source record: 68616

Does any one know if the arrl handbook is still published and where can one
get copies of say 1950's??? Also QST ?
How about CQ mag?
obvious I have been out of circulation for some time, but did build my
station out of the handbook in the 50's in Alaska KL7BDA bob

1162. Re: Flat Coax?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: Jack Taylor <n7oo@theriver.com>
Message-ID: <TNQi3.31316$AU3.670332@news2.giganews.com>
Source record: 68617
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

For a source of flat coax (70 Ohm) check out
http://www.smallear.com/ionsale1.htm. It's designed to go where no coax has
gone before and should handle 100 watts OK.

73 de Jack

David Green wrote in message <7mflss$9il$1@its.hooked.net>...
>Hello All;
>I'm in search of a short section of "flat coax" HF feed (for 20M
>operation;possible
>100W transfer energy) that can be tightly pressed between a vehicle window
>and
>the adjacent rubber seal. The wife has make it very clear there will be no
>holes
>added to "her" :-) van for a direct coaxial antenna feed.
>
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>
>Currently, the side window pressure fit to surrounding rubber appears to be
>so tight
>as to not provide the space necessary to accommodate the smaller Beldon
58/U
>coax without possible overstress of the surrounding glass.
>
>Suggestions, comments would be greatly appreciated.
>
>Thanks in advance,
>
>Dave Green
>KK6KM
>djgreen@hooked.net
>
>
>
>

1163. Gin Pole ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: Patrick Onesty <n2lka@frontiernet.net>
Message-ID: <7mgm66$mb6$1@node17.cwnet.frontiernet.net>
Source record: 68618

Hello All,
anyone got any pictures,drawings,sites on gin pole construction? I am
getting a rohn 25G.

thanks

--
Patrick Onesty (n2lka)
1291 Burlingham Road
Pine Bush, New York 12566-7325
(914)744-3518
Email: n2lka@frontiernet.net
ICQ: 4708894
Home Page: http://www.frontiernet.net/~n2lka

1164. Re: Breadboard PC pads

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: Michael Young <nobody@all.org>
Message-ID: <931913631.746.57@news.remarQ.com>
Source record: 68619

I'll give it a try, but not sure I've got the picture. So, you solder the part to the pad, and then "melt" wires into the solder blob?

Michael.

James Horn <jimhorn@svn.net> wrote in message news:378b9698.0@news1.svn.net...
> Hi Michael -
>
> Actually, they're quite useful indeed. The 'pad per hole' boards allow
> you to solder most PCB mountable parts easily. Then you wire
> point-to-point using any of a variety of techniques. I happen to like
> using an 800 degree F soldering iron tip and around 30 AWG magnet wire -
> the heat will vaporize the insulation and allow soldering directly. The
> microprocessor controlled Engine Monitoring System for the Rutan / Yeager
> Voyager (World Flight, 1986) was built just that way.
>
> So what does the protoboard provide in all this? By soldering the parts
> in, there are no flea clips or kluges to keep them well mounted. Many
> such boards have a continuous ground plane on the component side that is
> easy to use for any pins that need grounding. You don't need to drill
> holes or have to connect only to the various device pins (the pads make
> soldering much easier).
>
> Give 'em a try - you may be pleasantly surprised!
>
> Jim Horn WB9SYN/6 Been building circuits for 30+ years...
>

1165. Re: ny schematics for a tubed RF amplifier for 27-28MHz?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: "William F. Hagen" <whagen@inreach.com>
Message-ID: <378BE2D3.6D20E3E5@inreach.com>
Source record: 68620

not gonna find that here.

orion wrote:

> Hi all!
> I am in the search for any schematics of a 27-28 MHz RF amplifier using
> popular tubes as the 6146, 807, 811A, 4-125 etc
> Any help would be greately appreciated.
>
> Thanks in advance!!
> 73 Panos

--
Please remove the word 'NOREPLY' from the email address, sorry for the
inconvenience, but it helps keep down the spam.

1166. Re: S-meters... Where do they go?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7mgrhudps1@autumn.news.rcn.net>
Source record: 68621

The s meter can go on the agc bus, usually requires a DC amplifier for operation. Second place is in series with agc controlled IF stage in series with the plate B+ feed. Meter will read "backwards" in this application. S meter readings are based on the developed AGC voltage. If the set doesn't have AGC, you can't expect the S meter to work.

Rick Haub wrote in message <378B62C4.4AC86535@midwestmicro-tek.com>...
>First off thanks to every one who responded to my Tansmitter Design
>post, I got a number of good leads and David sent a lot of good stuff,
>thanks guys.
>
>Okay, I'm building the Mate to the Mighty Midget from a 1966 QST
>magazine article. I want to add an S-meter to it and the design that I
>have needs to be hooked into the AGC circuit, well the MMM doesn't have
>an AGC. It does, however, have a 20k pot to manualy adjust the gain.
>Where should I hook the S-meter into?
>

1167. Re: ARRL HANDBOOKS AND QST PUBLICATIONS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <378BF26E.B78203DF@teleport.com>
Source record: 68622

Welcome back, Bob.

For information about the ARRL Handbook, QST, and other League publications, visit http://www.arrl.org, or call 888-277-5289 (publication sales desk) or 860-594-0200 (ARRL general number). You can get back issues of QST on CD-ROM but I don't think this is true for the Handbook. One of the out-of-print book services might be able to locate an old Handbook, and ham conventions or flea markets are always a good place to look.

CQ Magazine is alive and well. Their web site is http://members.aol.com/cqmagazine, phone 516-681-2922.

Both are on the East Coast.

Roy Lewallen, W7EL (ex-KL7CIB)

REV wrote:
>
> Does any one know if the arrl handbook is still published and where can one
> get copies of say 1950's??? Also QST ?
> How about CQ mag?
> obvious I have been out of circulation for some time, but did build my
> station out of the handbook in the 50's in Alaska KL7BDA bob

1168. Re: Response of Dielectric Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: Peter Bolch <nc-bolchpe@netcologne.de>
Message-ID: <7mgu2t$k32$1@news.netcologne.de>
Source record: 68623

Hi Al,

> Inderdigital yes, and combline has moding depending upon geometry.

I thought of these dieelectric filters made of two (ore more) coupled dielectric resonators made of ceramics.

> Most engineers follow bandpass filters with "clean up" filters that act as low pass >filters above the passband if there is a problem.

Will do. Thanks for your reply

Peter

1169. Re: ARRL HANDBOOKS AND QST PUBLICATIONS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: Jim & Karen <jimllp@cet.com>
Message-ID: <378BFED7.7E1B6EDA@cet.com>
Source record: 68624

Yes Bob, the ARRL is very much alive and CQ mag is also. Check the ARRL
web site at www.arrl.org for info. Also check the local hamfests for
old handbooks and mags. Good luck.
73 Jim W6LLP

REV wrote:
>
> Does any one know if the arrl handbook is still published and where can one
> get copies of say 1950's??? Also QST ?
> How about CQ mag?
> obvious I have been out of circulation for some time, but did build my
> station out of the handbook in the 50's in Alaska KL7BDA bob

1170. Re: ny schematics for a tubed RF amplifier for 27-28MHz?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19990713231957704 32@zetnet.co.uk>
Source record: 68625

> I am in the search for any schematics of a 27-28 MHz RF amplifier using
> popular tubes as the 6146, 807, 811A, 4-125 etc
> Any help would be greately appreciated.
> Thanks in advance!!
> 73 Panos

==========

Is SSB-AM CB legal in Greece ???

Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland UK
e-mail : gm0csz.kn6wh@ukrs.org

1171. Re: GE MASTR II

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: Bobby Atkinson <bobbys@prodigy.net>
Message-ID: <01beccc7$f9aa5340$566cfcd1@ZTU.rsc.raytheon.com>
Source record: 68674

There are several sites on the net with info on converting the MASTR II.
Go to a search site like www.mamma.com and search on "mastr".
Some include how to read the model numbers. In the case yours isn't
a low band VHF, as it will cost a bit more to get on 6 mtr starting with
a UHF model [;>}

J Mull1997 <jmull1997@aol.com> wrote in article
<19990710171412.12226.00001242@ng-fs1.aol.com>...
> I just received a GE MASTR II and was wondering how much would it cost
to
> change it to six meters and what kind of tuning would be
involved.....Thanks
>

1172. Re: Wanting Info On Maxon 49B5 Conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: Bobby Atkinson <bobbys@prodigy.net>
Message-ID: <01becccc$3d8b8120$566cfcd1@ZTU.rsc.raytheon.com>
Source record: 68675

A few years back I fooled aroun.. ah, I mean experimented with a Maxon
5 channel 49MHz portable. Maxon was kind enough to supply a schematic
for the radio at no charge in exchange for proof of my being a ham.
Schematics are a good place to start. BOBBY K4BGA

bns <bns@entercomp.com> wrote in article <377fab8c.0@newsman.viper.net>...
> I have a Maxon 49B5 Base station that operates on 49.830 to 49.890 (5
> channell TX & RX)
> Want to convert to 6 meters. It has a PLL # LC-7150
> Any helpful information will be greatly appreciated.
> Bill
> KD4MXE
>
>
>

1173. Phase shifter info needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: dr.dongle@juno.com
Message-ID: <7me93v$6bc$1@nnrp1.deja.com>
Source record: 68676

I am looking for the formula for determaning the values for a R/C type phase shifter to be used as the feed back loop of an op-amp so as to create an oscilator. No I dont want to use a 555 I have my reasons. Any info will be appricated dr.d -- Kiss Technologys The more complicated the plumbing the easer it is to stop up the pipes M. Scott

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1174. FS: Silent Key equipment sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: mtanner@city-net.com
Message-ID: <378cafab.17279249@news.city-net.com>
Source record: 68677

A friend of mine became a Silent Key recently and I have been asked to dispose of his radio equipment. All proceeds will go directly to a trust fund set up by his sister to pay for funeral expenses. All items may be shipped UPS Ground. Prices DO NOT include shipping.

Respond to mtanner@city-net.com

The owner was a heavy smoker so most of the equipment is somewhat dirty, but other than that it is in fair to moderate condition.

Kenwood TS-430S w/ PS 250 power supply.....350.00
Swan 350 w/pwr supply.....125.00
Icom IC-2AT w/ extra battery & spk mic.....80.00
PK-232 All Mode TNC.....50.00
1/4 wave 2 mtr. Mag mount antenna.....10.00
10 amp 12 volt power supply.....15.00
Astatic D-104 microphone.....25.00
B&W TVI filter.....Best Offer MIN 5.00
Cantenna.....Best Offer
Clegg FMDX 2 meter mobile Unknown.....Best Offer
Cobra 148GTL CB Radio.....30.00
EICO 147A Signal Tracer.....Best Offer MIN 5.00
EICO 232 VTVM.....Best Offer MIN 5.00
EICO 330 RF Signal Generator.....Best Offer MIN 5.00
EICO 635 Tube Tester.....Best Offer MIN 5.00
EMC 801 Resistance / Capacitance Compariator...Best Offer MIN 5.00
Heath HD 1250 Grid Dip Meter w/ slugs.....Best Offer MIN 5.00
Heath HD-1410 CW Keyer.....20.00
Heath HM-2141 50-175Mhz SWR Meter.....Best Offer MIN 5.00
Heath IM 4100 Frequency Counter.....Best Offer MIN 10.00
Heath IN 3137 Resistance Substitution Box.....Best Offer MIN 5.00
Heath IN 347 Capacitance Substitution Box.....Best Offer MIN 5.00
HM 2140 HF SWR Meter.....Best Offer MIN 5.00
Lafayette 100 watt Power / SWR Meter.....Best Offer
MFJ 1272BX Mic / tnc switch.....Best Offer MIN 5.00
MFJ 814 SWR Meter.....Best Offer MIN 5.00
MFJ 931 Artificial Ground (like new).....45.00
MFJ 949D Antenna Tuner.....50.00
Olson TE-199 Dynamic Transistor Checker.....Best Offer MIN 5.00
Radio Shack 12Volt 1Amp power supply.....Best Offer
RCA 14T817 Desk Microphone.....Best Offer MIN 5.00
Sure 777S Slim-X Crystal Microphone.....Best Offer MIN 5.00

1175. Ic706 t\r relay help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: Tim <tvendt@kear.tds.net>
Message-ID: <01becce0$4108f800$609347cc@default>
Source record: 68678

Hi.... I have an IC-706 that won't key an amp. I built an interface for it but it seems that it may have been used on an amp that drew more than 20ma and probably blew the t\r switch in the 706. Does anyone know if the tr relay is a mechanical relay or are they using a transistor switch. if you have any info on this it would be appreciated. I don't have a service manual for this but I am technically adept (more or less).. I fix pro-sound gear for a living... if this has happened to someone in the past and you have fixed it, please let me know what you did.... one of the tests I have done is to measure the resistance across pins 2 and 3 on the 13 pin din plug keyed and unkeyed and the resistance doesn't change from several megohms. It should drop to somewhere around <1 ohm.... if i short pins 2&3 together, the amp keys to TX. Please e-mail me at ....
tvendt@kear.tds.net
Thanks in advance
Tim KB1MM

1176. Re: Phase shifter info needed

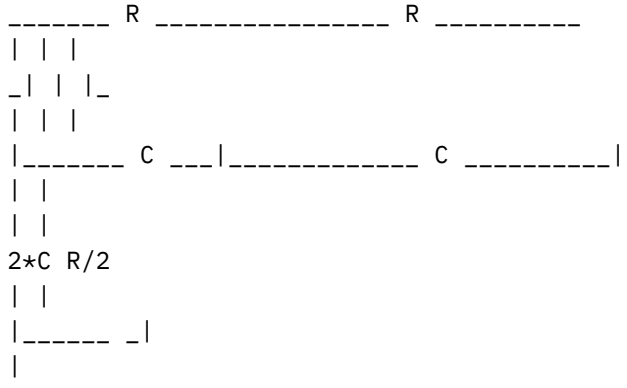
Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <7meoha$sr6@dfw-ixnews10.ix.netcom.com>
Source record: 68679

Here's one of several that will work.

Twin Tee notch network. . . .

T = RC

Notch frequency = 1/T



Peter AB4BC

dr.dongle@juno.com wrote in message <7me93v$6bc$1@nnrp1.deja.com>...
> I am looking for the formula for determaning the values for a R/C type
phase
>shifter to be used as the feed back loop of an op-amp so as to create an
>oscilator. No I dont want to use a 555 I have my reasons. Any info will be
>appricated dr.d -- Kiss Technologys The more complicated the plumbing the
>easer it is to stop up the pipes M. Scott
>
>
>Sent via Deja.com http://www.deja.com/
>Share what you know. Learn what you don't.

1177. ny schematics for a tubed RF amplifier for 27-28MHz?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: orion <orion@otenet.gr>
Message-ID: <7mf6fk$6b7$1@newssrv.otenet.gr>
Source record: 68680

Hi all!
I am in the search for any schematics of a 27-28 MHz RF amplifier using
popular tubes as the 6146, 807, 811A, 4-125 etc
Any help would be greately appreciated.

Thanks in advance!!
73 Panos

1178. yaesu ft757gx control software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: Ken Gubbins <kenny@two-stroke-addicts.freeserve.co.uk>
Message-ID: <7mf9m5ekd1@news8.svr.pol.co.uk>
Source record: 68681

does anyone know of any or have any rig control programs for the ft757gx
if you know of any andyou also know the site where i can download it from
the will help.
i already have a few like ft manager,mki575,757gx
many thanks
ken
kenny@two-stroke-addicts.freeserve.co.uk

1179. yaesu ft757gx control software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-13 00:00:00 UTC
From: Ken Gubbins <kenny@two-stroke-addicts.freeserve.co.uk>
Message-ID: <7mf9m6ekd2@news8.svr.pol.co.uk>
Source record: 68682

does anyone know of any or have any rig control programs for the ft757gx
if you know of any andyou also know the site where i can download it from
the will help.
i already have a few like ft manager,mki575,757gx
many thanks
ken
kenny@two-stroke-addicts.freeserve.co.uk

1180. Re: Downconverter Solution Using Off-the-Shelf Integrated Circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.SOL.4.10.9907140046510.4000-100000@Stratus.CAM.ORG>
Source record: 68533

I suspect you'll have to have something more sophisticated than you have planned. Making the leap through the glass and to the rubber ducky may require more power at 440MHz (ie it would be more like a translator in a satellite) or some sort of coupling from the output of the converter to the rubber ducky.

As for the actual converter, I don't know if they have exactly what you need, but I'd check Maxim. I've ended up on their mailing list, and I've seen some very interesting front end IC's described recently. I can't remember whether any had a synthesizer built in.

Maxim Integrated products
120 San Gabriel Drive
Sunnyvale, CA 94086

They are worth checking anyway, since I've seen a number of RF-related IC's, and a while back they had an article on a phasing transmitter. I've never checked it, but they have a website at http://www.maxim-ic.com

Michael VE2BVW

On Tue, 13 Jul 1999, lagniappe wrote:

> If there is anyone familiar with the current offerings of
> RFIC manufacturers, I would appreciate your help.
>
> I'm designing a block downconverter (fixed LO) from 1.2 GHz
> to 440 MHz. My application is low-power battery-operated
> mobile. I will build it into a small housing on the inside
> portion of a glass-mount L-Band antenna, with a small probe
> to retransmit the signal in the 70-cm band. You can think
> of it as a one-way transverter with microwatt output power.
>
> The idea is that I'd just reach up and turn it on, then use
> my 440 HT to listen to 1.2 GHz inside my car without having
> to remove the rubber-duck antenna. Actually I can't remove
> it, since it's an Alinco DJS-41T. Since the range will
> be only a foot or so, a power level that would be undetectable
> across the street should work fine.
>
> In keeping with the small size and low-power requirements, I
> was wondering if there is a commercial IC that I might make
> use of, maybe something from a 900-MHz or 2.4-GHz cordless
> phone. Ideally I'd like something with minimal off-chip
> components (maybe just L-C filtering for RF and IF), built-in
> PLL/VCO with frequency stability using easily-obtained crystal,

> reasonable NF at 1.2 GHz, and, of course, available cheap on
> the secondary market.
>
> What is out there that I should be looking into?
>
> best regards,
>
> Martin
>
>
> Sent via Deja.com http://www.deja.com/
> Share what you know. Learn what you don't.
>
>

1181. Re: Wanting Info On Maxon 49B5 Conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.SOL.4.10.9907130049260.22122-100000@Ocean.CAM.ORG>
Source record: 68534

A couple of years ago, Hugh Duff in Ontario (I forget his call) made some comments here about a Radio Shack 5 channel 49 MHz walkie talkie. The results of his exploring was that the synthesizer IC was hard wired for specific channels, and there was no easy way of modifying it. I suspect one could find the post on http://www.dejanews.com

I picked up a broken Radio Shack multi-channel cordless phone (and they must have great similarity with the walkie talkies in terms of RF circuitry) and it uses a Motorola MC145166 IC as the PLL. I don't have any info on it at hand, but with 16 pins I suspect it's not user programmable.

However, beyond the synthesizer, it should not require much work to move a 49MHz walkie talkie to six meters. A little retuning, and at most some reduction in capacitance across the front end coils. I think people have reported here that they have moved the crystal controlled ones to six, with little effort beyond new crystals.

I have the schematic for one of the Radio Shack single channel units, and while they are low power tranmistters, the receivers are fairly goo looking, with a first IF (and simple ceramic filter) at 10.7MHz, and a second IF with another ceramic filter at 455KHz. They use a standard Motorola double conversion FM IF IC, as does the cordless phone.

Michael VE2BVW

On 13 Jul 1999, Bobby Atkinson wrote:

> A few years back I fooled aroun.. ah, I mean experimented with a Maxon
> 5 channel 49MHz portable. Maxon was kind enough to supply a schematic
> for the radio at no charge in exchange for proof of my being a ham.
> Schematics are a good place to start. BOBBY K4BGA
>
> bns <bns@entercomp.com> wrote in article <377fab8c.0@newsman.viper.net>...
> > I have a Maxon 49B5 Base station that operates on 49.830 to 49.890 (5
> > channell TX & RX)
> > Want to convert to 6 meters. It has a PLL # LC-7150
> > Any helpful information will be greatly appreciated.
> > Bill
> > KD4MXE
> >
> >
> >
>
>

1182. Help TS-930

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: oris@dirtball.com
Message-ID: <7mhe0f$be0$1@nnrp1.deja.com>
Source record: 68535

Does anyone know where I can find the digital controller for the Kenwood TS-930SAT. Mine has finally bit the dust after months of repairing cold solder joints. Its the board directly under the internal speaker. It controlls all the digal readout. I hear that there is a newly engineared one out there. Can anyone help me.
Thank you
Oris
N3CND
oris@dirtball.com

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1183. Re: Flat Coax?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: spam@nospam.com
Message-ID: <378c3032.228815@news.lin.foa.se>
Source record: 68536
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

My humble suggestion is to use teflon miniature coax aka RG 178, RG 196 and M17/169. Diameter is 1.8 millimeter.

This cable will withstand 100 watt (do NOT use the more common none-teflon RG174), use as short cable as possible as it's pretty lossy.

But I doubt you will find any thinner cable with controlled impedance!!!

Cheers

On Tue, 13 Jul 1999 08:29:15 -0700, "David Green" <djgreen@hooked.net> wrote:

>Hello All;
>I'm in search of a short section of "flat coax" HF feed (for 20M
>operation;possible
>100W transfer energy) that can be tightly pressed between a vehicle window
>and
>the adjacent rubber seal. The wife has make it very clear there will be no
>holes
>added to "her" :-) van for a direct coaxial antenna feed.
>
>Any suggestions, ideas? Do such items exist?
>
>Currently, the side window pressure fit to surrounding rubber appears to be
>so tight
>as to not provide the space necessary to accommodate the smaller Beldon 58/U
>coax without possible overstress of the surrounding glass.
>
>Suggestions, comments would be greatly appreciated.
>
>Thanks in advance,
>
>Dave Green
>KK6KM
>djgreen@hooked.net
>
>
>
>

1184. Re: Flat Coax?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <378C4A30.5F68EA3B@teleport.com>
Source record: 68537
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Spammer wrote:
>
> My humble suggestion is to use teflon miniature coax aka RG 178, RG
> 196 and M17/169. Diameter is 1.8 millimeter.
>
> This cable will withstand 100 watt (do NOT use the more common
> none-teflon RG174). . .

I use RG-174 in my baluns, and they handle 300 watts at HF with no problem. It wouldn't be a good idea if the SWR is high, though.

Roy Lewallen, W7EL

1185. Re: Flat Coax?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <7mhmicmai1@neptunium.btinternet.com>
Source record: 68538
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Convert to a couple of inches of 20 gage twin speaker cable. Neither
the transceiver, antenna or XYL will notice the slightest difference.

Reg.

1186. Help TS 930

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: Oris <oris@dirtball.com>
Message-ID: <378C2FBF.1D09@dirtball.com>
Source record: 68539
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Does anyone know where I can get a digital controller board for the
TS- 930. It is the board that is mounted directly under the internal
speaker. Mine has finally bit the dust after mounts of redoing and
redoing soider joints. I hear that there is a reengineered new one out
there that will operate via the computer as well as manuelly. but I know
not where to find it. Can anyone help me? Thank you you can email me at
oris@dirtball.com
Thanks
Oris
N3CND
--

http://www.dirtball.com

97.1 Basis and purpose.
(d) Expansion of the existing reservoir within the amateur radio
SERVICE of trained operators, technicians, and electronics experts.

1187. Re: why did i become a licensed operator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: Harry SM0VPO <harryvpo@hotmail.com>
Message-ID: <378C65DF.E38B824C@hotmail.com>
Source record: 68540

xtreme wrote:

> $1000 down the tubes and its so damn boring!
> N9YIM

How I wish I could say that from time to time. I am fully occupied designing and building circuits, speaking to people on the radio set with home-made equipment. I even speak to my brother in England every second day. I have learned how to make printed circuits boards and I get loads of E-mail every day. I even have fun laughing at some of the idiotic mail I get - http://sm0vpo.8m.com/info/fasq.htm

If you take a peek at http://sm0vpo.8m.com I'll bet you are still not bored. Have you ever thought about joining a club? There you can meet other people who use ham-radio in combination with other pastimes such as camping, boozing, boating, publishing, etc.

If you are still bored then I suggest you take your equipment, pack it up nice and safely and send it to me. I will certainly have fun with it.

Not-so-bored - Harry

1188. Re: Dentron Clipperton-L bandswitch help....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: Oris <oris@dirtball.com>
Message-ID: <378C322B.31BB@dirtball.com>
Source record: 68541

Tim wrote:
>
> Frank Dinger <frank.dinger@zetnet.co.uk> wrote in article
> <19990710161515704 32@zetnet.co.uk>...
> > > Greetings... I have a Clipperton L that has a roasted
> > > bandswitch....actually it roasted many moons ago and I just hardwired
> the
> > > output tank for 20 mtrs but now would like to get a bandswitch and
> > > reinstall it so I can QSY a little easier. Does anyone have any ideas
> where
> > > one might latch onto a switch that would work?? I'm wondering if a
> switch
> > > that works in an Ameritron or the like could be made to work in the
> > > Dentron. Has anyone ever replaced the switch? What did you use????
> Thanks
> > > in advance for your help.....
> > > Tim KB1MM
> > ==========
> > It might be useful for readers of this NG to know what the switch is
> > supposed to do ,ie number of decks and switch positions. Insulation
> > is probably ceramic .
> >
> > 73 Frank GM0CSZ / KN6WH
> > ==========
> > Well, if it'll help... here is the low down on the switch....It is a
> three wafer, 5 position switch. It appears that the two rear wafers are
> "shorting" type. The rear most wafer has four contacts, four being band
> positions and the 5th position is empty. The middle wafer has 5 contacts...
> four of them in the same position as the rear one and the 5th contact is
> the wiper that shorts the other positions as the switch is turned. the
> front wafer has two contacts that are shorted together by the wiper when it
> is in the max ccw (160mtr) position. Hope this helps
> KB1MM
>
> >
> >
> >
Well Tim
I have had the same problem with my Clipperton L. I used the band
switch out of the heathkit SB 220. I works a whole lot better than that
peice of crap that Detron put in there. I also replaced the parasidics
in the process. I got the band switch new from Nebraska parts. It was
alittle high but well worth it. There is one problem though. In
replacing the band switch I did away with 10-meters. The switch doesnot

have the conectors for that postion. You could always make up a external switch for ten. I choose not to do that because being that the amp doesn't have a 10-meter position I can sell it to anyone. I'm haveing rig problems right now. The digital board in my TS-930 has craped and I need another one. My news server is fozen again. So I haven't been able to put out a want for the board. Do you think that you can help me? Heck I would trade the 930 and the clipperton L for a TS-940 Well I hope that I helped you
73 from Oris
N3CND

--

http://www.dirtball.com

97.1 Basis and purpose.
(d) Expansion of the existing reservoir within the amateur radio SERVICE of trained operators, technicians, and electronics experts.

1189. Re: packet radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: Harry SM0VPO <harryvpo@hotmail.com>
Message-ID: <378C69B3.FD11575F@hotmail.com>
Source record: 68542

You can find the circuit and article at:
http://sm0vpo.8m.com/use/baycom.htm

You can download the PCB at:
http://sm0vpo.8m.com/down/baycom-cct.zip

You can get the TCM3105 and PCB together as a package from:
http://sm0vpo.8m.com/info/kits.htm
(I still have a couple left, but not until after the 01st August -
holidays)

Best regards from Harry - SM0VPO
http://sm0vpo.8m.com

Mario Cordina wrote:

> Hi ppl
> I just got my amateur radio callsign and i am interested in getting
> started in packet radio. I decided to build my own TNC around the
> TCM3105 IC and gonna use baycom software. IS there anyone out there
> who can e-mail me a circuit diagram and pcb layout and artwork to
> build the TNC??
> If you have any info please e-mail me at mario_cordina@hotmail.com
> thanks
> Mario Cordina 9H5MR

1190. PS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: Harry SM0VPO <harryvpo@hotmail.com>
Message-ID: <378C6AD2.3C41E4CE@hotmail.com>
Source record: 68543

Harry SM0VPO should have written:

> You can download the PCB at:
> http://sm0vpo.8m.com/down/down.htm

1191. Re: PC RF getting into my HF rigs!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: Lionel B <lbooth@ametro.net>
Message-ID: <7mhurp$dn1$1@news.ametro.net>
Source record: 68544

Isn't there a source of spray on conductive coating? I seem to recall that this stuff which is packaged like spray paint, put down a few mils of shielding.

Spray the inside of the monitor case. Neater and safer than aluminum foil and doesn't block the ventilation.

Unfortunately I don't remember the source.

tatasadasayago <Jcrosley@mocc.com> wrote in message news:37898196.F99DA5E8@mocc.com...
> Help! I am going nuts trying to figure out how to stop my PC monitor
> from ruining the 15 and 20 meter bands with the awful buzzing. Any
> quick and dirty ideas?
> I'm about to grab a sheet of lead and wrap the darn thing with it.....
> Jim KY7DX
>

1192. Re: why did i become a licensed operator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: Robert Lyons <boblyons@umich.edu>
Message-ID: <378C9290.33F90097@umich.edu>
Source record: 68545

Harry SM0VPO wrote:
>
> I even have fun laughing at some of the
> idiotic mail I get - http://sm0vpo.8m.com/info/fasq.htm

Priceless letters, Harry! I love the one from the guy who tries to threaten you with disconnection for not designing him a 2000 W wood drying device! Unbelievable!

73, Bob, KI8AB

1193. Re: Flat Coax? -connector?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: Tim <ka8ddz@worldnet.att.net>
Message-ID: <378C99AF.422AE7B7@worldnet.att.net>
Source record: 68546
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Roy Lewallen wrote:

> I use RG-174 in my baluns, and they handle 300 watts at HF with no
> problem. It wouldn't be a good idea if the SWR is high, though.
>
> Roy Lewallen, W7EL

Which got me wondering, are you better off adding a connector at each end
or could you simply splice the sections together overlapping the shields
then sealing them with heat shrink or somthing similiar. Would it make
any noticable difference in performance? How about at 6 or 2m?

Tim ka8ddz

1194. Re: Help TS 930

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: KI8IK <KI8IK@yahoo.com>
Message-ID: <7mi8esgla1@ink.msen.com>
Source record: 68547
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

The TS-930 digital controller you are referring to is made by
PIEXX and can be seen at http://www.conknet.com/PIEXX.
Price is $295 + $8 shipping.

Michael Ostrowski - KI8IK
KI8IK@yahoo.com

Oris <oris@dirtball.com> wrote in message news:378C2FBF.1D09@dirtball.com...
> Does anyone know where I can get a digital controller board for the
> TS- 930. It is the board that is mounted directly under the internal
> speaker. Mine has finally bit the dust after mounts of redoing and
> redoing soider joints. I hear that there is a reengineered new one out
> there that will operate via the computer as well as manuelly. but I know
> not where to find it. Can anyone help me? Thank you you can email me at
> oris@dirtball.com
> Thanks
> Oris
> N3CND
> --
>
>
> http://www.dirtball.com
>
> 97.1 Basis and purpose.
> (d) Expansion of the existing reservoir within the amateur radio
> SERVICE of trained operators, technicians, and electronics experts.

1195. Re: S-meters... Where do they go?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <378CA894.889426FD@midwestmicro-tek.com>
Source record: 68548

CommQuart wrote:

> The s meter can go on the agc bus, usually requires a DC amplifier for
> operation. Second place is in series with agc controlled IF stage in series
> with the plate B+ feed. Meter will read "backwards" in this application.
> S meter readings are based on the developed AGC voltage. If the set
> doesn't have AGC, you can't expect the S meter to work.
>

Interesting, I realize that gain can be a bit of a personal choice i.e. how much gain is needed to get the signal quality that you like. However couldn't I get fair results by connecting the S-meter to the gain output of the 20k pot?

> Rick Haub wrote in message <378B62C4.4AC86535@midwestmicro-tek.com>...
> >First off thanks to every one who responded to my Tansmitter Design
> >post, I got a number of good leads and David sent a lot of good stuff,
> >thanks guys.
> >
> >Okay, I'm building the Mate to the Mighty Midget from a 1966 QST
> >magazine article. I want to add an S-meter to it and the design that I
> >have needs to be hooked into the AGC circuit, well the MMM doesn't have
> >an AGC. It does, however, have a 20k pot to manualy adjust the gain.
> >Where should I hook the S-meter into?
> >

1196. IC-2AT Battery Question???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: Bill Crann <bcrann@nf.sympatico.ca>
Message-ID: <378cb444.0@209.128.1.3>
Source record: 68549
Cross-posted to: rec.ham-radio,rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I was wondering what is the maximum voltage battery pack I can use on this radio? Does the battery pack from a HTX-202 fit this radio? Can I use the radio while it is charging? Can I hook it up to an external 13.8V power supply? Sorry for all the questions but I am fairly new to Ham Radio and just bought this radio used with no manual, so I wouldn't want to break it first thing.

73's
VO1BIL

1197. Re: Downconverter Solution Using Off-the-Shelf Integrated Circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: lagniappe <lagniappe@my-deja.com>
Message-ID: <7miigo$n28$1@nnrp1.deja.com>
Source record: 68550

In article <Pine.SOL.4.10.9907140046510.4000-100000@Stratus.CAM.ORG>,
Michael Black <blackm00@CAM.ORG> wrote:

> As for the actual converter, I don't know if they have exactly what
you
> need, but I'd check Maxim. I've ended up on their mailing list, and
I've
> seen some very interesting front end IC's described recently. I can't
> remember whether any had a synthesizer built in.
>

Checked MAXIM, all of their products seem to require external
LO, and they don't sell a synthesizer chip.

best regards,

Martin

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1198. Re: ARRL HANDBOOKS AND QST PUBLICATIONS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: Mike Silva <mjsilva@jps.net>
Message-ID: <7migol$qo1$1@its.hooked.net>
Source record: 68551

I'll sure second this. Every article (AFAIK) in the Handbooks was first a QST article (anybody know if this *wasn't* the case?). Great reading (wish they had a better search engine, though!).

73,
Mike, KK6GM

CarterCook wrote in message
<19990713223452.27308.00000131@ng-ft1.aol.com>...
>>Does any one know if the arrl handbook is still published and where can one
>>get copies of say 1950's??? Also QST ?
>
>Bob:
>Slickest source for back issues of QST is a CD-ROM series called QST View
>published by ARRL that goes back to 1915 trough 1994 in eleven sets. Each page
>- articles, ads and all are reproduced in an easily searchable format. ARRL
>charges about $40 a set (five or ten years of QST) but I have seen them offered
>cheaper at some ham stores and hamfests.
>
>W5URW
>Carter Cook

1199. Re: Phase shifter info needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <7mik1d$3qa@dfw-ixnews19.ix.netcom.com>
Source record: 68552

No, it won't. Various RC phase shift networks will have their own sets of design equations.

In fact there are generally more independent variables [unknown element values] in such networks than there are dependent variables to be satisfied. The network that you suggest does not have as "nice" a "solution" as the twin tee design, but then that is a question of "art".

For instance, as you can see in the twin tee network, there are six different circuit elements each of which could have a unique value, but in the solution that I have shown there are really only two values R & C specified to yeild a given notch [oscillation] frequency. Even then, the value of one or the other of R & C is still arbitrary. Only their product is specified by the notch frequency! You must arbitrarily choose one of them from other considerations, usually the value of C. Usually one would choose an appropriate capacitor value C first with respect to availability, cost, and size of capacitance relative to expected circuit parasitic capacitances [i.e. this would set the generally expected impedance levels in the circuit], and then calculate the corresponding R value from the notch frequency formula that I have given.

There are actually an infinite number of value sets for the elements of such networks which would satisfy the conditions for oscillation in an amplifier feedback loop. To find a particular solution, arbitrary values or realtionships must be assigned between the elements and then set or fix only two values to satisfy the two conditions for general impedance level, and desired frequency. And so . . . as in life there are a lot of choices. This is what often makes analog circuit design more of an art than a science, heh, heh. Too many choices! The good news AND the bad news, heh, heh.

It is my opinion that the twin tee circuit that I have chosen to show you with the given element value relationships contains some "nice art".

But there are an infinite variety of other choices!

BTW. . . . IMHO, a better RC oscillator design would be the classic one using the Wein Bridge, per the original Bill Hewlett and David Packard design. The Wein Bridge [patented] RC oscillator that started Silicon Valley lo those many years ago! Bravo Bill and David, and thanks to Fred Terman as well.

Cheers,

Peter AB4BC

dr.dongle@juno.com wrote in message <7mgpjh$4d8$1@nnrp1.deja.com>...
>In article <7meoha$sr6@dfw-ixnews10.ix.netcom.com>,
> "Peter O. Brackett" <ab4bc@ix.netcom.com> wrote:
>> Here's one of several that will work.
>>
>> Twin Tee notch network. . . .
>>
>> T = RC
>>
>> Notch frequency = 1/T
>>
>> _______ R _________________ R __________
>> | | |
>> _| | |_
>> | | |
>> |_______ C ___|_____________ C __________|
>> | |
>> | |
>> 2*C R/2
>> | |
>> |______ _|
>> |
>> Gnd
>>
>> Peter AB4BC
>>
>> dr.dongle@juno.com wrote in message <7me93v$6bc$1@nnrp1.deja.com>...
>> > I am looking for the formula for determaning the values for a R/C type
>> phase
>> >shifter to be used as the feed back loop of an op-amp so as to create an
>> >oscilator. No I dont want to use a 555 I have my reasons. Any info will
be
>> >appricated dr.d -- Kiss Technologys The more complicated the plumbing
the
>> >easer it is to stop up the pipes M. Scott
>> >
>> >
>> >Sent via Deja.com http://www.deja.com/
>> >Share what you know. Learn what you don't.
>>
>>
>
> Thanks for the info, it is much aprecated. There is a similar type of
phase
>shifter using a series string of 4 caps with a resistor (3) to ground from
>each juntion between caps, will this formula cover this type as well? --
dr.d
>Kiss Technologys The more complicated the plumbing the easer it is to stop
up
>the pipes M. Scott
>

>
>Sent via Deja.com http://www.deja.com/
>Share what you know. Learn what you don't.

1200. Re: PC RF getting into my HF rigs!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: tma@mail.island.net
Message-ID: <378cbd30.6325460@news.island.net>
Source record: 68553

Greetings All:

[>_Isn't there a source of spray on conductive coating? I seem to
recall that
[>_this stuff which is packaged like spray paint, put down a few mils of
[>_shielding.
[>_
[>_Spray the inside of the monitor case. Neater and safer than aluminum
foil
[>_and doesn't block the ventilation.
[>_
[>_Unfortunately I don't remember the source.

A spray on shielding product by GC/Thorsen is described on Page
2.11 in the ARRL 'RFI Book'. I imagine electronic distributors that
carry the General Cement electronics chemicals product line might carry
the product. I hope this information is of some help.

73 & Enjoy

Tom, VE7TMA

Very Best Regards: Thomas M. Alldread
E-mail: tmaldred@mail.island.net

1201. Re: ARRL HANDBOOKS AND QST PUBLICATIONS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.SOL.4.10.9907141413410.5495-100000@Stratus.CAM.ORG>
Source record: 68554

On Wed, 14 Jul 1999, Mike Silva wrote:

> I'll sure second this. Every article (AFAIK) in the Handbooks was first a
> QST article (anybody know if this *wasn't* the case?). Great reading (wish
> they had a better search engine, though!).
>
> 73,
> Mike, KK6GM

I think occasionally there were some construction projects that went straight into QST, but they are the exception. The one that I can think of is the 1977 Handbook. There's a receiver by WA1JZC that I never saw in QST, and I was getting QST monthly at the time. There's also a project a few pages earlier for adding bandpass tuning to an existing receiver, and I never saw that in QST either.

One unfortunate thing that the ARRL did was not include a reference to the original article when reprinting something in the Handbook (or the other ARRL books for that matter). Sometimes they did it, but not consistently. Sometimes it seems like articles are truncated, I've even seen it mentioned that readers might want to refer to the original article, and it would be nice to know when the article originally appeared.

A while back, when the QSTs on CDROM came up, someone mentioned that it would be nice to see old Handbooks on CDROM. I'm less certain there is a need for that, since virtually all of the projects did appear in QST and the Handbook itself changes relatively little from year to year. An interesting project would be to issue a CDROM with an index of when projects appeared in the Handbook, and what issue of QST they originally appeared. Throw in the projects that only appeared in the Handbook. Probably there'd be room to put in sample material from various editions of the Handbook, maybe one a decade or whenever there was major change.

And perhaps it's worth putting out a CDROM with the contents of the various books put out by the ARRL in years passed, despite them mainly being reprints of QST articles. The first, and maybe more so the second, edition of the ARRL's SSB manual is still a good reference on SSB, particularly the phasing method. As something becomes more mainstream, it ironically can become harder to find information, since everyone assumes that everyone knows about the topic. The old Mobile Manual, though the projects might be dated, might still have useful information about keeping your car quiet, and should carry useful info about antennas. Or it would be nice if the ARRL did the same as I suggest for the Handbook, and at least detail what's in each edition and where the projects came from.

Michael VE2BVW

> > CarterCook wrote in message >
<19990713223452.27308.00000131@ng-ft1.aol.com>...
> >>Does any one know if the arrl handbook is still published and where can
> one
> >>get copies of say 1950's??? Also QST ?
> >
> >Bob:
> >Slickest source for back issues of QST is a CD-ROM series called QST View
> >published by ARRL that goes back to 1915 trough 1994 in eleven sets. Each
> page
> >- articles, ads and all are reproduced in an easily searchable format. ARRL
> >charges about $40 a set (five or ten years of QST) but I have seen them
> offered
> >cheaper at some ham stores and hamfests.
> >
> >W5URW
> >Carter Cook
>
>
>
>

1202. Re: Building my own repeater - where to get the filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: PAUL ISTRIC <generelect@worldnet.att.net>
Message-ID: <378C8EB2.292D474C@worldnet.att.net>
Source record: 68555

Hi,
You don't need any filter, use 2 antennas 30 foot apart, one for TX and another for RX.

Keith wrote:

> On 15 Jun 1999 04:22:47 GMT, mroberds@worldnet.att.net (Matt Roberds) wrote:
>
> >Can anyone point me to a source of such sharp filters? Or is it
> >cost-effective to make your own? If so, are there any articles
> >or books you could point me at? Or is this the wrong approach
> >entirely?
>
> You need a duplexer. Read the ARRL handbook for information
> and they are not cheap.
>
> --
> Best Regards,
>
> Keith
> --
> http://www.teleport.com/~kew www.teleport.com/~kew/ham_swl_radio/
> --
> If all the personal computers in the world 260 million were put to
> work on a single PGP-encrypted message, it would still take an
> estimated 12 million times the age of the universe, on average,
> to break a single message. --William Crowell, Deputy Director, National Security Agency,
March 20,1997.

1203. Last MORSE Marine Transmission

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: "Mr. Muckle" <jdwalton@home.com>
Message-ID: <378D17E0.9D1F9718@home.com>
Source record: 68556

Not to get into the code wars, but NPR will do a feature on their program "All Things Considered" on the last Morse Marine Transmission Beacon today at 4:00 PM Eastern. Try 820 a.m. in NYC.

Jack

1204. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: PAUL ISTRIC <genere lect@worldnet.att.net>
Message-ID: <378C953E.F01F2F1A@worldnet.att.net>
Source record: 68557
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Hi,
I am using those Hungarian "cheap" bulbs, 4 for a dollar, they last longer
then GE bulbs... guaranteed!

NO SPAM wrote:

> Roy Lewallen wrote:
>
> > NO SPAM wrote:
>
> > > BTW, has anyone seen those Wind Up radios for sale? They are sold
> > > somewhere but I haven't seen them in a catalog or on a store shelf. I
> > > saw one guy using one at a cosntruction site, and he wound it up a
> > > whole lot and I guess it ran for ten or 20 minutes on a single
> > > windup. Pretty neat. Saved a lot on batteries.
> > > . . .
>
> > Let's see, guessing that the radio takes about 10 mA at 6 volts to run,
> > a set of alkaline AA cells would last about 150 hours. I seriously doubt
> > that he's cranked the radio enough to run for 150 hours, so he's saved
> > less than $4.00 at drugstore prices. (I get AA alkaline cells at
> > Price-Costco for about $0.25 each, dropping the savings to $1.00/150
> > hours.) Wonder how much more he paid for the radio than he would have
> > paid for a simple battery-operated one. Alkaline cells will easily last
> > 5 years in storage, or much longer -- 10 years or more -- if they're not
> > allowed to get too hot. A set or two in the refrigerator, or even stored
> > with a radio, are very good security that you'll be able to listen to
> > the radio in any emergency.
>
> > There are places where batteries simply aren't available (but the
> > crank-up radios are?), and the crank-type radios might be practical in
> > those locations. But if you get one to save money on batteries, first
> > subtract the cost of a battery-operated radio from the cost of the
> > crank-up version and see how many hours you'd have to crank to make up
> > the difference. Happy cranking!
>
> > Roy Lewallen, W7EL
> > -- cursed with an engineer's way of thinking.
>
> Well, you're cursed with some kind of thinking, that's for sure. But
> I think you didn't throw in all the other considerations.
>
> As an example, I managed apartments and the guy who owned them would

> buy those cheap Hungarian light bulbs for four for 99 cents or some
> cut rate deal. So I get up on a ladder to change the light bulbs on
> the outside of the apartments and it costs him a buck or so for ten
> minutes, at the then prevailing rate of $7 an hour back then in the
> late 70's. I grabbed a box of four bulbs and tried them in the
> socket, and the first three fizzled after a few seconds of light, and
> I think the fourth stayed on for awhile.
>
> In any case, it cost him more for me to have to change the bulbs more
> often because they were el cheapo bulbs, even tho they cost less.
> Moral of this story is that he should have taken the same path that
> his employer did. He worked for McDonnel-Douglas, and the maintenance
> crews would go around to each building and pull out ALL the
> fluorescent lamps and replace them on a periodic basis, saving the
> time of having to come back and replace the bad ones often. They
> figured that the cost of the added lamps was a lot less than the labor
> to put them in, rightly so.
> But hey, I wasn't complaining, starving student that I was, I needed
> the money.
>
> So back to the batteries, I guess one should count the time it takes
> to buy the batteries, the gas to go to the store, the cost of storing
> them in the fridge AKA cooling costs, etc., etc., etc. There's bound
> to be more, that are not part of the crank-up radio costs. Besides,
> we could all afford to expend a few more calories, couldn't we.
>
> BTW, I think at least double that 10 mA at 6V would be more
> realistic. So maybe 75 hours.

1205. Eimac 8187

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: Finnair <parnanen@finnair.fi>
Message-ID: <01bece31$1e4f85c0$a194c89d@w1001490>
Source record: 68558

Need specs from Eimac 8187 tubes.
73 s OH2KLC
jukka.kokkonen@finnair.nospam.fi

1206. Re: S-meters... Where do they go?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <379ee874.240432673@news.atl.bellsouth.net>
Source record: 68559

On Tue, 13 Jul 1999 11:01:08 -0500, Rick Haub <rhaub@midwestmicro-tek.com> wrote:
>Okay, I'm building the Mate to the Mighty Midget from a 1966 QST
>magazine article. I want to add an S-meter to it and the design that I
>have needs to be hooked into the AGC circuit, well the MMM doesn't have
>an AGC. It does, however, have a 20k pot to manualy adjust the gain.
>Where should I hook the S-meter into?

No AGC, no S-meter. S-meters work by monitoring the AGC voltage,
if you don't have AGC, then there's no AGC voltage to monitor. So
if you want a S-meter, you're first going to have to add AGC to the
receiver.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

1207. Re: PC RF getting into my HF rigs!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <379ce395.239185553@news.atl.bellsouth.net>
Source record: 68560

On Sun, 11 Jul 1999 19:56:47 GMT, k6mhe@arrl.net (Dan Richardson) wrote:
>As a side note in connecting up some additional equipment I
>inadvertently disconnected the antenna tuner form the ground system.
>When I turned on the computer all my noise was back.. Reconnecting the
>tuner ground confection resulted it the noise dropping back down to a
>very low level.

You know what that was telling you, don't you? It was telling you that you have common mode problems with your antenna system. The noise was traveling up the coax outside to the antenna, then coming back down the coax inside to the radio. Grounding is a bandaid approach to solving this problem. The correct approach is to resolve the common mode problem, ie use a proper choke balun and resolve any antenna symmetry issues.

It is often the case that grounding as you have done will simply make RFI problems *worse*, depending on feedline length, operating frequency, etc. Grounding isn't an RFI panacea. I mention this so that some of those who follow your advice won't be too surprised if it causes their RFI problems to worsen instead of improve. (It can do either depending on the particulars of an individual installation.)

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

1208. Re: PC RF getting into my HF rigs!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <379de6bf.239995568@news.atl.bellsouth.net>
Source record: 68561

On Wed, 14 Jul 1999 07:12:57 -0500, "Lionel B" <lbooth@ametro.net> wrote:
>Isn't there a source of spray on conductive coating? I seem to recall that
>this stuff which is packaged like spray paint, put down a few mils of
>shielding.
>
>Spray the inside of the monitor case. Neater and safer than aluminum foil
>and doesn't block the ventilation.
>
>Unfortunately I don't remember the source.

GC Electronics sells it. But it can *flake* off and cause
an unexpected short. It is a good idea to use fish paper
as a barrier between any conductive shielding and the
HV circuits of a monitor.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

1209. Re: ARRL HANDBOOKS AND QST PUBLICATIONS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <378CDC4B.3FB751FE@mwci.net>
Source record: 68562

Mike Silva wrote:

> I'll sure second this. Every article (AFAIK) in the Handbooks was first a
> QST article (anybody know if this *wasn't* the case?).

Definitely not true, I'm sure.

Bill W0IYH

1210. Re: IC-2AT Battery Question???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: Brad Kellison <KA8TOK@four-way.net>
Message-ID: <378CEC96.4E027624@four-way.net>
Source record: 68563
Cross-posted to: rec.ham-radio,rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

the max voltage for the IC-2at is 8.4 volts unless you have the 12v adapter pack with it. yes the 7.2 volt HTX-202 packs will work fine with it.. the HTX-202 was redeisgned from the ICOM IC-O2AT.

Bill Crann wrote:

> I was wondering what is the maximum voltage battery pack I can use on this
> radio? Does the battery pack from a HTX-202 fit this radio? Can I use the
> radio while it is charging? Can I hook it up to an external 13.8V power
> supply? Sorry for all the questions but I am fairly new to Ham Radio and
> just bought this radio used with no manual, so I wouldn't want to break it
> first thing.
>
> 73's
> VO1BIL

1211. Mic modification

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: Charles Hailbronner <hailbro@ibm.net>
Message-ID: <378cec97@news1.us.ibm.net>
Source record: 68564

I was given an Azden PCS-4000, and I am curious if I can put another 8 pin mic on it, or is the stock mic the only way to go?

73's
Charles Hailbronner
KC0EST

1212. Re: ARRL HANDBOOKS AND QST PUBLICATIONS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19990714161819.07111.00000247@ng-fp1.aol.com>
Source record: 68565

>Subject: Re: ARRL HANDBOOKS AND QST PUBLICATIONS
>From: "Mike Silva" <mjsilva@jps.net>
>Date: Wed, 14 July 1999 01:24 PM EDT
>Message-id: <7migol$qo1$1@its.hooked.net>
>
>I'll sure second this. Every article (AFAIK) in the Handbooks was first a
>QST article (anybody know if this *wasn't* the case?).

Hello Mike,

It surely wasn't the case. Less than half of the Handbook construction articles were QST articles. The majority were done specifically for the Handbook, and never appeared in QST. Most of the bigger projects were and are done specifically for the Handbook.

I have the Handbooks from '48, '49, '52, '55, '57, '62, '64, '67, '71, 78, '79 and '88, and they all follow this pattern. Also have every QST from mid 1944 to the present, plus most of them back to 1926.

73 de Jim, N2EY

1213. Re: For Sale: This Newsgroup!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <378D0235.385A8196@corecomm.net>
Source record: 68566

Christopher W. Buckley wrote:
> Add me to your killfile, and I will. Otherwise,
> learn to live with the anarchy that is, and the
> sarcasm I will spew to the self appointed group
> enforcers!

Obviously you've confused sociopathy with anarchy. You've also decided that
the news admins no longer have any control and that the users are in charge.
You also don't understand the consequences of a war between users and admins.

Feel free to have the last word. This is off-topic and I'm quitting.

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

1214. Re: Building my own repeater - where to get the filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: WebMonkey <demoman@rollanet.org>
Message-ID: <378D018F.429A@rollanet.org>
Source record: 68567

PAUL ISTRIC wrote:
>
> Hi,
> You don't need any filter, use 2 antennas 30 foot apart, one for TX and another for RX.
>
maybe for 5 watts or less output, desense will creep in big time.

> Keith wrote:
>
> > On 15 Jun 1999 04:22:47 GMT, mroberds@worldnet.att.net (Matt Roberds) wrote:
> >
> > >Can anyone point me to a source of such sharp filters? Or is it
> > >cost-effective to make your own? If so, are there any articles
> > >or books you could point me at? Or is this the wrong approach
> > >entirely?
> >
> > You need a duplexer. Read the ARRL handbook for information
> > and they are not cheap.
> >
> > --
> > Best Regards,
> >
> > Keith
> > --
> > http://www.teleport.com/~kew www.teleport.com/~kew/ham_swl_radio/
> > --
> > If all the personal computers in the world 260 million were put to
> > work on a single PGP-encrypted message, it would still take an
> > estimated 12 million times the age of the universe, on average,
> > to break a single message. --William Crowell, Deputy Director, National Security
Agency, March 20,1997.

--
A.C. Curtis
KBï¿½WLF
53.45 and 442.45, 77.0Hz enc/dec [multi-cast repeater system]
mailto:demoman@rollanet.org
http://www.rollanet.org/~demoman

1215. Re: S-meters... Where do they go?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <378D069B.A706C158@teleport.com>
Source record: 68568

Actually, you could run the signal through one of the Analog Devices log amps and to the meter from there. That way, you could be the first kid on your block, and probably the state, to actually have an S meter that reads 6 dB per S unit. (But you probably wouldn't like such a "dead" S-meter.)

Roy Lewallen, W7EL

Gary Coffman wrote:
>
> On Tue, 13 Jul 1999 11:01:08 -0500, Rick Haub <rhaub@midwestmicro-tek.com> wrote:
> >Okay, I'm building the Mate to the Mighty Midget from a 1966 QST
> >magazine article. I want to add an S-meter to it and the design that I
> >have needs to be hooked into the AGC circuit, well the MMM doesn't have
> >an AGC. It does, however, have a 20k pot to manualy adjust the gain.
> >Where should I hook the S-meter into?
>
> No AGC, no S-meter. S-meters work by monitoring the AGC voltage,
> if you don't have AGC, then there's no AGC voltage to monitor. So
> if you want a S-meter, you're first going to have to add AGC to the
> receiver.
>
> Gary
> Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
> 534 Shannon Way | We break it |
> Lawrenceville, GA | Guaranteed |

1216. FS: OHR 100A 20-meter CW xcvr & PS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: Jack Hardin <jhardin@hal-pc.org>
Message-ID: <01bece3f$112d5e40$de81b4ce@jack>
Source record: 68569
Cross-posted to:
alt.ham-radio.marketplace,rec.ham-radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.swap,rec.radio.swap

```
For sale: OHR 100A 20-meter CW transceiver and separate
AC power supply for it. 5 watts output, VFO 14.000-14.070 MHz,
nicely built and fully operational. Assembly/operating manual
included. $120.00 money order - shipped CONUS. Selling to
finance purchase of new receiver... Respond by email...
Jack, KD5EDO
jhardin@hal-pc.org
```

1217. Re: Flat Coax?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: J <ns5n@erols.com>
Message-ID: <378D1B9D.BEA0A42C@erols.com>
Source record: 68570
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

What you are looking for is some RG-174 coaxial cable. The total diameter is similar to the center conductor of RG-8 (just the metal center, not the dielectric) and is very useful in "Tight Fitting" applications. You should be able to acquire some with the appropriate adapters/connectors through Mouser Electronics or some other vendor. Works great but is very lossy if to long of a length is utilized, so keep it as short as possible.

--
J Edgar/NS5N & Maureen/KE4GSZ send>>>

1218. Re: Flat Coax?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: J <ns5n@erols.com>
Message-ID: <378D1C3F.998DCC3B@erols.com>
Source record: 68571
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

I wholeheartedly agree.

(I forgot about RG-178)..

--
J Edgar/NS5N & Maureen/KE4GSZ send>>>

1219. Re: UN to Tax Internet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: xxxphilj@ecc-uky.campuscwix.net
Message-ID: <7mj5o6$6vc$1@news.campuscwix.net>
Source record: 68572

Come on, you can do better than that. Everyone has heard all the
"they're gonna tax the 'net" garbage by now.

In article <378B69EF.5DD2604C@home.com>, jdwalton@home.com says...
>
>A little off topic for ham newsgroups, but see this morning's New York
>Times. The UN is proposing to tax the internet - a penny per e-mail -
>to raise money for the "Internetless". Did Al Gore think this up?
>
>It'll force folks to QSO again!
>

1220. Re: Building my own repeater - where to get the filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: Bobby Atkinson <bobbys@prodigy.net>
Message-ID: <01bece51$965e7c40$6a6cfcd1@ZTU.rsc.raytheon.com>
Source record: 68573

While not a replacement for cavities by any stretch, a friend suggested I
try
stacking the rec ant directly over the xmt. At 148 MHz I was able to null
or isolate them by 20 dB. BOBBY K4BGA

PAUL ISTRIC <generelect@worldnet.att.net> wrote in article
<378C8EB2.292D474C@worldnet.att.net>...
> Hi,
> You don't need any filter, use 2 antennas 30 foot apart, one for TX and
another for RX.
>
> Keith wrote:
>
> > On 15 Jun 1999 04:22:47 GMT, mroberds@worldnet.att.net (Matt Roberds)
wrote:
> >
> > >Can anyone point me to a source of such sharp filters? Or is it
> > >cost-effective to make your own? If so, are there any articles
> > >or books you could point me at? Or is this the wrong approach
> > >entirely?
> >
> > You need a duplexer. Read the ARRL handbook for information
> > and they are not cheap.
> >
> > --
> > Best Regards,
> >
> > Keith
> > --
> > http://www.teleport.com/~kew www.teleport.com/~kew/ham_swl_radio/
> > --
> > If all the personal computers in the world 260 million were put to
> > work on a single PGP-encrypted message, it would still take an
> > estimated 12 million times the age of the universe, on average,
> > to break a single message. --William Crowell, Deputy Director, National
Security Agency, March 20,1997.
>
>

1221. WTD: 220 module and accessories for FT 736

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: Arthur Moe <kb7ww@uswest.net>
Message-ID: <378D2C72.6018FBF4@uswest.net>
Source record: 68574
Cross-posted to:
alt.ham-radio.marketplace,rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,alt.ham-radio.vhf-uhf

Need good working 220 MHz Module + accessories for Yasue FT 736

Let me know what you have and what you want for it.

Thanks
Art
KB7WW

1222. Re: Flat Coax?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: cal25skipper <Skipper3@swbell.net>
Message-ID: <DXaj3.184$eD4.32396@typhoon01.swbell.net>
Source record: 68575
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

drill a hole in the fender well at the back of the care. take your feed to
the trunc and out this hole.
when you are done, plug the hole. Do it anyway while she's not around.
What is she going to do divorce you? get real.

Why would your wife have any problems with that? Maybe she just doesn't
want you have your fun, but I bet she always has hers.

Who wears the pants?

Men take back your homes!!!

Brent Scott
N5CLK
Austin, TX

Spammer wrote in message <378c3032.228815@news.lin.foa.se>...
>My humble suggestion is to use teflon miniature coax aka RG 178, RG
>196 and M17/169. Diameter is 1.8 millimeter.
>
>This cable will withstand 100 watt (do NOT use the more common
>none-teflon RG174), use as short cable as possible as it's pretty
>lossy.
>
>But I doubt you will find any thinner cable with controlled
>impedance!!!
>
>Cheers
>
>
>On Tue, 13 Jul 1999 08:29:15 -0700, "David Green" <djgreen@hooked.net>
>wrote:
>
>>Hello All;
>>I'm in search of a short section of "flat coax" HF feed (for 20M
>>operation;possible
>>100W transfer energy) that can be tightly pressed between a vehicle window
>>and
>>the adjacent rubber seal. The wife has make it very clear there will be
no
>>holes
>>added to "her" :-) van for a direct coaxial antenna feed.
>>
>>Any suggestions, ideas? Do such items exist?

>>
>>Currently, the side window pressure fit to surrounding rubber appears to
be
>>so tight
>>as to not provide the space necessary to accommodate the smaller Beldon
58/U
>>coax without possible overstress of the surrounding glass.
>>
>>Suggestions, comments would be greatly appreciated.
>>
>>Thanks in advance,
>>
>>Dave Green
>>KK6KM
>>djgreen@hooked.net
>>
>>
>>
>>
>

1223. Re: ARRL HANDBOOKS AND QST PUBLICATIONS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: "R.Morris" <robrk@pgh.net>
Message-ID: <378D46CE.3D7@pgh.net>
Source record: 68576

It's disappointing to see the new Handbook on CD cost more than paper.
Doesn't seem fair to the trees or customers.

1224. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: NO SPAM <NOSPAM@mail.rsccd.org>
Message-ID: <378D4B37.172C58D3@mail.rsccd.org>
Source record: 68577
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

PAUL ISTRIC wrote:

> Hi,
> I am using those Hungarian "cheap" bulbs, 4 for a dollar, they last longer
> then GE bulbs... guaranteed!

And the electric companies or whoever have calculated that the money saved by making the light bulbs longer lived (and hence put out less light) is more than offset by the additional power needed to get the same light level, and also by the inefficiency of the bulb.

So it's better to use the 750 hour GE blubs that are bright but don't last as long.

Better yet, just buy one of the fluorescent replacements, if you can stand the two or three seconds it takes to get one started.

> NO SPAM wrote:
[snip]
> > As an example, I managed apartments and the guy who owned them would
> > buy those cheap Hungarian light bulbs for four for 99 cents or some
> > cut rate deal. So I get up on a ladder to change the light bulbs on
> > the outside of the apartments and it costs him a buck or so for ten
> > minutes, at the then prevailing rate of $7 an hour back then in the
> > late 70's. I grabbed a box of four bulbs and tried them in the
> > socket, and the first three fizzled after a few seconds of light, and
> > I think the fourth stayed on for awhile.

1225. Re: Phase shifter info needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: dr.dongle@juno.com
Message-ID: <7mgpjh$4d8$1@nnrp1.deja.com>
Source record: 68626

In article <7meoha$sr6@dfw-ixnews10.ix.netcom.com>,
"Peter O. Brackett" <ab4bc@ix.netcom.com> wrote:
> Here's one of several that will work.
>
> Twin Tee notch network. . . .
>
> T = RC
>
> Notch frequency = 1/T
>
> _______ R _____________ R __________
> | | |
> _| | |_
> | | |
> |_______ C ___|_____________ C __________|
> | |
> | |
> 2*C R/2
> | |
> |______ _|
> |
> Gnd
>
> Peter AB4BC
>
> dr.dongle@juno.com wrote in message <7me93v$6bc$1@nnrp1.deja.com>...
> > I am looking for the formula for determaning the values for a R/C type
> phase
> >shifter to be used as the feed back loop of an op-amp so as to create an
> >oscilator. No I dont want to use a 555 I have my reasons. Any info will be
> >appricated dr.d -- Kiss Technologys The more complicated the plumbing the
> >easer it is to stop up the pipes M. Scott
> >
> >
> >Sent via Deja.com http://www.deja.com/
> >Share what you know. Learn what you don't.
>
>

Thanks for the info, it is much aprecated. There is a similar type of phase shifter using a series string of 4 caps with a resistor (3) to ground from each juntion between caps, will this formula cover this type as well? -- dr.d Kiss Technologys The more complicated the plumbing the easer it is to stop up the pipes M. Scott

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1226. Re: ARRL HANDBOOKS AND QST PUBLICATIONS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: Larry Asp <larry.asp@sympatico.ca>
Message-ID: <378BED8E.5DBB@sympatico.ca>
Source record: 68627

REV wrote:
>
> Does any one know if the arrl handbook is still published and where can one
> get copies of say 1950's??? Also QST ?
> How about CQ mag?
> obvious I have been out of circulation for some time, but did build my
> station out of the handbook in the 50's in Alaska KL7BDA bob

Just put a WTB on this newsgroup and some of the other associated groups
like rec.radio.swap, rec.radio.amateur.equipment etc., and you should be
able to turn up a few.

1227. WTB: QRP Club kit(s)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: BamBam <kl0an@my-deja.com>
Message-ID: <7mguhs$60p$1@nnrp1.deja.com>
Source record: 68628

Hello everyone,

I'm looking for a QRP transciever kit to build. I'd like to find a KnightSmite or Tixie in complete kit form. I know the KnightSmite isn't offered anymore but, if someone has one still in kit form, I'd be very interested in taking it off your hands. Or if you know of another kit in the same price range as these two kits, I'd love to hear about it. I already know about the Pixie II and that is my fall back kit for right now.. If I don't find another one, I'll buy that.

Also, looking for a kit that a club could put together and have an evening meeting for assembly. Then possibly put kits together and market them to the QRP community in kit form.

Does ANYONE have any ideas on any of this? Looking for kits and ideas..

Drop me an e-mail if you know of any good kits.

73
Paul Jordan
kl0an
Fairbanks, AK
--
There never seems to be enough time to do the
things you want to do once you find them...

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1228. Re: ARRL HANDBOOKS AND QST PUBLICATIONS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: cartercook@aol.com
Message-ID: <19990713223452.27308.00000131@ng-ft1.aol.com>
Source record: 68629

>Does any one know if the arrl handbook is still published and where can one
>get copies of say 1950's??? Also QST ?

Bob:
Slickest source for back issues of QST is a CD-ROM series called QST View published by ARRL that goes back to 1915 trough 1994 in eleven sets. Each page - articles, ads and all are reproduced in an easily searchable format. ARRL charges about $40 a set (five or ten years of QST) but I have seen them offered cheaper at some ham stores and hamfests.

W5URW
Carter Cook

1229. Re: why did i become a licensed operator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: w4pqwhs@aol.com
Message-ID: <19990713224357.20348.00012342@ng-fu1.aol.com>
Source record: 68630

dont cry,just get out..

1230. Re: ARRL HANDBOOKS AND QST PUBLICATIONS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.SOL.4.10.9907140035480.4000-100000@Stratus.CAM.ORG>
Source record: 68631

But let's not forget that only rec.radio.swap was set up to be a buy and
sell newsgroup. That's the one where an ad should be placed.

I've never seen used handbooks at used bookstores, though I suppose in
some regions it's a possibility. Like ham magazines, they tend to sold
off direct6ly to the amateur market.

The ARRL on it's website at http://www.arrl.org has a list of upcoming
hamfests, and a hamfest is a likely place to find a used handbook.

The site also has a list of affiliated ham clubs, which might also be of
use to someone getting back into the hobby.

On the other hand, things seem to be changing a bit since recently I've
found Handbooks at used book sales. Last year I picked up a 1971 edition
at the local Rotary Club garage sale for twenty cents. It was good to
get that since it was the first Handbook I ever bought, and I gave ait
away a few years later thinking a later edition would be fine.,

And two months ago I picked up a 1969 edition for fifty cents at a library
used book sale, along with an RCA receiving tube manual.

Michael VE2BVW

On Wed, 14 Jul 1999, Larry Asp wrote:

> REV wrote:
> >
> > Does any one know if the arrl handbook is still published and where can one
> > get copies of say 1950's??? Also QST ?
> > How about CQ mag?
> > obvious I have been out of circulation for some time, but did build my
> > station out of the handbook in the 50's in Alaska KL7BDA bob
>
> Just put a WTB on this newsgroup and some of the other associated groups
> like rec.radio.swap, rec.radio.amateur.equipment etc., and you should be
> able to turn up a few.
>
>
>

1231. ** FLEA at MIT ** This Sunday July 18th Cambridge MA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-14 00:00:00 UTC
From: w1gsl@mit.edu
Message-ID: <7mh5ab$30g@senator-bedfellow.MIT.EDU>
Source record: 68632
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc,rec.radio.info,sci.electronics.misc,ne.forsale,ne.general,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Subject: ** FLEA at MIT ** This Sunday July 18th Cambridge MA
Summary: Buy Sell SWAP Ham Radio Electronics Computers 9AM - 2PM

*** !!!! In our Traditional GARAGE and lot !!!! ****
so come rain or shine or super heat the Flea is on !!!

********* $1 buyers discount with hardcopy of this notice ********

COMPUTERS - ELECTRONICS - HAM RADIO - COMPUTERS - ELECTRONICS - HAM RADIO

FLEA all SUMMER at MIT
Sunday July 18th 1999
9AM-2PM

Come to the city for a great flea - plenty of free parking.

MIT's electronics and ham radio flea will take
place on the third Sunday of each month this summer,
April thru October.

There is tailgate space for over 600 sellers and
free, off-street parking for >2000 cars!

Buyers admission is $4 (you get $1 off if
you're lucky enough to have a copy of our ad)
and sellers spaces are $10.00-each at the gate.

The flea will be held at the corner of Albany and
Main streets in Cambridge; right in the Kendall
Square area from 9AM to 2PM, with sellers set-up
time starting at 7AM.

*** Attention Sellers ***
Prepaid vendors.. Season Pass or monthly,
will be admitted FIRST.
Separate lines will form prior to gate opening
for prepaid and nonprepaid vendors

!! RAIN or SHINE !! Have no fear of rain, a covered
well illuminated tailgate area is available for all
sellers (6'8" clearance).

Talk-in: 146.52 and W1XM/R-449.725/444.725 (PL 114.8/2A).

Sponsors: MIT Electronics Research Society
MIT UHF Repeater Association (W1XM)

MIT Radio Society (W1MX)
Harvard Wireless Club (W1AF)

For more info / advanced reservations 617 253 3776

********** $1 buyers discount with hard copy of this notice ************

<<<<<<<<<<<<<<<<<<<<<<< cut here >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

1999 SELLERS ADVANCED DISCOUNT REGISTRATION if Mailed by the 5th

Name..... Call.....

Address..... Phone.....

City..... State..... Zip.....

E-Mail .....

Spaces Required ___ Season @ $50 / space = $ ..... CK # .....

___ April ____ May ___ June ____ July

___ Aug ____ Sept ___ Oct

Total Monthly spaces @ $9/ Space = $ ..... CK # .....

Make checks payable to The MIT Radio Society

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.....
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For .....

By ..... Stamp

Enclose SASE for return by mail.

****
Steve Finberg W1GSL w1gsl@mit.edu
PO Box 82 MIT Br Cambridge MA 02139-7082 617 258 3754
****

1232. Re: Flat Coax?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-15 00:00:00 UTC
From: spam@nospam.com
Message-ID: <378dca06.18064565@news.lin.foa.se>
Source record: 68483
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

I did see one Palomar rx-amp with tr-switch using RG174. Not sure if
it was exposed to high SWR or more than 100 Watt but the coax was
totally melted....

I find using teflon-coax is so much simpler and reliable as the
insulation on the 174 tends to melt very easy....

But then again, IF it works well stick to it! No need to change!

Cheers

On Wed, 14 Jul 1999 01:28:32 -0700, Roy Lewallen <w7el@teleport.com>
wrote:

>Spammer wrote:
>>
>> My humble suggestion is to use teflon miniature coax aka RG 178, RG
>> 196 and M17/169. Diameter is 1.8 millimeter.
>>
>> This cable will withstand 100 watt (do NOT use the more common
>> none-teflon RG174). . .
>
>I use RG-174 in my baluns, and they handle 300 watts at HF with no
>problem. It wouldn't be a good idea if the SWR is high, though.
>
>Roy Lewallen, W7EL

1233. Basic Electronics Vol1-6 Common Core Series

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-15 00:00:00 UTC
From: brendantmurphy@tinet.ie
Message-ID: <7mkj0b$99m$1@scotty.tinet.ie>
Source record: 68484

Looking for above printed about 1959 for US navy

1234. Re: Flat Coax?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-15 00:00:00 UTC
From: W1PEV <paulvanasse@tp.net>
Message-ID: <xpkj3.474$y%2.17847@news13.ispnews.com>
Source record: 68485
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

ROTFLMAO.....good one!

1235. Re: IC-2AT Battery Question???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-15 00:00:00 UTC
From: Brad Kellison <KA8TOK@four-way.net>
Message-ID: <378DD9D9.A8BA0724@four-way.net>
Source record: 68486
Cross-posted to: rec.ham-radio,rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

the IC2at requires an adapter to be used with it in order to run 13.8v.. the
202 is based on ICOM's IC-O2AT design.

Roger Grady wrote:

> "Bill Crann" <bcrann@nf.sympatico.ca> wrote:
>
> >I was wondering what is the maximum voltage battery pack I can use on this
> >radio? Does the battery pack from a HTX-202 fit this radio? Can I use the
> >radio while it is charging? Can I hook it up to an external 13.8V power
> >supply? Sorry for all the questions but I am fairly new to Ham Radio and
> >just bought this radio used with no manual, so I wouldn't want to break it
> >first thing.
>
> My -2AT manual doesn't specify a maximum voltage, but the BP-5 battery
> supplies 10.8V (and 2.3W RF out), so at least that much is acceptable.
> I don't think it's intended to be run direct from 13.8v.
>
> I haven't tried it but I've read that batteries are interchangable
> with the HTX-202.
>
> Manual says NOT to charge battery while radio is on.
>
> Roger Grady k9opo@netusa1.qlf.net
> To reply by email, remove "qlf." from address

1236. Re: UN to Tax Internet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-15 00:00:00 UTC
From: Robert Lyons <boblyons@umich.edu>
Message-ID: <378DE2F7.D79611FD@umich.edu>
Source record: 68487

agent01413@my-deja.com wrote:
>
> In article <7mj5o6$6vc$1@news.campuscwix.net>,
> xxxphilj@ecc-uky.campuscwix.net (Phillip Jockell) wrote:
> > Come on, you can do better than that. Everyone has heard all the
> > "they're gonna tax the 'net" garbage by now.
> >
>
> I had the same initial impression.
>
> Unfortunately, while the proposal was made by people that clearly didn't
> know the difference between twisted pair and Twisted Sister, the UN
> Development Agency did make the proposal. It isn't a hoax.

How absurd. The UN has no authority to levy any sort of taxes. Someone
is pulling someone's leg.

1237. Re: PC RF getting into my HF rigs!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-15 00:00:00 UTC
From: "Laszlo I. Morocz" <kf4pv@spammenotlmorocz.com>
Message-ID: <01bececd$a4135320$4eee1e26@p133>
Source record: 68488

Unfortunately, as long as you're using a CRT you're stuck with the noise. A Tempest lab I was once associated with did some tests and found that even if the monitor case was completely metal (and well grounded) there was still major interference because of radiation through the CRT face. The only way to attenuate this (and that's "attenuate", not "eliminate") was to cover the CRT face with a grounded metallic screen.

The best solution I've found so far is a laptop with an LCD screen. In fact, for digital HF modes I use a 10 MHz 386 monochrome laptop running on batteries. The low clock rate really limits the radiated noise, and when the power saver feature kicks in and shuts off the disk, etc. it's below the ambient noise on 80m, even without elaborate grounding schemes and sitting next to the HF rig fed with a longwire antenna.

I use 1980's vintage DOS-based software so that it will fit into RAM and not need a disk to run. A bit primitive, but it can keep up with HF CW, AMTOR, PACTOR, RTTY, etc. without working up a sweat. Of course, I do use Pentiums, Win98, Linux, etc. for my professional stuff. Good luck,

73 de Laszlo KF4PV/3

--
To reply, remove the text spammenot from the e-mail address.

tatasadasayago <Jcrosley@mocc.com> wrote in article
<37898196.F99DA5E8@mocc.com>...
> Help! I am going nuts trying to figure out how to stop my PC monitor
> from ruining the 15 and 20 meter bands with the awful buzzing. Any
> quick and dirty ideas?
> I'm about to grab a sheet of lead and wrap the darn thing with it.....
> Jim KY7DX
>
>

1238. Re: PC RF getting into my HF rigs!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-15 00:00:00 UTC
From: Dan K Nelson <kf6knb@qsl.net>
Message-ID: <Blnj3.244$lv.6811@dfiatx1-snr1.gtei.net>
Source record: 68489

Laszlo I. Morocz <kf4pv@spammenotlmorocz.com> wrote in message
news:01bececd$a4135320$4eee1e26@p133...
> Unfortunately, as long as you're using a CRT you're stuck with the noise.
A
> Tempest lab I was once associated with did some tests and found that even
> if the monitor case was completely metal (and well grounded) there was
> still major interference because of radiation through the CRT face. The
> only way to attenuate this (and that's "attenuate", not "eliminate") was
to
> cover the CRT face with a grounded metallic screen.
>
> The best solution I've found so far is a laptop with an LCD screen. In
> fact, for digital HF modes I use a 10 MHz 386 monochrome laptop running on
> batteries. The low clock rate really limits the radiated noise, and when
> the power saver feature kicks in and shuts off the disk, etc. it's below
> the ambient noise on 80m, even without elaborate grounding schemes and
> sitting next to the HF rig fed with a longwire antenna.
>
> I use 1980's vintage DOS-based software so that it will fit into RAM and
> not need a disk to run. A bit primitive, but it can keep up with HF CW,
> AMTOR, PACTOR, RTTY, etc. without working up a sweat. Of course, I do use
> Pentiums, Win98, Linux, etc. for my professional stuff. Good luck,
>
> 73 de Laszlo KF4PV/3
>

I have a NEC XV17 sitting 4 inches away from my Yaesu Ft-920, and on the
other side of the bench, I have a 19 inch Sony SVGA sitting about 6 inches
away from my Kenwood TS-790. I get no interference whatsoever from either
monitor on any of the bands - HF or VHF/UHF.

The computers are underneath the bench and are also only about 2 feet from
the rigs (both are home built 400 mhz. machines with a 100 mhz system bus).

Apparently, the noise issue is related to specific equipment and/or station
setups ?

73 de KF6KNB

1239. Re: PC RF getting into my HF rigs!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-15 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <378E04E9.6293@ix.netcom.com>
Source record: 68490

tatasadasayago wrote:
>
> Help! I am going nuts trying to figure out how to stop my PC monitor
> from ruining the 15 and 20 meter bands with the awful buzzing. Any
> quick and dirty ideas?
> I'm about to grab a sheet of lead and wrap the darn thing with it.....
> Jim KY7DX

Hi Jim -- yake a look at RFIing YOUR COMPUTER by 9V1ZV at URL:
http://www.ac6v.com/pagearfi.html

Good Luck
--
73 From Rod In San Diego

AC6V INDEX TO DX AND HAM RADIO
FEATURING 88 PAGES, 400 INDEXED TOPICS, AND 3000 LINKS
Over 411,000 visits on the counter
http://www.ac6v.com/pageas.html -- Alphabetical Index
http://www.ac6v.com/ -- Home Page

1240. SPICE Models

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-15 00:00:00 UTC
From: "Mr. Muckle" <jdwalton@home.com>
Message-ID: <378E53ED.CE0D045E@home.com>
Source record: 68491

Can one of the NG members recommend one or more web-sites with SPICE model libraries.

Jack

1241. Re: Flat Coax?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-15 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <378E1B41.6733C52B@teleport.com>
Source record: 68492
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

At 300 watts and 1:1 SWR, the current is about 2.5 amps. At 14 MHz, the RF resistivity of the #22 center conductor of RG-174 is about 0.15 ohms/foot, so the cable dissipates less than a watt per foot. This isn't enough to raise the temperature of the center conductor to the melting point of polyethylene. The resistivity increases as you go up in frequency, but it should still be ok at this power level anywhere in the HF bands.

Voltage isn't a problem. RG-174 is rated at 1100 volts RMS, which is over 24 kW at 1:1 SWR.

Sure I'll stick to it. Been using RG-174 for baluns and other purposes for more than 20 years and have never had any problem up to 300 watts. It's poor for long runs, though. The loss at low HF is nearly as great as at the high end, due to current penetration of the steel portion of the very small center conductor strands.

Roy Lewallen, W7EL

Spammer wrote:
>
> I did see one Palomar rx-amp with tr-switch using RG174. Not sure if
> it was exposed to high SWR or more than 100 Watt but the coax was
> totally melted....
>
> I find using teflon-coax is so much simpler and reliable as the
> insulation on the 174 tends to melt very easy....
>
> But then again, IF it works well stick to it! No need to change!
>
> Cheers
>
> On Wed, 14 Jul 1999 01:28:32 -0700, Roy Lewallen <w7el@teleport.com>
> wrote:
>
> >Spammer wrote:
> >>
> >> My humble suggestion is to use teflon miniature coax aka RG 178, RG
> >> 196 and M17/169. Diameter is 1.8 millimeter.
> >>
> >> This cable will withstand 100 watt (do NOT use the more common
> >> none-teflon RG174). . .
> >>
> >I use RG-174 in my baluns, and they handle 300 watts at HF with no

> >problem. It wouldn't be a good idea if the SWR is high, though.
> >
> >Roy Lewallen, W7EL

1242. Re: PC RF getting into my HF rigs!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-15 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <7ml7tf$7g$1@autumn.news.rcn.net>
Source record: 68493

> > Unfortunately, as long as you're using a CRT you're stuck with the noise.

I disagree! I have a budget Vision Graphic monitor 6-inches to the left of my IC-761 and not a bit of RFI on any band. Directly above the monitor is a 2M rig with no RFI and a 6M rig with no RFI.

CRTs do radiate out the face but not enough to get into a properly shielded rig. The most likely source of his RFI is radiation from the cables.

1243. Re: Flat Coax?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-15 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <378E29AC.16FC@ixpres.com>
Source record: 68494
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

cal25skipper wrote:
>
> drill a hole in the fender well at the back of the car. take your feed to the trunk and out this hole.
> when you are done, plug the hole. Do it anyway while she's not around.
> What is she going to do, divorce you? get real.

Hear hear! These things are easily accomplished if one does not live in abject terror of the (often uninformed) opinions of others, including those we love. Get real, indeed.

73,
Don, W6JL

>

1244. Re: UN to Tax Internet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-15 00:00:00 UTC
From: tcrpe <tcrpe@yahoo.com>
Message-ID: <wxqj3.38819$AU3.777407@news2.giganews.com>
Source record: 68495

Robert Lyons <boblyons@umich.edu> wrote in message
news:378DE2F7.D79611FD@umich.edu...
> How absurd. The UN has no authority to levy any sort of taxes. Someone
> is pulling someone's leg.

Ever heard of the 'carbon tax', coming your way soon?

They have the authority to bomb a country back into the stone age. Why not
steal money?

And where do you suppose the dues that are paid to the UN come from?
(Taxpayers)

As soon as that idiot, Herr Klinton, gets into the UN, we'll all be taxed
for "our own good", or "for the children", or some other nonsense.

TR

1245. Re: Building my own repeater - where to get the filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-15 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <37ad345a.325412238@news.atl.bellsouth.net>
Source record: 68496

On 14 Jul 1999 23:35:56 GMT, "Bobby Atkinson" <bobbys@prodigy.net> wrote:
>While not a replacement for cavities by any stretch, a friend suggested I
>try stacking the rec ant directly over the xmt. At 148 MHz I was able to null
>or isolate them by 20 dB. BOBBY K4BGA

Yeah, but a repeater normally has about 90 dB of isolation between
transmit and receive. So you'll have big time desense if your repeater
runs more than very low power. You need about 3 miles horizontal
separation to get 90 dB of isolation, or about 500 feet of vertical
separation.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

1246. Re: SPICE Models

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-15 00:00:00 UTC
From: Bobby Atkinson <bobbys@prodigy.net>
Message-ID: <01becf10$31560560$656cfcd1@ZTU.rsc.raytheon.com>
Source record: 68497

www.intusoft.com is a good source, if you were specfic as to the
device type you needed I could be more helpful. BOBBY K4BGA

Mr. Muckle <jdwalton@home.com> wrote in article
<378E53ED.CE0D045E@home.com>...
> Can one of the NG members recommend one or more web-sites with SPICE
> model libraries.
>
> Jack
>
>

1247. HELP WITH COLOR CODE

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-15 00:00:00 UTC
From: Harry <WA4OFS@iag.net>
Message-ID: <378E6545.38B7CA1E@iag.net>
Source record: 68498

I HAVE SEVERAL COIL FORMS THAT ARE SLUG TUNED ,TROUBLE IS DON'T WHAT
FREQS. THE COLORS ON THE SLUGS REPRESENT,HAVE WHITE, RED, YELLOW,GREEN,
AND NO COLOR.WONDER IF ANY ONE HAS THE INFO? TIA HARRY WA4OFS

1248. Transformer tape?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-15 00:00:00 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <01becf1d$7936fa80$57874d0c@default>
Source record: 68499

I've been using a high temp tape for wrapping transformers and inductors.
We are getting low on supply and I'm looking for a source of 1/4" and 3/8"
tape to wrap bobbins.
The tape I have has the name Permacel on the core.
Any suggestions?

Mike

1249. Re: Building my own repeater - where to get the filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-15 00:00:00 UTC
From: Ralph Mowery <rmowery@ibm.net>
Message-ID: <378E7DF2.28456F83@ibm.net>
Source record: 68500

Have you tried this ??? If so what frequency and what kind of
antennas ??

Doesn't seem to work on the 220 band at a 20 watt level. Tried this
about 15 years ago.

PAUL ISTRIC wrote:
>
> Hi,
> You don't need any filter, use 2 antennas 30 foot apart, one for TX and another for RX.
>
> Keith wrote:
>
> > On 15 Jun 1999 04:22:47 GMT, mroberds@worldnet.att.net (Matt Roberds) wrote:
> > >
> > > >Can anyone point me to a source of such sharp filters? Or is it
> > > >cost-effective to make your own? If so, are there any articles
> > > >or books you could point me at? Or is this the wrong approach
> > > >entirely?
> > >

1250. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-15 00:00:00 UTC
From: Rich Grise <rich@entheosengineering.com>
Message-ID: <378E89CE.1EA8@entheosengineering.com>
Source record: 68501
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

gord wrote:
>
> Why not just start with rotary motion... pedaling? Seems to me there'd be a
> lot of waste converting the "pivot" motion back to rotary.

Well, I was thinking of the difference in pedaling around in a
circle, vs. just pedaling along an arc. One advantage would
be that for acceleration you could push with both legs at the
same time. And the "gearshift" is almost trivial - slide your
cable up and down the lever arm to get the mechanical advantage
of a type 2 lever. And I think they have pretty efficient
drum/ratchet devices that you could get out of a catalog.
...
> >I got a million of 'em, including about a half-dozen that I've
> >done for companies that have since gone belly-up. Wonder if
> >I'm some kind of jinx?
>
> Hmmm. I wonder why they went belly up?

Good question! Mind you, none of the above inventions are
included in this set - I think mostly I was paid to implement
stupid pointy-haired ideas a la Dilbert, or maybe I was just
working too cheap, and the companies were doomed anyway. Or,
I'm a jinx or a total f***-up and it's my fault. But I don't
really think I'm all THAT powerful! :)

Cheers!
Rich

BTW, any vulture capitalists want to try any of these?

1251. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-15 00:00:00 UTC
From: Rich Grise <rich@entheosengineering.com>
Message-ID: <378E8B31.3963@entheosengineering.com>
Source record: 68502
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

NO SPAM wrote:
>
> PAUL ISTRIC wrote:
>
> > Hi,
> > I am using those Hungarian "cheap" bulbs, 4 for a dollar, they last longer
> > then GE bulbs... guaranteed!
>
> And the electric companies or whoever have calculated that the money
> saved by making the light bulbs longer lived (and hence put out less
> light) is more than offset by the additional power needed to get the
> same light level, and also by the inefficiency of the bulb.
>
> So it's better to use the 750 hour GE blubs that are bright but don't
> last as long.
>
> Better yet, just buy one of the fluorescent replacements, if you can
> stand the two or three seconds it takes to get one started.
>
I just recently moved into a new apartment, and the overhead light,
or ceiling light, had a lame little 7 watt chandelier bulb in it.
So, I figured I'd be really smart, and shelled out 13 bucks apiece
for a couple of 25-watt fluorescents (which are about 9"long) but
said they give the equivalent light of a 100-watt incandescent.

Installed them both in the fixture. Turned on the switch, and I
was almost blinded! Instantly - no noticeable (sp?) delay at all.
I ended up taking one of them out, and the one 25-watt instant-on
fluorescent gives me more than enough light for my computer room/
office/tech lab. But they are kind of expensive, but they probably
last a long time (this remains to be seen) and probably over their
lifetime they save enough KWH to offset the cost.

And I can take them with me when I move, and put back the stupid
little 7- or maybe 15-watt chandelier bulb.

Cheers!
Rich

1252. Tektronix Scope f/s

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-15 00:00:00 UTC
From: hmn <hmnadel@banet.net>
Message-ID: <378E8CF2.359A719F@banet.net>
Source record: 68503

Tektronix Model 465, dual trace scope with a leader model LP16A probe.
In excellent condition.
The price is $325.00. Please note I am located on Long Island about 25
miles east of NYC and I will not ship this. If you are interested you
will have to pick it up.

--

"Always Available Through Technology"

Be sure to visit the web site of w2ufo & w2xyl
just by clicking on http://www.qsl.net/w2ufo

1253. Re: Building my own repeater - where to get the filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-15 00:00:00 UTC
From: WebMonkey <demoman@rollanet.org>
Message-ID: <378E9C4A.79E@rollanet.org>
Source record: 68504

Ralph Mowery wrote:
>
> Have you tried this ??? If so what frequency and what kind of
> antennas ??
>
> Doesn't seem to work on the 220 band at a 20 watt level. Tried this
> about 15 years ago.
>
30' horizontal doesn't work well anywhere =]
my antennae are 100' apart horizontal and 30' apart vertical.
even at the 5mHz split of 70cm, 20 watts causes noticeable desense.
the antennae are comet gp-15s. there is a nice gasfet preamp on the
rcvr
but the desense was noticed before.
mobiles never had trouble but i pride my system for it's abundance of
low power ht users. 2 500mw users and 1 10mw user.
desense must go =]
i have a handbook with isolation figures but they don't factor gain
antennae.

just my experience.

> PAUL ISTRIC wrote:
> >
> > Hi,
> > You don't need any filter, use 2 antennas 30 foot apart, one for TX and another for RX.
> >
> > Keith wrote:
> >
> > > On 15 Jun 1999 04:22:47 GMT, mroberds@worldnet.att.net (Matt Roberds) wrote:
> > >
> > > >Can anyone point me to a source of such sharp filters? Or is it
> > > >cost-effective to make your own? If so, are there any articles
> > > >or books you could point me at? Or is this the wrong approach
> > > >entirely?
> > >

--
A.C. Curtis
KBï¿½WLF
53.45 and 442.45, 77.0Hz enc/dec [multi-cast repeater system]
mailto:demoman@rollanet.org
http://www.rollanet.org/~demoman

1254. Re: AEA-121 HF ANALYST

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-15 00:00:00 UTC
From: Tom <topdog@advicom.net>
Message-ID: <378EB407.23D3@advicom.net>
Source record: 68505
Cross-posted to: alt.ham-radio.hf,rec.ham-radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Richard Earl wrote:
>
> Are they still in business?
>
> Need instruction manual(or copy), software and serial cable for the AEA
> Model SWR-121 HF Analyst.
>
> Thank you,
>
> Rich
>
> W9JUC

Try www.aea-wireless.com

Tom K4AKC

1255. Looking plans dualband (VHF/UHF) antenna for HT.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-15 00:00:00 UTC
From: Alexey Lomazin <milker@onego.ru>
Message-ID: <378eb9eb.0@news.global-one.ru>
Source record: 68506
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

My frend looking plans compact dualband (VHF/UHF) antenna for HT.
The well known way is using 0.5 m whip (1/4 for VHF and 3/4 for UHF) - but it's not a compact antenna. I looking for plans some _real_ compact about 10 to 15 cm.

I think about anithing like this:

###---------[L1]---------[L2]---------

- BNC connector,
L1, L2 - coils.
Inductanse
L1 ~ 0.18 uH
L2 ~ 1.2 uH

Lenghts:
from BNC to L1 - 4 cm, L1-L2 - 4cm, l2 to end - 5 cm, common - 15 cm.

I think best matirial will be central isolator from coax (without central conductor, of course) - diameter about 4 to 7 mm with winding on it.

Is any erros in above?
For e-mail me plis remove /stopspam/ in my adress.

1256. Re: Crystal Load Capacitance

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-15 00:00:00 UTC
From: CDT <xctx@onr.com>
Message-ID: <01becf95$25c9a000$8032c8cf@ct>
Source record: 68507

The Crystal's load capacitance is the capacitance it sees in
the oscillator circuit. You can vary the load capacitance by
probably 30% without much fear of startup failure. Load capacitance
is really the capacitance the manufacturer places on the crystal
when it is calibrated at the factory. So if you want the closest trim-free

accuracy use the specified load capacitance. If you don't care about
precise accuracy the load capacitance can simply be
"close" and your circuit will still oscillate.

-W5CDT

--
>>>Remove the X's from my email address before using<<<

XctX@onr.com

1257. TS50 ALC help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-15 00:00:00 UTC
From: Doug <kf4abm@my-deja.com>
Message-ID: <7mjmai$4pp$1@nnrp1.deja.com>
Source record: 68578

Hi all,

The Kenwood TS-50 has a ALC jack on the back of the rig.
According to a QRZ review if I fed a negative voltage to
this jack I could vary the output power. The TS50 has
three power levels as with many 2 meter rigs, they are
10/50/100 watts. However, with this negative voltage as
I understood to be varried between 0 and -4 volts I could
get down to QRP with the TS50. I built a power supply
and tried this without success. I switched and fed a positive
voltage which also didn't work.

Has anyone else tried this? I got the rig used and it has
been modified. Was set up to 150 watts and TX out of band.
Does anyone know if these mod's would inhibit the ALC?

Thanks in advance for any help!

--
--... ...-- -.. . -.- ..-. ....- .- -... --

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1258. Re: IC-2AT Battery Question???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-15 00:00:00 UTC
From: k9opo@netusa1.qlf.net
Message-ID: <7mjj5d$2vg9$1@news.netusa1.net>
Source record: 68579
Cross-posted to: rec.ham-radio,rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"Bill Crann" <bcrann@nf.sympatico.ca> wrote:

>I was wondering what is the maximum voltage battery pack I can use on this
>radio? Does the battery pack from a HTX-202 fit this radio? Can I use the
>radio while it is charging? Can I hook it up to an external 13.8V power
>supply? Sorry for all the questions but I am fairly new to Ham Radio and
>just bought this radio used with no manual, so I wouldn't want to break it
>first thing.

My -2AT manual doesn't specify a maximum voltage, but the BP-5 battery
supplies 10.8V (and 2.3W RF out), so at least that much is acceptable.
I don't think it's intended to be run direct from 13.8v.

I haven't tried it but I've read that batteries are interchangable
with the HTX-202.

Manual says NOT to charge battery while radio is on.

Roger Grady k9opo@netusa1.qlf.net
To reply by email, remove "qlf." from address

1259. ICOM comm. protocol

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-15 00:00:00 UTC
From: Andrej Laudis <laudis@my-deja.com>
Message-ID: <7mkcsv$c6p$1@nnrp1.deja.com>
Source record: 68580

Hi all,

I search for description about ICOM communication protokol between
computer and ICOM rigs. Did you see some docs?

Thanks for all replies

Andrej / OM1CW

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1260. Re: UN to Tax Internet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-15 00:00:00 UTC
From: agent01413@my-deja.com
Message-ID: <7mkhrbdji1@nnrp1.deja.com>
Source record: 68581

In article <7mj5o6$6vc$1@news.campuscwix.net>,
xxxphilj@ecc-uky.campuscwix.net (Phillip Jockell) wrote:
> Come on, you can do better than that. Everyone has heard all the
> "they're gonna tax the 'net" garbage by now.
>

I had the same initial impression.

Unfortunately, while the proposal was made by people that clearly didn't know the difference between twisted pair and Twisted Sister, the UN Development Agency did make the proposal. It isn't a hoax.

It got written up in Wired.

The report is discussed on the Agency home page at
<http://www.undp.org/hdro/>

Read the agency's own press release about it at
<http://www.undp.org/hdro/E3.html>

Fire the people who wrote this proposal, shut down the agency that authorized it, then come talk to us about paying the debt when the money won't be used on wasteful proposals like this one.

Make sure you post commentary on their discussion page
<http://www.undp.org/hdro/converse.html>

> In article <378B69EF.5DD2604C@home.com>, jdwalton@home.com says...
> >
> >A little off topic for ham newsgroups, but see this morning's New
York
> >Times. The UN is proposing to tax the internet - a penny per e-mail
-
> >to raise money for the "Internetless". Did Al Gore think this up?
> >
> >It'll force folks to QSO again!
> >
>
>

--

Spam Me and Die - Lumber Cartel Agent 1413
God is real, unless explicitly declared integer

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1261. Re: URGENT update on FREE *junk* HP R/S Schlumberger Polaroid

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-15 00:00:00 UTC
From: spam@nospam.com
Message-ID: <378dc918.17827180@news.lin.foa.se>
Source record: 68582

This morning the dump-truck removed all left-overs.... so nothing to
be saved anymore!!

I had NO taker on any equipment listed so I guess there is NO interest
in older tubed HP/TEK stuff!!! Not even a query about the junk!
Strange as it was absolutely FREE!!

/Lasse

On Tue, 13 Jul 1999 13:12:15 GMT, spam@nospam.com (Spammer) wrote:

>I did check today only to discover even more interesting devices!
>Updated list:
>Polaroid C30 scope camera
>Polaroid Shackman scope camera
>HP 12050 IR-HPIB link including opto fiber cable, one unit defunk
>HP5105 plus 5110(?) Direct synth with reference signalsource
>R/S 0-100 dB attenuator BIG 19 inch wide High power?? Very big
>connectors!!
>R/S Noise generator
>R/S ESM180 VHF AM/FM receiver 31,5 kg!
>Schlumberger precision signal source 0-30 MHz
>HP 9825 Instrument controller with plotter, printer ....
>Tek squrare wave generator calibrator ??
>Apple Mac plus
>
>
>All units are FREE, as it will be shipped to scrap within a few
>days!!!
>
>You pick up, smaller items might be shipped at your COST!!!
>All junk located at LINK PING SWEDEN
>
>Contact me ASAP lasse.moell@swipnet.se.nospam and remove the usual
>nospam from my adress!
>
>My estimate is this will be shipped to scrap-yard on friday at the
>latest....
>
>I HATE TO SEE INSRUMENTS BEEING SCRAPPED!

1262. Re: GPS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <378F9734.B03A885D@teleport.com>
Source record: 68433

Michael Young wrote:
>
> Build an ultrasonic beacon and save everyone the grief. An AF
> oscillator, amp, and piezo buzzer is all you need, about $3 in parts. On
> receive: a microphone, amp, tone decoder, and VU meter. It's cheap,
> effective, legal, and might even keep the mosquitoes out of the camp.
> (Did I mention legal?)
>
> Michael.

Aren't the little piezo transducers pretty directional? Doesn't brush absorb ultrasonic sound pretty badly? Have you actually tried this yourself?

Roy Lewallen, W7EL

1263. Re: Frequency spurs in PLL output ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: "Charles H. Reichert" <reichert@cig.mot.com>
Message-ID: <378F9368.FBA01DC7@cig.mot.com>
Source record: 68434

I have some excellent PLL design references on my Ham Web Page
at http://www.imaxx.net/~kd9jq. I also have a document spelling out
just how false integer locks can occur. I used this info to solve
a similar problem at a previous employer.

Chuck KD9JQ
mailto:kd9jq@imaxx.net

Oliver Huang wrote:
>
> I' using a down-converter IC which has an internal PLL circuit to
> convert the injected reference frequency at Fo to 100*Fo as the local
> oscillator for the first stage mixer.
>
> Normally, when powered up, I can see a single frequency at 100 times
> the injected reference frequency on the spectrum analyzer on the
> output; and there's very small ripple voltage on the PLL loop filter
> capacitor. But occasionally, after powering up, I see other evenly
> distributed frequency spurs above and below the desired frequency. The
> frequency spacing between the spurs seems to vary with the capacitance
> of the loop filter capacitor. I find that there's 100mVpp 40+kHz
> square wave ripple superimposed on the DC voltage (1.9V) on the PLL
> loop filter capacitor. From the square wave ripple, I can imagine that
> it somehow modulated the VCO to produce the spurs that I saw, but I
> simply cannot figure out how the PLL got into such steady state
> (locked into multiple frequencies) in the frequency pull-in acqusition
> process. Can anyone kindly help me explain the phenomonen? What can I
> do to remove the problem? Thanks.
>
> Oliver

1264. Output transistors for HF power amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: Gerrit Barrere <ctrXpoiYnt@halcZyon.com>
Message-ID: <7mo66b$6bv$2@brokaw.wa.com>
Source record: 68435
Cross-posted to: uk.radio.amateur,aus.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hi all,

I'm designing a 1-10 MHz Class AB broadband power amplifier, 50-100 W pulses, 10-15 W average into 50 ohms, for an ultrasound application. I'm having trouble finding a good source of output transistors, bipolar or FET, since most transistor manufacturers are deserting these low frequencies for the cellular band and above these days.

Can anyone recommend some good production transistors for this type of application? I would also welcome app notes or design schematics, but I do have a circuit already for NPN bipolars which should work.

Many thanks,
Gerrit Barrere
ctrpXoinYt@halZcyon.com
(please remove X, Y, and Z from return email address)

1265. Re: Frequency spurs in PLL output ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <378F95F4.3CB2@pop.removethistomailme.net>
Source record: 68436

Oliver Huang wrote:
>
> I' using a down-converter IC which has an internal PLL circuit to
> convert the injected reference frequency at Fo to 100*Fo as the local
> oscillator for the first stage mixer.
>
> Normally, when powered up, I can see a single frequency at 100 times
> the injected reference frequency on the spectrum analyzer on the
> output; and there's very small ripple voltage on the PLL loop filter
> capacitor. But occasionally, after powering up, I see other evenly
> distributed frequency spurs above and below the desired frequency. The
> frequency spacing between the spurs seems to vary with the capacitance
> of the loop filter capacitor. I find that there's 100mVpp 40+kHz
> square wave ripple superimposed on the DC voltage (1.9V) on the PLL
> loop filter capacitor. From the square wave ripple, I can imagine that
> it somehow modulated the VCO to produce the spurs that I saw, but I
> simply cannot figure out how the PLL got into such steady state
> (locked into multiple frequencies) in the frequency pull-in acqusition
> process. Can anyone kindly help me explain the phenomonen? What can I
> do to remove the problem? Thanks.
>
> Oliver

Sounds like your phase margin is inadequate for stability. The "spurs"
are likely to be the result of low-to-medium-frequency oscillations
modulating your VCO. You may want to increase the value of the resistor
that's in series with your loop filter capacitor.

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

1266. Re: Output transistors for HF power amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <378F9704.7004@pop.removethistomailme.net>
Source record: 68437
Cross-posted to: uk.radio.amateur,aus.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Gerrit Barrere wrote:
>
> Hi all,
>
> I'm designing a 1-10 MHz Class AB broadband power amplifier, 50-100 W pulses,
> 10-15 W average into 50 ohms, for an ultrasound application. I'm having trouble
> finding a good source of output transistors, bipolar or FET, since most
> transistor manufacturers are deserting these low frequencies for the cellular
> band and above these days.
>
> Can anyone recommend some good production transistors for this type of
> application? I would also welcome app notes or design schematics, but I do have
> a circuit already for NPN bipolars which should work.
>
> Many thanks,
> Gerrit Barrere
> ctrpXoinYt@halZcyon.com
> (please remove X, Y, and Z from return email address)

Just about any device that's characterized for VHF/UHF will also work at HF, but you may need to be unusually careful about circuit layout, Z matching, and parasitic suppression. It's usually better to stick with the old rule of device cutoff frequency <= 10 * the maximum desired operating frequency if you have a choice.

It's amazing how many cheap, nifty RF power devices are available these days for 800 MHz.

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

1267. Re: GPS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: Michael Young <nobody@all.org>
Message-ID: <932161834.358.36@news.remarQ.com>
Source record: 68438

No, I haven't tried an ultrasonic beacon. I've found camp 100% of the time, sometimes without using the map or compass I carry. A beacon would be useful for the last 50 yds, where attenuation and other difficulties aren't so great. Ultrasonic seems a bit friendlier environment-wise than the usual camper's beacon: a boom box at moderate volume. But you're right: I haven't tried it. And it has nothing to do with me thinking someone trouncing about with a loaded rifle should know how to find his way home.

Michael.

Roy Lewallen <w7el@teleport.com> wrote in message news:378F9734.B03A885D@teleport.com...
> Aren't the little piezo transducers pretty directional? Doesn't brush
> absorb ultrasonic sound pretty badly? Have you actually tried this
> yourself?
>
> Roy Lewallen, W7EL

1268. Re: Trying to build an FM Transmitter, and hopelessly lost

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <378FA3DF.C5BB3E72@midwestmicro-tek.com>
Source record: 68439

I agree with Lyle, I don't think that the body blocking approach would work all that well. I think your best bet would be to go to Radio Shack and get Forrest M. Mims "Engineer's Mini-Notebook" on communications projects and build the RF transmitter he shows.

If you want to get illegal about it, which I don't recomend as sooner or later some one will notice you and you will get sighted, just up the voltage/current and add a large antenna to break a number of FCC rules and you might get a mile or two out of it. He also gives circuits for simple receivers (or you could just buy some cheap am transister radios) as well. What you could do is put a directional loop antenna on the receivers and then "sight" through them to determine the direction of the beacon. You'd have to know the general direction back to the camp though since the direction could be 180 degrees from where you think it is. If you decide to build the receiver up to get a few miles out of it, on your head be it.

Some one correct me on this if I'm wrong but I think that basement and sub-basement bands (i.e. 20,000KHz and less) are open and free to be use by any one for anything since they have no real value commercialy, although I think submarines use long wave when communicating while submerged. I remember reading an article on this in Popular Electronics or Radio and Electronics in the early '90s. The power neccessary to transmitt great distances is commercialy prohibitive, information content is low (but is fine for CW) and QRM can be nasty but you can build and transmitt on some of the frequencies (I think) without holding any kind of licence or having to have permission from the FCC.

Lyle Koehler wrote:

> As others have pointed out, if you succeed in getting a two mile range
> with an FM transmitter you are definitely illegal. But legal or not, I
> doubt if it would work, for a number of reasons. First of all, with an
> FM receiver, the loudness of the audio output is not affected much by
> the strength of the signal until you are near the noise threshold. Then
> there's the fact that your body isn't big enough to have much of a
> blocking effect at the wavelength (about 3 meters) of the FM signal. Add
> to that the multipath, reflections and blockage from trees and terrain,
> and it sounds like a pretty unreliable system. I suggest that you try
> the body-blocking approach to determine the direction of an existing FM
> station while in an open field, before devoting too much time and solder
> to this technique.
>
> Lyle, K0LR
>
> daveooo@my-deja.com wrote:

> >
> > I am trying to build an FM Transmitter that emits a continuous beeping
> > that I can use while hunting (Using a walkman to body-block the signal
> > and find my way back to camp when in unfamilliar woods).
> >
> >

1269. Re: Computer Clock Chip as Local Oscillator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: Eamon Skelton <nospam@oceanfree.net>
Message-ID: <7moc0tqeq1@fu-berlin.de>
Source record: 68440

lagniappe <lagniappe@my-deja.com> wrote in message
news:7mnfnegrs1@nnrp1.deja.com...
> I need a stable (crystal-controlled) LO source of several hundred
> megahertz, capable of being finely trimmed to an exact frequency,
> for a block downconverter.
>

Computer clock oscillators are not usually
adjustable/trimable. See the two metre CW
transmitter and six metre RX converter on
my web page (address below.)

Computer CPU cores run at several
hundred MHz but the clock input and
bus speed is much less. Usually 66, 75
83, or 100 MHz.

73, Ed. EI9GQ

--
Eamon 'Ed' Skelton EI9GQ
Cork, Ireland.

My e-mail address really is:
nospam@oceanfree.net

Home brew radio page
http://www.qsl.net/ei9gq

1270. Re: Trying to build an FM Transmitter, and hopelessly lost

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: Lyle Koehler <lyle@mlecmn.net>
Message-ID: <378FB4B4.DE4CCCA2@mlecmn.net>
Source record: 68441

The FCC rules go down to 9 kHz. Pretty hard to get two miles range below that frequency without a *huge* transmitting antenna. There's also the LowFER band between 160 and 190 kHz, where you can run 1 watt and a 15 meter antenna. I've heard LowFER beacons more than a thousand miles away, but when the QRN is bad, even 2 miles might be a challenge. Besides, a good LowFER antenna isn't exactly portable. The best bet would be the upper end of the 510-1705 kHz "MedFER" band, where it's legal to run 100 milliwatts and a 3-meter antenna. A ground-wave range of two miles is possible with a good transmitting antenna and a sensitive receiver. CW "beeps" would be the way to go, except that it would require a receiver with a BFO. Except for the 180 degree ambiguity, the loopstick antenna in an AM transistor radio will give good direction readings, essentially unaffected by trees and terrain. However, even though I'm still an avid LowFER and also used to be a MedFER beacon operator, I'd spend the 100 bucks on a GPS. Either that or a very long roll of string.

Lyle, K0LR

http://www.computerpro.com/~lyle

Rick Haub wrote:
>

> Some one correct me on this if I'm wrong but I think that basement and
> sub-basement bands (i.e. 20,000KHz and less) are open and free to be use by
> any one for anything since they have no real value commercialy, although I
> think submarines use long wave when communicating while submerged. I
> remember reading an article on this in Popular Electronics or Radio and
> Electronics in the early '90s. The power neccessary to transmitt great
> distances is commercialy prohibitive, information content is low (but is
> fine for CW) and QRM can be nasty but you can build and transmitt on some
> of the frequencies (I think) without holding any kind of licence or having
> to have permission from the FCC.

1271. Re: GPS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <378FAD96.9EC3E79A@midwestmicro-tek.com>
Source record: 68442

We have a lot of deer/car accidents out where I live every year. A lot of people have taken to putting ultrasonic wind driven "whistleing" devices on thier cars. I don't know if they actually work but I know most animals can hear ultrasonics and they don't like them, tends to drive them off. This would seem to defeat the perpose of using it as a hunting beacon.

Roy Lewallen wrote:

> Michael Young wrote:
> >
> > Build an ultrasonic beacon and save everyone the grief. An AF
> > oscillator, amp, and piezo buzzer is all you need, about $3 in parts. On
> > receive: a microphone, amp, tone decoder, and VU meter. It's cheap,
> > effective, legal, and might even keep the mosquitoes out of the camp.
> > (Did I mention legal?)
> >
> > Michael.
>
> Aren't the little piezo transducers pretty directional? Doesn't brush
> absorb ultrasonic sound pretty badly? Have you actually tried this
> yourself?
>
> Roy Lewallen, W7EL

1272. Re: Output transistors for HF power amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <7mocq4ckq1@neptunium.btinternet.com>
Source record: 68443
Cross-posted to: uk.radio.amateur,aus.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

ANY power junction transistor intended for linear SSB operation up to
30 MHz will do the job nicely. Look for Ft, the transition frequency,
at which the current gain has fallen to unity at 150 MHz.

Although in your application the average power output is only 15
watts, it should be remembered that transistors are rated on
peak-volts and peak-amps and you should select a pair of transistors
rated at about 50 watts each. They are very common in this power
range. But I do not have any manufacturers' data books to refer to.

You need a pair of PA transistors as are used in the very popular 100
watt SSB HF transceivers. The transistors are usually of USA or
Japanese manufacture and should be fairly easy to obtain.

In my Icom 100-watt, DC = 14-volt, transceiver PA there are a pair of
Japanese silicon junction transistors type: 2SC2904. But I am sure
there are many alternatives.

Your low average power requirement will allow you to use a much
smaller heat sink than is used in HF transceivers.

A pair of field effect transistors, normally used as fast,
nano-second, power switches will also do the job very efficiently with
lower current and higher voltage DC power supplies. If you are
interested only in pulsed operation, not in input-output linearity,
then this may be the best direction to go. But I have no practical
experience of power-FET driving requirements.
--
Regards, Reg G4FGQ Click Below.
http://www.btinternet.com/~g4fgq.regp

1273. Re: Output transistors for HF power amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: Gerrit Barrere <ctrXpoiYnt@halcZyon.com>
Message-ID: <7moj8sflk1@brokaw.wa.com>
Source record: 68444
Cross-posted to: uk.radio.amateur,aus.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

John,

Thanks for the reply. What you say about the wider BW devices working fine at HF is quite true, but I've found that they do tend to be more expensive than the lower BW types. My first choice would be a cheap low-to-mid HF variety with no GHz oscillation tendencies, but if I have to I'll look more closely at the higher fT types.
--
Gerrit Barrere
ctrpXoinYt@halZcyon.com
(please remove X, Y, and Z from return email address)

1274. Re: Output transistors for HF power amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: Gerrit Barrere <ctrXpoiYnt@halcZyon.com>
Message-ID: <7moj96flk2@brokaw.wa.com>
Source record: 68445
Cross-posted to: uk.radio.amateur,aus.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Reg Edwards <G4fgq.Regp@btinternet.com> wrote in message
news:7mocq4ckq1@neptunium.btinternet.com...
> ANY power junction transistor intended for linear SSB operation up to
> 30 MHz will do the job nicely. Look for Ft, the transition frequency,
> at which the current gain has fallen to unity at 150 MHz.
>
> Although in your application the average power output is only 15
> watts, it should be remembered that transistors are rated on
> peak-volts and peak-amps and you should select a pair of transistors
> rated at about 50 watts each. They are very common in this power
> range. But I do not have any manufacturers' data books to refer to.

What I've found is that they are less common than you might think! And the
manufacturers are thinning out what's left.

>
> You need a pair of PA transistors as are used in the very popular 100
> watt SSB HF transceivers. The transistors are usually of USA or
> Japanese manufacture and should be fairly easy to obtain.
>
> In my Icom 100-watt, DC = 14-volt, transceiver PA there are a pair of
> Japanese silicon junction transistors type: 2SC2904. But I am sure
> there are many alternatives.

This is just what I was after. I know there will be Icom 100 W SSB transceivers
around for some time yet, so the 2SC2904 or similar is probably a safe bet to
design in. Many thanks!

[snip]

Gerrit

1275. How built a Duplexer Home made ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: Gervais Fillion <gfillio1@globetrotter.net>
Message-ID: <7mor54$992$1@news.quebectel.com>
Source record: 68446

Hi ,thanks for reading. I wonder is there some way to built an home made Duplexer for the 2 meters band? is there something on the WEB about it? i found some infos in the ARRL Antenna Book but elsewhere??????

thanks for any help!

Gervais
ve2ckn
ve2ckn@rac.ca

1276. MIM and ???? for APRS...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: Paul Breed <Paul@Netburner.com>
Message-ID: <378FF4D5.789E8760@Netburner.com>
Source record: 68447

Does anyone know of a source for a very small, light
crystal controlled TX to go with a MIM in an RC Plane?

What do the amateur baloon people use for Telemetry transmitters?

Can any one reccomend a good source for the technical definition of the
frequecies, shifts and protocols used in standard 2M APRS/Packet?

Paul (KL7JG)

1277. Re: SPICE Models

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: "Mr. Muckle" <jdwalton@home.com>
Message-ID: <378EB6A6.1CCFBBB9@home.com>
Source record: 68508

Thanks for the reply.

Some of the PWM chips, like the LM3524, LM3525, the buck, boost,
buck-boost converters etc. I would like a zener library etc.

Jack

ps - I did find the Duncan Amp page.

Bobby Atkinson wrote:

> www.intusoft.com is a good source, if you were specfic as to the
> device type you needed I could be more helpful. BOBBY K4BGA
>
> Mr. Muckle <jdwalton@home.com> wrote in article
> <378E53ED.CE0D045E@home.com>...
> > Can one of the NG members recommend one or more web-sites with SPICE
> > model libraries.
> >
> > Jack
> >
> >

1278. Re: Transformer tape?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: knox_k_NOBS@nemaine.com
Message-ID: <378e85f4.2296309@news.nemaine.com>
Source record: 68509

On 15 Jul 1999 22:55:24 GMT, "AMDX" <AMDX@worldnet.att.net> wrote:

>I've been using a high temp tape for wrapping transformers and inductors.
>We are getting low on supply and I'm looking for a source of 1/4" and 3/8"
>tape to wrap bobbins.
> The tape I have has the name Permacel on the core.
>Any suggestions?
>
> Mike

Do a search for Permacel on Alta Vista (or any other search engine).
AltaVista returned 319 sites with information.

Ken

1279. Re: Gin Pole ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: wa1wla@my-deja.com
Message-ID: <7mm75k$330$1@nnrp1.deja.com>
Source record: 68510

In article <7mgm66$mb6$1@node17.cwnet.frontiernet.net>,
"Patrick Onesty" <n2lka@frontiernet.net> wrote:
> Hello All,
> anyone got any pictures,drawings,sites on gin pole construction? I am
> getting a rohn 25G.

You are very welcome to borrow and use mine, (Stratford CT) if You want
to give me a cash deposit that covers tha value of my ROHN jinpole.
73 CT

>
> thanks
>
> --
> Patrick Onesty (n2lka)
> 1291 Burlingham Road
> Pine Bush, New York 12566-7325
> (914)744-3518
> Email: n2lka@frontiernet.net
> ICQ: 4708894
> Home Page: http://www.frontiernet.net/~n2lka
>
>

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1280. Trying to build an FM Transmitter, and hopelessly lost

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: daveooo@my-deja.com
Message-ID: <7mmaam$43p$1@nnrp1.deja.com>
Source record: 68511

I am trying to build an FM Transmitter that emits a continuous beeping that I can use while hunting (Using a walkman to body-block the signal and find my way back to camp when in unfamilliar woods).

I am trying to find somebody who can tell me what sort of parts and assembly will be needed.

It does not have to be fancy, or even remotely legal, since I will be using this several miles from nowhere. Just a pocket-size transmitter, that beeps, whines, warbles, or makes some other obnoxious noise and does it for a couple miles on the FM band when placed out in the open and has a battery life of 8-10 hours.

I have just barely enough proficiency with a soldering iron to avoid burning down my house, but if the parts can be bought from radio shack and thrown together on a project board, I should be able to build it.

If you can help, please E-mail me or post a reply to this.

Thank you.

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1281. Looking for 75m transverter design

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: corryAT@eburgDOT.com
Message-ID: <378ebf9f.346383122@news.aa.net>
Source record: 68512

Hello to ya'll, anyone have a tried and true design for a 10m to 75m transverter? I have a multi mode handheld transciever that would work great for the IF for a 75m tranvertor. I figured a tranverter would be better/easier then building up a multi mode homebrew rig. Also, any comments on Dans 75m SSB Centenial (sp) qrp kit? Or perhaps some hints or kinks on a 75m transverter would help. I was getting ready to start building one up myself and figured I would ask first just in case any designs are out there already.
-Dave
corry AT eburg DOT com

1282. Re: Flat Coax?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: spam@nospam.com
Message-ID: <378ed841.392449@news.lin.foa.se>
Source record: 68513
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Thanks for digging the specs out for the RG174, didn't realize it
would handle 1100 volts!!!

I wounder what ever happened to that rx-preamp with t/r swiohing I
reparied.... the RG174 was turned in to a stiff black mess looking
almost as if it had caught fire. One thing for sure it was not exposed
to 24 kW hi hi. Likely a combination of power (kW) and high SWR.

Still, I try to grab teflon cable at flea-markets as I feel much more
secure when soldering connerctors. Maybe I do something wrong but the
insulation seems to melt awfully eaisy on the 174....

Back to the issue of how to get the cable trough, I guess the simplest
way would be use a few inches of speaker cable. The jump in impedance
would problably not be big enough to be noticed!

BTW, some years ago I saw an ad from the local ham-shop, promoting
something called NINJA-Cable, a.k.a. flat coax. Especially developed
for passing thru window frames. Price was horrendous so I guess the
dropped the product!

Cheers

On Thu, 15 Jul 1999 10:32:49 -0700, Roy Lewallen <w7el@teleport.com>
wrote:

>At 300 watts and 1:1 SWR, the current is about 2.5 amps. At 14 MHz, the
>RF resistivity of the #22 center conductor of RG-174 is about 0.15
>ohms/foot, so the cable dissipates less than a watt per foot. This isn't
>enough to raise the temperature of the center conductor to the melting
>point of polyethylene. The resistivity increases as you go up in
>frequency, but it should still be ok at this power level anywhere in the
>HF bands.
>
>Voltage isn't a problem. RG-174 is rated at 1100 volts RMS, which is
>over 24 kW at 1:1 SWR.
>
>Sure I'll stick to it. Been using RG-174 for baluns and other purposes
>for more than 20 years and have never had any problem up to 300 watts.
>It's poor for long runs, though. The loss at low HF is nearly as great
>as at the high end, due to current penetration of the steel portion of
>the very small center conductor strands.
>
>Roy Lewallen, W7EL
>

>Spammer wrote:
>>
>> I did see one Palomar rx-amp with tr-switch using RG174. Not sure if
>> it was exposed to high SWR or more than 100 Watt but the coax was
>> totally melted....
>>
>> I find using teflon-coax is so much simpler and reliable as the
>> insulation on the 174 tends to melt very easy....
>>
>> But then again, IF it works well stick to it! No need to change!
>>
>> Cheers
>>
>> On Wed, 14 Jul 1999 01:28:32 -0700, Roy Lewallen <w7el@teleport.com>
>> wrote:
>>
>> >Spammer wrote:
>> >>
>> >> My humble suggestion is to use teflon miniature coax aka RG 178, RG
>> >> 196 and M17/169. Diameter is 1.8 millimeter.
>> >>
>> >> This cable will withstand 100 watt (do NOT use the more common
>> >> none-teflon RG174). . .
>> >
>> >I use RG-174 in my baluns, and they handle 300 watts at HF with no
>> >problem. It wouldn't be a good idea if the SWR is high, though.
>> >
>> >Roy Lewallen, W7EL

1283. Re: Trying to build an FM Transmitter, and hopelessly lost

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: hrbcrb@aol.com
Message-ID: <19990716035742.00924.00000912@ng-cr1.aol.com>
Source record: 68514

Hello Dave

You may wish to consider a low end GPS unit. Their accurarcy is 50-60 feet, more than adequate to find a camp site and just as small as the little HT's to carry. Also would return you to good hunting spots the second day that were located on the first day. The cost may even be less. Good luck if you still decide to build the beacon.

Regards, Hugh KF6HHS

1284. Re: Trying to build an FM Transmitter, and hopelessly lost

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: David Little <dalite01@sprynet.com>
Message-ID: <7mn9np$q3a$1@nntp3.atl.mindspring.net>
Source record: 68515

You may want to consider one of the inexpensive "sound feeder" type fm oscillators that are used for sending sound from a portable CD player to a car radio. The slippery slope you are approaching here is that by the time you have a transmitter built up that reaches beyond the perimeter of your campsite, you would probably crossed a dozen legal (non-statutory?) boundaries imposed by the great federal spectrum father. The oscillator approach can gain extended range by adding a more efficient antenna, and raising the supply voltage to one approaching the max. for the IC that it is based around. Again, inexpensive=dirty in terms of spectral purity for the most part, and the oscillators are no exception. Ramsey offers the FM-10 fm transmitter which is based on the BA 1404 IC, if my memory serves me correctly. It will drift until it reaches a stabile operating temp, as most others do.

The end result in the discussion of this type of transmitting device is that by the time you develop something that approaches usefulness in terms of coverage area , you cross into the part of the regulation of the airwaves (Communications act of 1934; airwaves belong to the public) where you have to pay to play, In other terms, if you build a winner the FCC will gladly either rent you rights to the public's airwaves to use it or attempt to fine you out of existence after insuring that you no longer use it.

The moral, if you get it going, don't make too much noise about it, try not to use it in areas that are near population zones, consider your altitude (signal strength), and so on..... to try to eliminate the probabilities of someone waging a complaint about your "pirate station" on the FM commercial broadcast band; that spectrum has already been sold and is no longer available for use by the public that owns it.

Good Luck,

David
KD4NUE

daveooo@my-deja.com wrote in message <7mmaam$43p$1@nnrp1.deja.com>...
>I am trying to build an FM Transmitter that emits a continuous beeping
>that I can use while hunting (Using a walkman to body-block the signal
>and find my way back to camp when in unfamilliar woods).
>
>I am trying to find somebody who can tell me what sort of parts and
>assembly will be needed.
>
>It does not have to be fancy, or even remotely legal, since I will be
>using this several miles from nowhere. Just a pocket-size transmitter,
>that beeps, whines, warbles, or makes some other obnoxious noise and
>does it for a couple miles on the FM band when placed out in the open

>and has a battery life of 8-10 hours.
>
>I have just barely enough proficiency with a soldering iron to avoid
>burning down my house, but if the parts can be bought from radio shack
>and thrown together on a project board, I should be able to build it.
>
>If you can help, please E-mail me or post a reply to this.
>
>Thank you.
>
>
>
>Sent via Deja.com http://www.deja.com/
>Share what you know. Learn what you don't.

1285. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: Olin Lathrop <ogl@cognivis.com>
Message-ID: <932130382.315.45@news.remarQ.com>
Source record: 68516
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Rich Grise wrote in message <378E8B31.3963@entheosengineering.com>...
>But they are kind of expensive, but they probably
>last a long time (this remains to be seen) and probably over their
>lifetime they save enough KWH to offset the cost.

I worked this out once assuming $0.10/KWh. If I remember right, the flourescents lasted 9 times longer. So it came down to the cost of 9 incandescent bulbs plus the electricity to run them versus one flourescent plus the electricity to run it. Turns out the cost of the electricity dominated the cost of the incandescent bulbs (LEBs, Light Emitting Bulbs ;-)). Overall, the flourescent won by a decent margin. In a commercial setting you've also got the cost of paying someone to climb up the ladder 8 additional times.

1286. Re: Trying to build an FM Transmitter, and hopelessly lost

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: lagniappe <lagniappe@my-deja.com>
Message-ID: <7mnf27ggq1@nnrp1.deja.com>
Source record: 68517

I once did a similar project as part of a 6-meter "beacon"
transmitter for a propagation experiment. You can build it for
about $5 and it will be good for at least a mile:

I used one of the self-contained "crystal timebase" oscillators
available from every surplus store for about $1.49. They run
on 5 volts, so four nicad cells make an ideal power source. Output
is a nasty square wave, so I designed a simple LC filter to clean it
up. I fed the filtered signal directly to my antenna, which
was a 1/4-wave ground plane made from a panel-mount BNC connector.
Just solder a 1/4-wave wire to the center pin (radiating element)
and 1/4-wave radials to the four mounting holes. Tie a string to
the radiating element and hang it from a tree.

This would, of course, be only a CW transmitter, so I fed the power
to it from a 555 timer with output boosted by a PNP buffer (emitter
tied to bias rail). Set astable frequency at about 1 KHz. Yes,
this is AM but you will hear it on an FM receiver. Apparently
the oscillator frequency "chirps" when power is toggled on and
off. I could hear it just as well using FM demod as using AM. I
hung the antenna from the ceiling in my kitchen and drove my truck
over a mile before losing the signal on the scanner. My frequency
was in the 6-meter HAM band.

If you must operate in the FM broadcast band, you may have to build
a one-transistor doubler or tripler. It's harder to find the
oscillators above about 60 MHz. And you will probably be running
illegal power in that band, as the little oscillators make
surprisingly powerful RF sources.

best regards,

Martin

In article <7mmaam$43p$1@nnrp1.deja.com>,
daveooo@my-deja.com wrote:
> I am trying to build an FM Transmitter that emits a continuous beeping
> that I can use while hunting (Using a walkman to body-block the signal
> and find my way back to camp when in unfamilliar woods).
>
> I am trying to find somebody who can tell me what sort of parts and
> assembly will be needed.
>
> It does not have to be fancy, or even remotely legal, since I will be
> using this several miles from nowhere. Just a pocket-size
transmitter,

> that beeps, whines, warbles, or makes some other obnoxious noise and
> does it for a couple miles on the FM band when placed out in the open
> and has a battery life of 8-10 hours.
>
> I have just barely enough proficiency with a soldering iron to avoid
> burning down my house, but if the parts can be bought from radio shack
> and thrown together on a project board, I should be able to build it.
>
> If you can help, please E-mail me or post a reply to this.
>
> Thank you.
>
> Sent via Deja.com http://www.deja.com/
> Share what you know. Learn what you don't.
>

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1287. Computer Clock Chip as Local Oscillator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: lagniappe <lagniappe@my-deja.com>
Message-ID: <7mnfnegrs1@nnrp1.deja.com>
Source record: 68518

I need a stable (crystal-controlled) LO source of several hundred megahertz, capable of being finely trimmed to an exact frequency, for a block downconverter.

Noting that there are a lot of computers out there running clocks in that range, I wonder - Is the clock generator is a separate chip that I could buy and use, or is it all done on the CPU chip nowadays?

best regards,

Martin

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1288. Re: Trying to build an FM Transmitter, and hopelessly lost

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: Dale Parfitt <parinc@bellsouth.net>
Message-ID: <378F3EAB.7D2B8CBD@bellsouth.net>
Source record: 68519

daveooo@my-deja.com wrote:

> I am trying to build an FM Transmitter that emits a continuous beeping
>
> that I can use while hunting (Using a walkman to body-block the signal
>
> and find my way back to camp when in unfamilliar woods).
>
> I am trying to find somebody who can tell me what sort of parts and
> assembly will be needed.
>
> It does not have to be fancy, or even remotely legal, since I will be
> using this several miles from nowhere. Just a pocket-size
> transmitter,
> that beeps, whines, warbles, or makes some other obnoxious noise and
> does it for a couple miles on the FM band when placed out in the open
> and has a battery life of 8-10 hours.
>
> I have just barely enough proficiency with a soldering iron to avoid
> burning down my house, but if the parts can be bought from radio shack
>
> and thrown together on a project board, I should be able to build it.
>
> If you can help, please E-mail me or post a reply to this.
>
> Thank you.
>
> Sent via Deja.com http://www.deja.com/
> Share what you know. Learn what you don't.

Why not pick up an inexpensive GPS and use the waypoint feature?

Dale W4OP

1289. Re: GPS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: daveooo@my-deja.com
Message-ID: <7mnih6$i38$1@nnrp1.deja.com>
Source record: 68520

> Why not pick up an inexpensive GPS and use the waypoint feature?
>
> Dale W4OP
>

The words "inexpensive" and "GPS" are mutually exclusive terms. I am looking to build these things for about ten bucks each. And I want to make a few of them because it would be FUN.

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1290. 4800 volt 1 amp xmfr $90.00 + shipping

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: zeitler@ibm.net
Message-ID: <378f44aa@news1.us.ibm.net>
Source record: 68521
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

I have a very well built homebrew 240 volt only primary, 4800 volt 1 amp ccs secondary power xmfr. Great for that 4-1000 project that you have been wanting to get going. I no longer have a need for this much voltage. Price is $90.00 plus shipping. Warning, this thing is really heavy at around 100 pounds so shipping will not be cheap. Will only ship via UPS ground. Will be triple boxed. My zip in San Diego is 92139.

73s

Lane Zeitler
Ku7i

1291. Re: Computer Clock Chip as Local Oscillator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <378F4F4E.DFF6A062@erols.com>
Source record: 68522

I wouldn't place computer clocks in the category of "stable".

lagniappe wrote:
>
> I need a stable (crystal-controlled) LO source of several hundred
> megahertz, capable of being finely trimmed to an exact frequency,
> for a block downconverter.
>
> Noting that there are a lot of computers out there running clocks
> in that range, I wonder - Is the clock generator is a separate chip
> that I could buy and use, or is it all done on the CPU chip
> nowadays?
>
> best regards,
>
> Martin
>
> Sent via Deja.com http://www.deja.com/
> Share what you know. Learn what you don't.

1292. Re: Trying to build an FM Transmitter, and hopelessly lost

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: Lyle Koehler <lyle@mlecmn.net>
Message-ID: <378F62F6.118845ED@mlecmn.net>
Source record: 68523

As others have pointed out, if you succeed in getting a two mile range with an FM transmitter you are definitely illegal. But legal or not, I doubt if it would work, for a number of reasons. First of all, with an FM receiver, the loudness of the audio output is not affected much by the strength of the signal until you are near the noise threshold. Then there's the fact that your body isn't big enough to have much of a blocking effect at the wavelength (about 3 meters) of the FM signal. Add to that the multipath, reflections and blockage from trees and terrain, and it sounds like a pretty unreliable system. I suggest that you try the body-blocking approach to determine the direction of an existing FM station while in an open field, before devoting too much time and solder to this technique.

Lyle, K0LR

daveooo@my-deja.com wrote:
>
> I am trying to build an FM Transmitter that emits a continuous beeping
> that I can use while hunting (Using a walkman to body-block the signal
> and find my way back to camp when in unfamilliar woods).
>
>

1293. Adding tone board to 3AT?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: raoul@olympus.net
Message-ID: <raoul-1607990957060001@pt194199.olympus.net>
Source record: 68524

Group:

Got my trusty 3AT out of the drawer and tried to access a few repeaters
and find that tones are necessary for a bunch of them in my area.

Someone must be using a tone board with the 2/3/4AT series and can anyone
give me a suggestion for a nice, clean installation of one in my radio?

thanks. 73
Jeff KB7AIL

--
"It's better to be shot from a cannon than squeezed from a tube,
That's why there's fast motorcycles, bubba...."
-Dr. H. S. Thompson paraphrasing Grace Slick

1294. Re: GPS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <378F689D.7B6A650@corecomm.net>
Source record: 68525

daveooo@my-deja.com wrote:
> The words "inexpensive" and "GPS" are mutually exclusive terms.

Sorta depends on your definition of "inexpensive". At ten bucks, yes. But there are enough old "obsolete" models of GPS units that used units are becoming available cheaply.

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

1295. Re: GPS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <378F6D53.CE290B6@erols.com>
Source record: 68526

They'll get real cheap after the 1024 roll over next month and they
don't work any more.

> there are enough old "obsolete" models of GPS units that used units
> are becoming available cheaply.
>

1296. FA: HP 2235 100MHz Digital Oscilloscope

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: dj@despro.com
Message-ID: <1263912A2DCA4FC3.323F4A2A214DCD29.81C1D97ABD57F8FA@lp.airnews.net>
Source record: 68527

FA: HP 2235 100MHz Digital Oscilloscope

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=129346831

Thanks.

1297. Frequency spurs in PLL output ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: emr01@ms19.hinet.net
Message-ID: <378f66f8.7652759@news.hinet.net>
Source record: 68528

I' using a down-converter IC which has an internal PLL circuit to convert the injected reference frequency at Fo to 100*Fo as the local oscillator for the first stage mixer.

Normally, when powered up, I can see a single frequency at 100 times the injected reference frequency on the spectrum analyzer on the output; and there's very small ripple voltage on the PLL loop filter capacitor. But occasionally, after powering up, I see other evenly distributed frequency spurs above and below the desired frequency. The frequency spacing between the spurs seems to vary with the capacitance of the loop filter capacitor. I find that there's 100mVpp 40+kHz square wave ripple superimposed on the DC voltage (1.9V) on the PLL loop filter capacitor. From the square wave ripple, I can imagine that it somehow modulated the VCO to produce the spurs that I saw, but I simply cannot figure out how the PLL got into such steady state (locked into multiple frequencies) in the frequency pull-in acqusition process. Can anyone kindly help me explain the phenomonen? What can I do to remove the problem? Thanks.

Oliver

1298. Re: GPS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: Michael Young <nobody@all.org>
Message-ID: <932150395.500.50@news.remarQ.com>
Source record: 68529

Build an ultrasonic beacon and save everyone the grief. An AF
oscillator, amp, and piezo buzzer is all you need, about $3 in parts. On
receive: a microphone, amp, tone decoder, and VU meter. It's cheap,
effective, legal, and might even keep the mosquitoes out of the camp.
(Did I mention legal?)

Michael.

<daveooo@my-deja.com> wrote in message
news:7mnih6$i38$1@nnrp1.deja.com...
>
>
> > Why not pick up an inexpensive GPS and use the waypoint feature?
> >
> > Dale W4OP
> >
>
>
> The words "inexpensive" and "GPS" are mutually exclusive terms. I am
> looking to build these things for about ten bucks each. And I want
to
> make a few of them because it would be FUN.
>
>
> Sent via Deja.com http://www.deja.com/
> Share what you know. Learn what you don't.

1299. L.O.S.A Contribution Form

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: cjX@hth.com
Message-ID: <378e65ac.62384653@news.sverige.net>
Source record: 68530
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

```
List Of Stamp Applications (L.O.S.A for short)
==============================================

If you have done something (big or small) with the BASIC Stamp
that you are willing to tell others please use the form below and
write a short description, nothing fancy is needed just a simple
explanation. If you have source code to share that's even better but
it's not necessary.

Then e-mail the form to:

cj@hth.com

With the following as the subject:

L.O.S.A Contribution

Or you could point your Web-browser to the following URL and fill in
the L.O.S.A form on the Web-page...

http://www.hth.com/losa.htm

The latest version of L.O.S.A is always available at the above
mentioned both in ASCII and in ZIP-file format for easy download.
An index of L.O.S.A is posted to the following mailing lists and
news groups, I will update it approx. once a month.

Mailing lists:

BASIC Stamp Mailing List

News groups:

comp.robotics.misc
comp.home.automation
sci.electronics
sci.electronics.misc
rec.radio.amateur.homebrew

FTP-site:

ftp://ftp.parallaxinc.com/pub/text/losa.txt

You can also find the latest version on the following URL...

http://www.hth.com/losa.htm

[--- cut ---]
```

```
=============================================================================
- L.O.S.A Contribution Form -
=============================================================================
New Contribution [ ] Update [ ]
-----------------------------------------------------------------------------

Title :
Author: Date:

E-mail: (optional)
-----------------------------------------------------------------------------

Stamp model : BASIC Stamp/BS1-IC/BS2-IC/BS2SX-IC
Code available: YES/NO
Filename : (optional)
URL : (optional)
-----------------------------------------------------------------------------
Description : (5-50 rows describing your application)

=============================================================================

[--- cut ---]

Regards,

/Christer

[NOTE: Clear the "X" from my e-mail address if you want to e-mail me]

-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
Send and receive serial data over the power lines... For more info
about the PLM-24 Power Line Modem go to http://www.hth.com/plm-24/
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
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1300. ANY PLANS FOR STEREO STOMPER?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: toecapp@aol.com
Message-ID: <19990716153148.03134.00001242@ng-bk1.aol.com>
Source record: 68531

Does anyone have a plan for a simple, easy to throw together project to put a halt to an overly agressive "burnout" neighbor's stereo? Something that will buzz, hum, whistle, etc. My sanity is being threatened. Thanks

1301. Re: Computer Clock Chip as Local Oscillator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-16 00:00:00 UTC
From: Michael Young <nobody@all.org>
Message-ID: <932155915.315.83@news.remarQ.com>
Source record: 68532

They would be TTL level, square waves. Even if they were stable enough,
the harmonics would kill your circuit. (I think.)

Michael.

lagniappe <lagniappe@my-deja.com> wrote in message
news:7mnfnegrs1@nnrp1.deja.com...
> I need a stable (crystal-controlled) LO source of several hundred
> megahertz, capable of being finely trimmed to an exact frequency,
> for a block downconverter.
>
> Noting that there are a lot of computers out there running clocks
> in that range, I wonder - Is the clock generator is a separate chip
> that I could buy and use, or is it all done on the CPU chip
> nowadays?
>
> best regards,
>
> Martin
>
>
> Sent via Deja.com http://www.deja.com/
> Share what you know. Learn what you don't.

1302. Re: ANY PLANS FOR STEREO STOMPER?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-17 00:00:00 UTC
From: "Laszlo I. Morocz" <kf4pv@spammenotlmorocz.com>
Message-ID: <01becff5$991cef20$f9f11e26@p133>
Source record: 68448

Just theoretically (since it would be illegal to actually do it, so of course I never did this) a wire antenna connected to a Heathkit RF signal generator tuned to the offending radio station's frequency would radiate enough RF that the receiver's AGC would cut in and the radio would go silent. As far as range goes, in theory, it'd work absolutely great for that person who used to live directly above me a few years back playing her music with the offensively loud beat. Not too good for her tape deck, though (or CDs today).

The best of luck to you,

Laszlo KF4PV/3

--
To reply, remove the text spammenot from the e-mail address.

TOECAPP <toecapp@aol.com> wrote in article
<19990716153148.03134.00001242@ng-bk1.aol.com>...
> Does anyone have a plan for a simple, easy to throw together project to
put a
> halt to an overly agressive "burnout" neighbor's stereo? Something that
will
> buzz, hum, whistle, etc. My sanity is being threatened. Thanks
>

1303. Guide to the rec.radio Newsgroups

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-17 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <7moqlh$a3t@news.Hawaii.Edu>
Source record: 68449
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Archive-name: radio/personal-intro

This message describes the rec.radio.amateur.*, rec.radio.cb, rec.radio.info, and rec.radio.swap newsgroups, as well as their Internet mailing list counterparts and complements. It is intended to serve as a guide for the new reader on what to find where. Questions and comments may be directed to Jeffrey Herman, KH6O, jeffreyh@hawaii.edu, or Paul Schleck, K3FU, pschleck@novia.net.

This message was last changed on 14 March, 1998.

History
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Way back when, before there was a Usenet, the Internet hosted a mailing list for hams, called (appropriately enough) INFO-HAMS. Ham radio discussions were held on the mailing list, and sent to the mailboxes of those who had signed up for it. When the Usenet software was created, and net news as we now know it was developed, a newsgroup was created for hams: net.ham-radio. The mailing list and the newsgroup were gatewayed together, eventually.

Over the years, as the net grew, the volume of discussion became progressively higher. First one by one, and then as part of two reorganizations, what was once one group became many. In the process, developments elsewhere on the net were reflected in the groups as they were created, most notably the change to place all of the ham radio groups in one hierarchy.

The collection of newsgroups continues to grow as more people join the net, and as more topics of discussion gain volume, I expect to see more groups be created as well. This follows what is happening on the rest of the net.

Nearly all of the radio newsgroups have corresponding mailing lists, the notable exception being rec.radio.swap. There are also a few mailing lists that don't have newsgroups.

The Current Groups
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It's important to post messages to the group that's appropriate for them, and not to the groups that aren't. The whole idea of having different newsgroups is so that folks who aren't interested in, say, homebrewing, don't have to wade through messages about homebrewing on the way to read about Field Day. Posting appropriately is just good etiquette.

The rec.radio.amateur.misc group is the catchall. It is what rec.ham-radio was renamed to during the first major reorganization. Any message that's not more appropriate in one of the other groups belongs here, from contesting to DX to ragchewing on VHF to information on becoming a ham.

The group rec.radio.amateur.digital.misc is for discussions related to (surprise!) digital amateur radio. This doesn't have to be the common two-meter AX.25 variety of packet radio, either; some of the most knowledgeable folks in radio digital communications can be found here, and anything in the general area is welcome. The name was changed to emphasize this, and to encourage discussion not only of other text-based digital modes, such as AMTOR, RTTY, and Clover, but things like digital voice and video as well. The former group, rec.radio.amateur.packet, was removed on September 21st, 1993. It is obsolete, and you should use .digital.misc instead (or the appropriate new mailing list, mentioned below). The group has .misc as part of the name to allow further specialization if the users wish it, such as .digital.tcp-ip.

The swap group is rec.radio.swap. This recognizes a fact that became evident shortly after the original group was formed: Hams don't just swap ham radio gear, and other folks besides hams swap ham equipment. If you have radio equipment, or test gear, or computer stuff that hams would be interested in, here's the place. Equipment wanted postings belong here too. Discussions about the equipment generally don't; if you wish to discuss a particular posting with the buyer, email is a much better way to do it, and the other groups, especially .equipment and .homebrew, are the place for public discussions. There is now a regular posting with information on how to go about buying and selling items in rec.radio.swap; please refer to it before you post there. To answer a frequently asked question: No, there is no mailing list that goes along with this group. If you can't read Usenet news directly, you're out of luck.

The group rec.radio.amateur.policy was created as a place for all the discussions that seem to drag on interminably about the many rules, regulations, legalities, and policies that surround amateur radio, both existing and proposed. Recent changes to the Amateur Radio Rules (FCC Part 97) have finally laid to rest the Great Usenet Pizza Autopatch Debate - it's now legal to order a pizza on the autopatch, if you're not in the pizza business - as well as complaints about now-preempted local scanner laws hostile to amateurs, but plenty of discussion about what a bunch of rotten no-goodniks the local frequency coordinating body is, as well as the neverending no-code debate, may still be found here.

The group rec.radio.cb is the place for all discussion about the Citizens' Band radio service. Such discussions have been very inflammatory in rec.ham-radio in the past; please do not cross-post to both rec.radio.cb and rec.radio.amateur.* unless the topic is genuinely of interest to both hams and CBers - and very few topics are.

The rec.radio.info group is just what its name implies: it's the place where informational messages from across rec.radio.* may be found, regardless of where else they're posted. As of this writing, information posted to the group includes Cary Oler's daily solar progagation bulletins, ARRL

bulletins, the Frequently Asked Questions files for the various groups, and radio modification instructions. This group is moderated, so you cannot post to it directly; if you try, even if your message is crossposted to one of the other groups, your message will be mailed to the moderator, who is currently David Dodell, WB7TPY. The email address for submissions to the group is rec.radio.info-moderator@primenet.com. Inquires and other adminis-trivia should be directed to rec.radio.info-request@primenet.com. For more information about rec.radio.info, consult the introduction and posting guidelines that are regularly posted to that newsgroup.

The groups r.r.amateur.antenna, .boatanchors, .dx, .equipment, .homebrew, and .space are for more specialized areas of ham radio: discussions about antennas, the older tube based amateur, military, and commercial gear, commercially-made equipment, homebrewing, and amateur radio space operations. The .equipment group is not the place for buying or selling equipment; that's what rec.radio.swap is for. Similarly, the .space group is specifically about amateur radio in space, such as the OSCAR program and SAREX, the Shuttle Amateur Radio EXperiment; other groups cover other aspects of satellites and space. Homebrewing isn't about making your own alcoholic beverages at home (that's rec.crafts.brewing), but rather construction of radio and electronic equipment by the amateur experimenter. The .dx group is devoted to long distance amateur communications. Each of these subgroups has its own charter and FAQ; please refer to the archives to find these documents.

Except for rec.radio.swap and rec.radio.cb, all of these newsgroups are available by Internet electronic mail in digest format; send a mail message containing "help" on a line by itself to listserv@ucsd.edu for instructions on how to use the mail server.

All of the groups can be posted to by electronic mail, though, by using a gateway at the University of Texas at Austin. To post a message this way, change the name of the group you wish to post to by replacing all of the '.'s with '-'s - for example, rec.radio.swap becomes rec-radio-swap - and send to that name@cs.utexas.edu (rec-radio-swap@cs.utexas.edu, for example). You may crosspost by including multiple addresses as Cc: entries (but see below). This gateway's continued availability is at the pleasure of the admins at UT-Austin, and is subject to going away at any time - and especially if forgeries and other net.abuses become a problem. You have been warned.

Mailing Lists

In addition to the mailing lists that mirror the Usenet newsgroups, there also are a few that stand alone. These cover specific areas of ham radio, and discussion is focused on just those areas. PLEASE BE SURE TO SAVE THE WELCOME MESSAGE YOU RECEIVE AFTER SUBSCRIBING -- IT WILL CONTAIN IMPORTANT INFO REGARDING UNSUBSCRIBING!

The cq-contest mailing list is for discussions of contesting in ham radio. To join, send an email to cq-contesting-request@contesting.com.

The DX mailing list covers the finer points of DXing. This one is also joined by mailing "subscribe" on a line by itself, this time to dx-request@unbc.edu.

There's also a VHF mailing list, for VHF operators of the weak signal persuasion. You can join this one be sending "subscribe vhf" on a line by itself to vhf-request@w6yx.stanford.edu.

The QRP-L list is devoted to building and operating gear at low-power outputs. To subscribe, send an email to listproc@lehigh.edu and only write: subscribe qrp-l Your Name.

The TopBand e-list is devoted to all areas of operation on 160m. To subscribe, send an email to majordomo@contesting.com and only write: subscribe topband and follow the instructions you'll be sent.
This site, contesting.com, also hosts a couple dozen other ham-related e-lists. Use the above address, and only write: lists to get the entire index.

The Boatanchors e-list is devoted to the older tube-based ham, military, and commercial communications gear. To subscribe, send an email to: listserv@listserv.tempe.gov and only write: subscribe boatanchors

For homebuilding transmitters and receivers using tube technology, there is the Glowbugs e-list; send an email to: majordomo@piobaire.mines.uidaho.edu and only write: subscribe glowbugs <your@address.here>

The VHF DX discussion list can be accessed by sending an email to: majordomo@blacksheep.org and only writing: subscribe VHF-DX-discuss.

We now have a list devoted to amateur radio history. To subscribe, send an email to: ham-radio-history-subscribe@egroups.com - leave the body of the message blank.

Qth.net hosts over 100 ham-related e-lists, including lists devoted to each state, manufacturer, mode, band - too many to state here. Send an email to majordomo@qth.net and only write: lists to get the complete index.

For one of the most complete indexes of email lists, see the excellent web site http://pw2.netcom.com/~ac6v/pageae.html

Please do NOT send subscription requests to the mailing lists themselves; that doesn't work very often, and is very annoying to those on the list. Also, please keep your electronic mail address current with any mailing lists you subscribe to, as dealing with returned email is a nuisance for the person maintaining the mailing list.

A Few Words on Crossposting
==========

Please do not crosspost messages to two or more groups unless there is genuine interest in both groups in the topic being discussed, and when you do, please include a header line of the form "Followup-To: group.name" in your article's

headers (before the first blank line). This will cause followups to your article to go to the group listed in the Followup-To: line. If you wish to have replies to go to you by email, rather than be posted, use the word "poster" instead of the name of a group. Such a line appears in the headers of this article.

One of the few examples of productive cross-posting is with the rec.radio.info newsgroup. To provide a filtered presentation of information articles, while still maintaining visibility in their home newsgroups, the moderator strongly encourages cross-posting. All information articles should be submitted to the rec.radio.info moderator so that he may simultaneously cross-post your information to the appropriate newsgroups. Most newsreaders will only present the article once, and network bandwidth is conserved since only one article is propagated. If you make regular informational postings, and have made arrangements with the moderator to post directly to the group, please cross-post as appropriate.

--
Jeffrey Herman, KH6O, and your friendly rec.radio.amateur working-group
jeffreyh@hawaii.edu

1304. help in reconnecting clipperton-L bandswitch

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-17 00:00:00 UTC
From: Tim <tvendt@kear.tds.net>
Message-ID: <01bed008$03dd40a0$539347cc@default>
Source record: 68450
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Greetings.... I am putting together, after several years of having it apart, a Clipperton-L amp. I had put some of the spare parts in an envelope with the drawing of how the bandswitch was wired to the tank (I left the wires connected to the tank itself, just unsoldered them from the switch). Well the parts were found but no drawing!! The schematic is somewhat ambiguous as to what wires go where...ie. L1 on the schematic has 2 wires coming from it but on the actual tank there are 3. It's also possible that I may have gotten the orientation of the rotary part of one or more of the wafers 180 degrees out. All this info was on that lousy scrap of paper that is gone, probably forever. If anyone has one of these amps and would be so kind as to pop the top of it and get me out of this pickle I would be very grateful.

TIA
Tim Vendt KB1MM
tvendt@kear.tds.net

1305. An idea for a small DDS driven TX/TNC...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-17 00:00:00 UTC
From: Paul Breed <Paul@Rasdoc.com>
Message-ID: <37900053.5A26C122@Rasdoc.com>
Source record: 68451

Analog devices has a new DDS chip....

The AD9851 that will operate as a 180Mhz DDS with a
20 Mhz external Crystal internally PLLed up to 180Mhz.
This can directly generate 2M/3 or 2M/3 signals directly.

It is small, low power and has a relativly clean output.

If you combine this chip with a SMT flash programmed micro controller
(PIC or AVR)

you could generate a MIM+TX module that would be small and self
contained.

The CPU would have to directly program the frequency deviations
necessary for
generating the modulating waveform..... So while it was transmitting it
would
be very busy..... but in the normal APRS or telemetry mode it could
spend the majority
of it's time gathering GPS data, reading A/Ds etc.... It would then form
a packet
and send it.

I am an embedded network protcol engineer by profession and I feel
comfortable with
the the development of the S/W and digital hardware but I'm I'm a babe
in the woods
when it comes to building analog RF electronics.

My first thought was to run the DDS at 110 Mhz and generate a ~34Mhz
Signal.
Due to the nature of sampled signals the DDS output will have

Fo =34Mhz (Bigger than 144Mhz signal)
Fc-F0 =76Mhz (Bigger than 144Mhz signal)
Fc+Fo =144Mhz
2Fc-Fo =186Mhz(Smaller than 144Mhz signal)

Can anyone give me some guidance on the spectral purity required in a 1
Watt transmitter?
How hard would it be to filter the output given above enough to reach
this level
of purity?

My second thought was to run the part at 180Mhz, generate a
72.5Mhz signal use the 7Pole filter in the AD9851 data sheet to filter

that, and then run the result into a a mimicircuits doubler.....
Would the result of this be easier to filter?

Could I even use the on chip fast digital comparitor to make square
waves
and use that as a tripler?

My end goal is to create a very very small no tune design.

Paul (Kl7JG)

1306. Re: GPS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-17 00:00:00 UTC
From: Doug Younker <dougy@ruraltel.net>
Message-ID: <379034B7.3833@ruraltel.net>
Source record: 68452

Rick Haub wrote:
>
> We have a lot of deer/car accidents out where I live every year. A lot of
> people have taken to putting ultrasonic wind driven "whistleing" devices on
> thier cars. I don't know if they actually work but I know most animals can
> hear ultrasonics and they don't like them, tends to drive them off. This would
> seem to defeat the perpose of using it as a hunting beacon.
>
> Roy Lewallen wrote:
>
> > Michael Young wrote:
I have to ask. How well does a GPS receiver work in wooded areas? I'd
think the treees would attenuate the sattelite signals.

--
73, Doug Younker N0LKK
Near Plainville,KS
dougy@ruraltel.net

1307. Re: How built a Duplexer Home made ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-17 00:00:00 UTC
From: Doug Younker <dougy@ruraltel.net>
Message-ID: <3790357F.2082@ruraltel.net>
Source record: 68453

Gervais Fillion wrote:
>
> Hi ,thanks for reading. I wonder is there some way to built an home made
> Duplexer for the 2 meters band? is there something on the WEB about it? i
> found some infos in the ARRL Antenna Book but elsewhere??????
>
> thanks for any help!
>
> Gervais
> ve2ckn
> ve2ckn@rac.ca

I think I recall the "other" amateur radio hand book had some details on
a duplexer. Damned if I can recall the book's authors name

--
73, Doug Younker N0LKK
Near Plainville,KS
dougy@ruraltel.net

1308. Re: Looking plans dualband (VHF/UHF) antenna for HT.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-17 00:00:00 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <7mp7qd$89d@nnrp4.farm.idt.net>
Source record: 68454
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Save yourself some trouble and get a PRYME RD-19 antenna, dual band V/UHF
and is only 19 cm long.

http://www.pryme.com/radio.shtml#ANTENNAS

Or if you don't like that one then check out the DIAMOND RH3 antenna, dual
band V/UHF and is only 4.45 cm long.

http://www.rfparts.com/diamond/

73's,

Leland C. Scott
KC8LDO

ARRL member
NCI member

"You ask what Morse Code is good for? I'll tell you. Morse
Code is used exclusively by Electronics Based life forms to
communicate amongst themselves using advanced Organic
Digital Signal Processors, running state of the art Artificial
Intelligence Software, to perform the highly complex
transmit encryption, receive decryption and error correction
functions."

Alexey Lomazin wrote in message <378eb9eb.0@news.global-one.ru>...
>My frend looking plans compact dualband (VHF/UHF) antenna for HT.
>The well known way is using 0.5 m whip (1/4 for VHF and 3/4 for UHF) - but
>it's not a compact antenna. I looking for plans some _real_ compact about
10
>to 15 cm.
>
>I think about anithing like this:
>
> ###---------[L1]---------[L2]---------
>
>### - BNC connector,
>L1, L2 - coils.
>Inductanse
>L1 ~ 0.18 uH
>L2 ~ 1.2 uH
>
>Lenghts:
>from BNC to L1 - 4 cm, L1-L2 - 4cm, l2 to end - 5 cm, common - 15 cm.
>

>I think best matirial will be central isolator from coax (without central
>conductor, of course) - diameter about 4 to 7 mm with winding on it.
>
>Is any erros in above?
>For e-mail me plis remove /stopspam/ in my adress.
>
>
>
>

1309. Re: An idea for a small DDS driven TX/TNC...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-17 00:00:00 UTC
From: mike@corn2.freeserve.co.uk
Message-ID: <37902067.748847@news.freeserve.net>
Source record: 68455

Interesting Idea Paul, but don't forget that when you multiply or
divide an fsk signal you also multiply or divide the frequency shift.
How about the dds generating at 134.3Mhz then mix 10.7Mhz to produce
the TX signal, when there is no TX data the dds will be producing the
Local Osc. frequency for recieving on a 10.7Mhz I.F. Amplifier.
Just an Idea..

On Sat, 17 Jul 1999 00:02:27 -0400, Paul Breed <Paul@Rasdoc.com>
wrote:

>Analog devices has a new DDS chip....
>
>The AD9851 that will operate as a 180Mhz DDS with a
>20 Mhz external Crystal internally PLLed up to 180Mhz.
>This can directly generate 2M/3 or 2M/3 signals directly.
>
>It is small, low power and has a relativly clean output.
>
>If you combine this chip with a SMT flash programmed micro controller
>(PIC or AVR)
>
>you could generate a MIM+TX module that would be small and self
>contained.
>
>The CPU would have to directly program the frequency deviations
>necessary for
>generating the modulating waveform..... So while it was transmitting it
>would
>be very busy..... but in the normal APRS or telemetry mode it could
>spend the majority
>of it's time gathering GPS data, reading A/Ds etc.... It would then form
>a packet
>and send it.
>
>I am an embedded network protcol engineer by profession and I feel
>comfortable with
>the the development of the S/W and digital hardware but I'm I'm a babe
>in the woods
>when it comes to building analog RF electronics.
>
>My first thought was to run the DDS at 110 Mhz and generate a ~34Mhz
>Signal.
>Due to the nature of sampled signals the DDS output will have
>
>Fo =34Mhz (Bigger than 144Mhz signal)

>Fc-F0 =76Mhz (Bigger than 144Mhz signal)
>Fc+Fo =144Mhz
>2Fc-Fo =186Mhz(Smaller than 144Mhz signal)
>
>Can anyone give me some guidance on the spectral purity required in a 1
>Watt transmitter?
>How hard would it be to filter the output given above enough to reach
>this level
>of purity?
>
>
>My second thought was to run the part at 180Mhz, generate a
>72.5Mhz signal use the 7Pole filter in the AD9851 data sheet to filter
>that, and then run the result into a a mimicircuits doubler.....
>Would the result of this be easier to filter?
>
>Could I even use the on chip fast digital comparitor to make square
>waves
>and use that as a tripler?
>
>My end goal is to create a very very small no tune design.
>
>
>Paul (Kl7JG)

1310. Re: GPS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-17 00:00:00 UTC
From: Michael Young <nobody@all.org>
Message-ID: <932195421.715.61@news.remarQ.com>
Source record: 68456

Mine, a Magellan something-3000, works fine in the single canopy forests in NE Illinois. Just the same, it shouldn't replace your map and compass.

Michael.

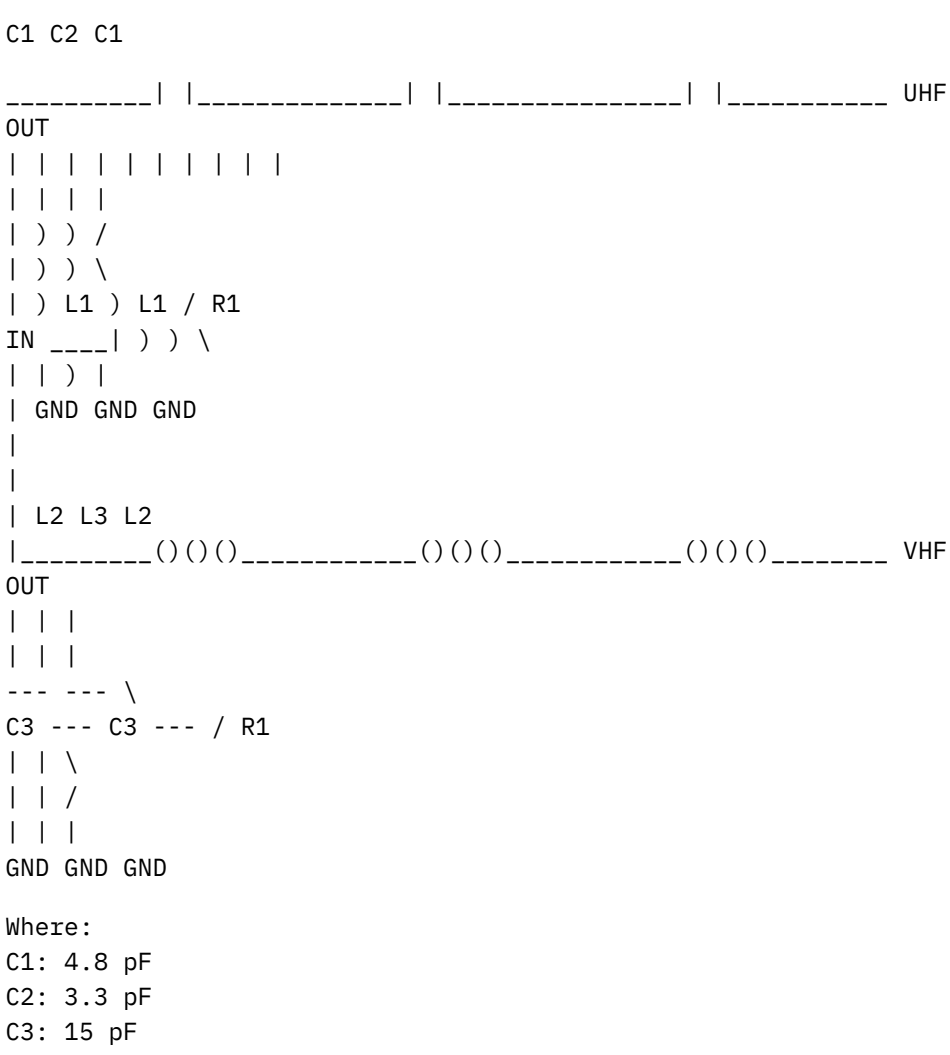
Doug Younker <dougy@ruraltel.net> wrote in message news:379034B7.3833@ruraltel.net...
> I have to ask. How well does a GPS receiver work in wooded areas? I'd
> think the treees would attenuate the sattelite signals.

1311. Re: How built a Duplexer Home made ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-17 00:00:00 UTC
From: David Snyder Hale <david@isi9.mtwilson.edu>
Message-ID: <7mpaiq$r23$1@agate.berkeley.edu>
Source record: 68457

Here is something I had stored on disk. It is a 2m/70cm diplexer;
hope it is useful...

From OCT 1991 QST:



Where:
C1: 4.8 pF
C2: 3.3 pF
C3: 15 pF
L1: 2 turns #14, 3/16" dia.
L2: 4 turns #14, 3/16" dia.
L3: 5 turns #14, 1/4" dia.
R1: 50k, 1/2 w.

--
Dave * N3WTK (DM04xf) * http://isi9.mtwilson.edu

1312. Re: How built a Duplexer Home made ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-17 00:00:00 UTC
From: Igor <un7gm@qsl.net>
Message-ID: <7mpl7s$4nh$1@mail.nursat.net>
Source record: 68458

Hi Gervais,

Gervais Fillion wrote <7mor54$992$1@news.quebectel.com> ...
>Hi ,thanks for reading. I wonder is there some way to built an home
made
>Duplexer for the 2 meters band? is there something on the WEB about
it? i
>found some infos in the ARRL Antenna Book but elsewhere??????

Look at the http://www.xs4all.nl/~pa0nhc/repeater/duplex2m , there
is an
inexpensive solution of your problem.
WBR,
Igor

1313. Re: Output transistors for HF power amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-17 00:00:00 UTC
From: Eamon Skelton <nospam@oceanfree.net>
Message-ID: <7mpnu0$ik0$1@fu-berlin.de>
Source record: 68459
Cross-posted to: uk.radio.amateur,aus.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Gerrit Barrere <ctrXpoiYnt@halcZyon.com> wrote in message
news:7mo66b$6bv$2@brokaw.wa.com...
> Hi all,
>
> I'm designing a 1-10 MHz Class AB broadband power amplifier, 50-100 W
pulses,
> 10-15 W average into 50 ohms, for an ultrasound application. I'm having
trouble
> finding a good source of output transistors, bipolar or FET, <snip>

Try Motorola's website. I think the address is:
http://www.mot.com

There are links to several other semiconductor
manufacturers, on my web page (below.)

73, Ed.

--
Eamon 'Ed' Skelton EI9GQ
Cork, Ireland.

My e-mail address really is:
nospam@oceanfree.net

Home brew radio page
http://www.qsl.net/ei9gq

1314. packet radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-17 00:00:00 UTC
From: mario_cordina@hotmail.com
Message-ID: <37907714.3239487@news.maltanet.net>
Source record: 68460

hello ppl
i am new to packet radio and i am looking for a circuit diagram
complete with pcb artwork. If there is anyone who knows from where i
can get this info please e-mail on mario_cordina@hotmail.com.
Also,is there anyone who knows how to tap the baseband output of the
Icom IC-Q7E???
thanks
Mario Cordina 9H5MR

1315. Re: RFcalc software help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-17 00:00:00 UTC
From: xxx@yyy.zzz
Message-ID: <37908afa.8626462@ny.news.verio.net>
Source record: 68461
Cross-posted to:
rec.radio.amateur.equipment,rec.radio.amateur.homebrew,sci.electronics.cad,sci.electronics.design,sci.electronics.misc

On Mon, 5 Jul 1999 18:37:08 +0100, "David" <davhayes@netcomuk.co.uk>
wrote:

>Have recently downloaded RFCALC with RFFILTER by Daniel Klosterman(Circuit
>Synthesis Inc) from RF Globalnet, I would like to register this program so I
>can get full use from it.
>The above vendors web site is down and I have tried e-mail but to no avail.
>Can you help in any way with the vendors new contact details, some
>registration info or a copy of the registered version.
>
>Many thanks in advance if you can assist.
>
>David Hayes
>
>Sherwood Forest, Nottingham, UK
>
>
>

A few months ago my company bought RFCalc. Daniel Klosterman was
contacted and timely responses to our questions received. Try Dan
again. RF Calc is a great program.

1316. LCD Readout for Rotator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-17 00:00:00 UTC
From: Hansanter <shbcommm@indigo.ie>
Message-ID: <37908DC1.9E191659@indigo.ie>
Source record: 68462

I'm looking for a circuit that I can install into my homemade antenna rotator to enable an LED or LCD heading readout to about 1 to 3 degrees accuracy. I'm currently using a 10K pot in the rotator as a voltage divider to an analogue meter which works, well, just OK. I know it involves an A/D converter but I'm not well up on this stuff. I'd appreciate any help on this or better still a schematic diagram (online would be great).

Regards to all

Hansanter

1317. 2metre TX questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-17 00:00:00 UTC
From: ptay@spam-jam.interlog.com
Message-ID: <7mq645htk1@news.interlog.com>
Source record: 68463

At work, I've designed a PLL TX at 170MHz. No conversion; the VCO runs at 170MHz, phase locked through a dual-modulus prescaler and freq. synth IC. The TX puts out about +8dBm, and is FSK modulated by 78kbps Manchester data, AC coupled to the VCO varactor. Output is very clean, spectrally speaking. Not being a radio amateur, I have the following questions:

1) I can easily alter the cct to run at 2-metre frequencies. Is there any reason I couldn't apply audio to the varactor, hook up a linear amp, and have a viable 2-metre ransmitter?

2) What is the standard channel spacing in the 2-metre band?

3) What is the standard frequency offset between Tx and Rx for 2-metre work?

4) Can I get away with sharp filters and an RF relay in place of a proper diplexer? If so, at what power level would I need to use a proper diplexer to protect the Rx front end from the Tx output?

All of my experience so far involves levels of +10 dBm and below, on co-ax networks. I have no experience with off-air work, and would appreciate any help I can get.

Thanks,

Paul Taylor

ps please remove <spam-jam> from e-mail address to reply via e-mail

1318. Re: GPS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-17 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <37bba589.485482612@news.atl.bellsouth.net>
Source record: 68464

On Sat, 17 Jul 1999 00:45:59 -0700, Doug Younker <dougy@ruraltel.net> wrote:
>I have to ask. How well does a GPS receiver work in wooded areas? I'd
>think the treees would attenuate the sattelite signals.

Mine works fine in Georgia forests. It might have a problem in forests
that are so dense that sunlight never reaches the ground.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

1319. Re: help in reconnecting clipperton-L bandswitch

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-17 00:00:00 UTC
From: Dan/W4NTI <w4nti@my-deja.com>
Message-ID: <7mqd3v$f9s$1@nnrp1.deja.com>
Source record: 68465
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <01bed008$03dd40a0$539347cc@default>,
"Tim" <tvendt@kear.tds.net> wrote:
> Greetings.... I am putting together, after several years of having it
> apart, a Clipperton-L amp. I had put some of the spare parts in an
envelope
> with the drawing of how the bandswitch was wired to the tank (I left
the
> wires connected to the tank itself, just unsoldered them from the
switch).
> Well the parts were found but no drawing!! The schematic is somewhat
> ambiguous as to what wires go where...ie. L1 on the schematic has 2
wires
> coming from it but on the actual tank there are 3. It's also possible
that
> I may have gotten the orientation of the rotary part of one or more
of the
> wafers 180 degrees out. All this info was on that lousy scrap of
paper that
> is gone, probably forever. If anyone has one of these amps and would
be so
> kind as to pop the top of it and get me out of this pickle I would be
very
> grateful.
>
> TIA
> Tim Vendt KB1MM
> tvendt@kear.tds.net
>
Tim,

The schematic will not show the actual number of turns on the tank coil.
The simplest way would be to set the bandswitch to either 10 or 160.
The entire coil will be on 160 and the smallest amount of coil/turns
will be for 10 meters. Just line it up like that. Also you will find
that on the LOWER FREQ. bands there will probably be a capacitor or two
that is switched in/out on the low bands ONLY.

Dan/W4NTI

--
"Just tellin the truth, and they cain't stand it."

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1320. Re: LCD Readout for Rotator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-17 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <3790ED67.84CFCD66@bellsouth.net>
Source record: 68466

Hansanter wrote:
> I'm looking for a circuit that I can install into my homemade antenna
> rotator to enable an LED or LCD heading readout to about 1 to 3 degrees
> accuracy. I'm currently using a 10K pot in the rotator as a voltage
> divider to an analogue meter which works, well, just OK. I know it
> involves an A/D converter but I'm not well up on this stuff. I'd
> appreciate any help on this or better still a schematic diagram (online
> would be great).

I would suggest the easiest thing to do is to use a digital panel meter. Feed 3.60 volts up to the pot (so that when you get to due north, you get 3.60 back down from the arm). Disable the leading zeroes and the decimal point, and there you go -- at due north, the panel meter reads 360.

That's assuming you have a panel meter whose full scale is more than 3.6 volts. Some max out at 2 volts - I suppose you could feed 0.36 volts up but I bet you'd start having noise & interference problems with that. (even 3.6 may be too low) I'd feed up something higher and then put a voltage divider right before the panel meter.

Personally, I'd leave it analog though. When working at unusual directions (for example, about 290deg. for operation here in the States) I have trouble visualizing exactly where I'm pointing from a digital display. With an analog display, I know exactly where I'm beaming.
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

1321. Re: Computer Clock Chip as Local Oscillator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-17 00:00:00 UTC
From: lagniappe <lagniappe@my-deja.com>
Message-ID: <7mqijbgqk1@nnrp1.deja.com>
Source record: 68467

In article <7moc0tqeq1@fu-berlin.de>,
"Eamon Skelton" <nospam@oceanfree.net> wrote:
>
> lagniappe <lagniappe@my-deja.com> wrote in message
> news:7mnfnegrs1@nnrp1.deja.com...
> > I need a stable (crystal-controlled) LO source of several hundred
> > megahertz, capable of being finely trimmed to an exact frequency,
> > for a block downconverter.
> >
>
> Computer clock oscillators are not usually
> adjustable/trimable. See the two metre CW
> transmitter and six metre RX converter on
> my web page (address below.)
>
> Computer CPU cores run at several
> hundred MHz but the clock input and
> bus speed is much less. Usually 66, 75
> 83, or 100 MHz.
>
> 73, Ed. EI9GQ

Easy enough to trim the oscillator frequency by
using a capacitor in series or shunting the
XTAL. But if the oscillator in a 400-MHz
pentium does not run at 400 MHz, where does the
CPU get it's clock? Does it use some sort of
doubling scheme?

Martin

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1322. Re: LCD Readout for Rotator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-17 00:00:00 UTC
From: "Thomas C. Sefranek" <tcs@cmcorp.com>
Message-ID: <3790BCF5.39E2CBD7@cmcorp.com>
Source record: 68468

Hansanter wrote:

> I'm looking for a circuit that I can install into my homemade antenna
> rotator to enable an LED or LCD heading readout to about 1 to 3 degrees
> accuracy. I'm currently using a 10K pot in the rotator as a voltage
> divider to an analogue meter which works, well, just OK. I know it
> involves an A/D converter but I'm not well up on this stuff. I'd
> appreciate any help on this or better still a schematic diagram (online
> would be great).
>
> Regards to all
>
> Hansanter

Don't build it!
Buy a cheap Digital Volt meter (Here they sell for less than $10!)
Set your applied voltage to the pot to exactly 3.6.
Then your 3 digit voltmeter will read in degrees!
--
Thomas C. Sefranek WA1RHP
ARRL Instructor, Technical Specialist, VE Contact.
http://hamradio.cmcorp.com/41_Repeater/repeater.html
http://hamradio.cmcorp.com/inventory/Inventory.html

1323. Re: GPS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-17 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <3790D1D7.1E633DF0@corecomm.net>
Source record: 68469

Doug Younker wrote:
> I have to ask. How well does a GPS receiver work in wooded areas? I'd
> think the treees would attenuate the sattelite signals.

This is the other disadvantage to buying that "obsolete" used unit. Older units multiplexed one receiver to receive six to ten different satellites; newer units, with multiple receivers, lock and hold lock better under marginal conditions like the one you suggest. My GPS II (single receiver) doesn't do well in the woods. Just one of the many, many reasons the GPS shouldn't replace map and compass, just augment them.

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+

1324. ferrite bead inductance AL value

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-17 00:00:00 UTC
From: calhoun@cal.tech.net
Message-ID: <7O4k3.570$36.106800@newsgate.direct.ca>
Source record: 68470

Hi, can anyone tell me the AL for the FB43-101 ferrite bead.
I nedd to make a 1 microhenry choke using one

thanks Calhoun

1325. Re: Human power (was amp'd crystal radio)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-17 00:00:00 UTC
From: Ponyboy <mevans@netonecom.net>
Message-ID: <379102D4.5059058@netonecom.net>
Source record: 68471
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Thats cold Krusty. :)

Krusty The Klown wrote:

> J wrote:
>
> > Popular Electronics did an article or two years ago about someone
> > utilizing a bicycle/generator system in configuration with a
> > television. If the kids wanted to watch a program, they had to peddle
> > away during the program to provide enough current for the set. I have
> > seen similar units in use for Field Day, and they do work.
>
> I have a quarter slot on the TV my kids watch. Makes me about $2 an
> hour...

1326. Re: An idea for a small DDS driven TX/TNC...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-17 00:00:00 UTC
From: Rocci <rocci@worldnet.att.net>
Message-ID: <37910CAE.D2F8FD7B@worldnet.att.net>
Source record: 68472

Call up the Analog Devices field office and ask about the new AD9854. Thy'll probably have to call the factory to find out about it though.
It has 300 Mhz clocking and built in single pin FSK w/programmable shift, frequency slewing rate, and amplitude control. Excellent spurious performance (<-80dB at 100 Mhz). Built in programmable clock generator allows use with external low frequency oscillator as low as 1/20 the desired DDS clocking frequency.
Not on the market yet...but I've worked with some Alpha samples. General availability in October.

Joe
WA3CMQ

Mike W wrote:

> Interesting Idea Paul, but don't forget that when you multiply or
> divide an fsk signal you also multiply or divide the frequency shift.
> How about the dds generating at 134.3Mhz then mix 10.7Mhz to produce
> the TX signal, when there is no TX data the dds will be producing the
> Local Osc. frequency for recieving on a 10.7Mhz I.F. Amplifier.
> Just an Idea..
>
> On Sat, 17 Jul 1999 00:02:27 -0400, Paul Breed <Paul@Rasdoc.com>
> wrote:
>
> >Analog devices has a new DDS chip....
> >
> >The AD9851 that will operate as a 180Mhz DDS with a
> >20 Mhz external Crystal internally PLLed up to 180Mhz.
> >This can directly generate 2M/3 or 2M/3 signals directly.
> >
> >It is small, low power and has a relativly clean output.
> >
> >If you combine this chip with a SMT flash programmed micro controller
> >(PIC or AVR)
> >
> >you could generate a MIM+TX module that would be small and self
> >contained.
> >
> >The CPU would have to directly program the frequency deviations
> >necessary for
> >generating the modulating waveform..... So while it was transmitting it
> >would
> >be very busy..... but in the normal APRS or telemetry mode it could
> >spend the majority

> >of it's time gathering GPS data, reading A/Ds etc.... It would then form
> >a packet
> >and send it.
> >
> >I am an embedded network protcol engineer by profession and I feel
> >comfortable with
> >the the development of the S/W and digital hardware but I'm I'm a babe
> >in the woods
> >when it comes to building analog RF electronics.
> >
> >My first thought was to run the DDS at 110 Mhz and generate a ~34Mhz
> >Signal.
> >Due to the nature of sampled signals the DDS output will have
> >
> >Fo =34Mhz (Bigger than 144Mhz signal)
> >Fc-F0 =76Mhz (Bigger than 144Mhz signal)
> >Fc+Fo =144Mhz
> >2Fc-Fo =186Mhz(Smaller than 144Mhz signal)
> >
> >Can anyone give me some guidance on the spectral purity required in a 1
> >Watt transmitter?
> >How hard would it be to filter the output given above enough to reach
> >this level
> >of purity?
> >
> >
> >My second thought was to run the part at 180Mhz, generate a
> >72.5Mhz signal use the 7Pole filter in the AD9851 data sheet to filter
> >that, and then run the result into a a mimicircuits doubler.....
> >Would the result of this be easier to filter?
> >
> >Could I even use the on chip fast digital comparitor to make square
> >waves
> >and use that as a tripler?
> >
> >My end goal is to create a very very small no tune design.
> >
> >
> >Paul (Kl7JG)

1327. Re: Computer Clock Chip as Local Oscillator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-17 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.SOL.4.10.9907172046380.17602-100000@Stratus.CAM.ORG>
Source record: 68473

On Sat, 17 Jul 1999, lagniappe wrote:

> In article <7moc0tqeq1@fu-berlin.de>,
> "Eamon Skelton" <nospam@oceanfree.net> wrote:
> >
> > lagniappe <lagniappe@my-deja.com> wrote in message
> > news:7mnfnegrs1@nnrp1.deja.com...
> > > I need a stable (crystal-controlled) LO source of several hundred
> > > megahertz, capable of being finely trimmed to an exact frequency,
> > > for a block downconverter.
> > >
> >
> > Computer clock oscillators are not usually
> > adjustable/trimable. See the two metre CW
> > transmitter and six metre RX converter on
> > my web page (address below.)
> >
> > Computer CPU cores run at several
> > hundred MHz but the clock input and
> > bus speed is much less. Usually 66, 75
> > 83, or 100 MHz.
> >
> > 73, Ed. EI9GQ
>
> Easy enough to trim the oscillator frequency by
> using a capacitor in series or shunting the
> XTAL. But if the oscillator in a 400-MHz
> pentium does not run at 400 MHz, where does the
> CPU get it's clock? Does it use some sort of
> doubling scheme?
>
> Martin

Most computers use those ttl crystal oscillators in a can for their
clocks, which is why they aren't variable. It would be a different matter
if they used a stand-alone crystal with an oscillator, but I don't see
that happening. Looking at moterhboards, the only place I see crystals
tend to be for the time keeping clock, which is down around 32 KHz or so.

In one of the other newsgroups, the clock of these really fast CPU's came
up for some reason. Someone pointed out that they phase lock to an
external clcok source running at a sub-harmonic of the clock frequency.
So for example, if the CPU runs at 400 MHz, the external clock would be at
100MHz and the PLL muliplies by 4.

And while it has no relevance to the question of using one of those clocks in some other scheme, remember that 400MHz CPU's only run at that frequency while doing internal operations. It slows down, probably considerably, when dealing with memory or I/O or anything else connected to it externally.

Michael VE2BVW

1328. Re: Output transistors for HF power amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-17 00:00:00 UTC
From: Gerrit Barrere <ctrXpoiYnt@halcZyon.com>
Message-ID: <7mqkvs$7cq$1@brokaw.wa.com>
Source record: 68474
Cross-posted to: uk.radio.amateur,aus.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Ed,

Motorola is one of the culprits I've already indicted. Their app notes for HF power amps are old, many of them specify transistors which Moto has discontinued. The reps and app engineers I've contacted don't have suggestions for replacements. I get the clear impression Motorola is phasing out their HF power discretes.
--
Gerrit Barrere
ctrpXoinYt@halZcyon.com
(please remove X, Y, and Z from return email address)

Eamon Skelton <nospam@oceanfree.net> wrote in message
news:7mpnu0$ik0$1@fu-berlin.de...
>
> Gerrit Barrere <ctrXpoiYnt@halcZyon.com> wrote in message
> news:7mo66b$6bv$2@brokaw.wa.com...
> > Hi all,
> >
> > I'm designing a 1-10 MHz Class AB broadband power amplifier, 50-100 W
> pulses,
> > 10-15 W average into 50 ohms, for an ultrasound application. I'm having
> trouble
> > finding a good source of output transistors, bipolar or FET, <snip>
>
> Try Motorola's website. I think the address is:
> http://www.mot.com
>
> There are links to several other semiconductor
> manufacturers, on my web page (below.)
>
> 73, Ed.
>
>
> --
> Eamon 'Ed' Skelton EI9GQ
> Cork, Ireland.
>
> My e-mail address really is:
> nospam@oceanfree.net
>
> Home brew radio page
> http://www.qsl.net/ei9gq
>

>

1329. Re: GPS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-17 00:00:00 UTC
From: Doug Younker <dougy@ruraltel.net>
Message-ID: <3791702F.2114@ruraltel.net>
Source record: 68475

Thanks for all the personal experiance answers, my curiousity is
satisfied. Not a lot of forest in W. Kansas to ask a local GPS owner

--
73, Doug Younker N0LKK
Near Plainville,KS
dougy@ruraltel.net

1330. T/R switch..help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-18 00:00:00 UTC
From: Phillip Sanders <nika01@kalamazoo.net>
Message-ID: <3792303D.5CA371CD@kalamazoo.net>
Source record: 68383

I am looking for a schemetic of a low power (<50 watts) transmit/receive switch. Solid state/2 meter.
Please respond to KC8LZN@arrl.net if you can help..

Thanks,

Phil KC8LZN

1331. Re: Microwave Modules MML 144/100-LS Circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-18 00:00:00 UTC
From: Trevor Day <Trev@southwestuk.demon.co.uk>
Message-ID: <GGDcRHApCjk3Ew0T@southwestuk.demon.co.uk>
Source record: 68384
Cross-posted to: alt.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

In article <932320781.26052.0.nnrp-01.9e98acde@news.demon.co.uk>, Martin
John Hallsworth <Martin@g1gyc.demon.co.uk> writes
>Wanted Circuit diagram and component values for MML144/100 LS

Sent by e-mail..
--
Trevor Day G3ZYY

1332. ARRL Simulation software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-18 00:00:00 UTC
From: Alex <aturner@netunlimited.net>
Message-ID: <7mteah$57b$1@news.netunlimited.net>
Source record: 68385

Can anyone tell me about this software, the price is attractive,but I'd like to hear from somone who has actually used it.

Thanks
Alex

1333. Re: ferrite bead inductance AL value

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-18 00:00:00 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <01bed173$72186c40$c2864d0c@default>
Source record: 68386

Hi Calhoun,
I don't have the answer, but do you have any equipment such as a
scope and signal generator or a dip meter if so, then we can discuss
how you can find out for yourself.
Let me know,
Mike
PS. I emailed you but it was returned used unknown.

Calhoun <calhoun@cal.tech.net> wrote in article
<7O4k3.570$36.106800@newsgate.direct.ca>...
> Hi, can anyone tell me the AL for the FB43-101 ferrite bead.
> I nedd to make a 1 microhenry choke using one
>
> thanks Calhoun
>
>

1334. Repeater Controller

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-18 00:00:00 UTC
From: hijacker@spray.se
Message-ID: <7mtp55$d4q$1@nnrp1.deja.com>
Source record: 68387

Hi!

I was wondering if someone has a nice circuit for a
repeatercontroller with a pic16f84?
Please mail me a link/pic with it if you do.

Thanks / John, sm0whq

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1335. Re: ARRL Simulation software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-18 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <379258BF.AE5DBA34@mwci.net>
Source record: 68388

Alex wrote:

> Can anyone tell me about this software, the price is attractive,but I'd like
> to hear from somone who has actually used it.

I presume you are referring to the Radio Designer program. I use it a lot and like it for linear ac circuit analysis and for Smith chart operations. There are a lot of useful things to learn about it and I think you will like it.

Bill W0IYH

1336. HR2510

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-18 00:00:00 UTC
From: Subliminal Chaos <subchaos@gomontana.com>
Message-ID: <7mtukr$7a2a1@news.gomontana.com>
Source record: 68389

Does anyone out there know where I can get an Uniden HR2510 that has been chipped to travel into the CB freq's as well as the ham bands?

I owned one several years ago and had to sell it. I would love to own one again.

Any help emailed or replied to me here would be greatly appreciated!

Mike

subchaos@yahoo.com

1337. Re: GPS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-18 00:00:00 UTC
From: John Mock <kd6pag@qsl-nojunk.net>
Message-ID: <87emi5pccm.fsf@mongrel.kd6pag.ampr.org>
Source record: 68390

Doug Younker wrote:
> I have to ask. How well does a GPS receiver work in wooded areas? I'd
> think the treees would attenuate the sattelite signals.

This is the other disadvantage to buying that "obsolete" used unit. Older units multiplexed one receiver to receive six to ten different satellites; newer units, with multiple receivers, lock and hold lock better under marginal conditions like the one you suggest. My GPS II (single receiver) doesn't do well in the woods. Just one of the many, many reasons the GPS shouldn't replace map and compass, just augment them.

Yup, the one time i borrowed a GPS (i was trying to activate CM79 [where there areno roads]), i found that i could not acquire more than one or two satellites at a time in a redwood forest on a steep slope. So there are limitations.

What about Part 15 devices? Would 49 MHz walkie-talkies give enough range? Even if you were to exceed normal power limits, in the woods, no one is likely to complain.
-- KD6PAG (Networking Old-Timer, "RF newbie")

1338. Re: 2metre TX questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-18 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <37916135.FC127CFB@bellsouth.net>
Source record: 68476

ptay@spam-jam.interlog.com wrote:
> 1) I can easily alter the cct to run at 2-metre frequencies. Is there any
> reason I couldn't apply audio to the varactor, hook up a linear amp, and have
> a viable 2-metre ransmitter?

I would think it would work OK. The amplifier doesn't have to be linear
for FM work. You should re-check for spurs after connecting the amp;
they can sometimes generate various spurious emissions that aren't
present in the drive signal. Oh, and be sure to get a license before
connecting an antenna<G>!

> 2) What is the standard channel spacing in the 2-metre band?

It varies. I think you're going to need 2.5kHz steps to accomodate all
the world's bandplans. If we know what country you're in (judging from
your spelling of "metre" I gather you're not in the U.S.!) and, if in
North America, what part of NA, we can give a better answer.

> 3) What is the standard frequency offset between Tx and Rx for 2-metre work?

600kHz for repeater work - to the best of my knowledge, that's a
world-wide standard. There is also some "simplex" work where the
transmitter and receiver operate on the same frequency.

> 4) Can I get away with sharp filters and an RF relay in place of a proper
> diplexer? If so, at what power level would I need to use a proper diplexer to
> protect the Rx front end from the Tx output?

Standard procedure is to simply switch the antenna between the
transmitter and receiver. (we used to use relays, but have gone to
diode switching) It isn't difficult to get enough isolation that
diplexers and sharp filters aren't necessary to protect the receiver. A
decent relay is probably the easiest way to do it.

--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

1339. Kenwood TS-50 ALC Mod?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-18 00:00:00 UTC
From: Doug <kf4abm@my-deja.com>
Message-ID: <7mrp99rhp1@nnrp1.deja.com>
Source record: 68477

Hi Again All, Thanks for some of you replying about my previous post. I now need someone that knows about the mod for the ALC mod for the ts-50 that allows it 150 watt output. I want to undo that mod and Can't find info on QRZ or other mod sites. Thanks in advance.

--... ...-- -.. . -.- ..-. ....- .- -... --

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1340. Pacterm 98 Release 1.3 Update - Kudos

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-18 00:00:00 UTC
From: Anon <nospam@nospam.com>
Message-ID: <wLkk3.2947$4P4.103714@news3.ispnews.com>
Source record: 68478
Cross-posted to:
aus.radio.amateur.digital,rec.amateur.equipment,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,uk.radio.amateur

For those who read my negative comments regarding <sub> I am pleased to report that the new version of Pacterm installed and ran without problems on my Win98 equipped box. Also, I would like to thank Rick Ruhl, N4GDO of Creative Services Software for taking a personal interest in solving the problems I ran into with the earlier version after the distributor went MIA and for providing me with the update at no charge. I am in no way connected with Creative Services Software except for being a happy customer.<g>

73

-Barnett, W1XL

1341. GPS Antenna Connector Repair

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-18 00:00:00 UTC
From: Robert Lyons <boblyons@umich.edu>
Message-ID: <3791F089.250B474C@umich.edu>
Source record: 68479

Ladies and Gents, the antenna connector on my Magellan GPS broke yesterday, and I'm weighing the possibilities of repair. The pin in the center snapped off. Surely the company will charge me exhorbitant amounts to repair it, so it would be nice if I could fix it myself (I've quite a bit of experience with a soldering iron ... on larger curcuits). Does anyone know if the connector is commercially available? (it's very small, gold, shaped a bit like a BNC but without the lateral retention pins). It's assembled on a stiff bit of shielded wire much like coax, but quite small, and that wire in turn attaches to the circuit board inside. I'd probably have to remove and replace the connector, wire and all.

Suggestions would be most welcome. Meanwhile, I'll contact the company and see if they'll give me an estimate.

Bob, KI8AB

1342. Microwave Modules MML 144/100-LS Circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-18 00:00:00 UTC
From: Martin John Hallsworth <Martin@g1gyc.demon.co.uk>
Message-ID: <932320781.26052.0.nnrp-01.9e98acde@news.demon.co.uk>
Source record: 68480
Cross-posted to: alt.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

Wanted Circuit diagram and component values for MML144/100 LS

Thanks Martin G1GYC

1343. Re: GPS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-18 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <7mt47o$pi8@dfw-ixnews19.ix.netcom.com>
Source record: 68481

In article <932150395.500.50@news.remarQ.com>,
Michael Young <nobody@all.org> wrote:
><daveooo@my-deja.com> wrote in message
>>
>> The words "inexpensive" and "GPS" are mutually exclusive terms. I am
>> looking to build these things for about ten bucks each. And I want
>to
>> make a few of them because it would be FUN.

In order for it to be long enough range, it'd have to be in the watt
level. And the FM band is adjacent to the VOR aeronavigation band, so
if it drifts, you'll have BOTH the FAA and FCC on your case. And, (as
you posted this in a ton of different newsgroups), you're not "nowhere" as
long as, at that power level, there are small planes within several miles
of your location. So it's got to be reasonably powerful, stable, and
is going to cost you probably $50 in parts. And is against regulations.

The worst part is that 100 MHz is a lousy band for direction finding,
especially for something that you have to carry. A much higher frequency,
where you could have a decent gain yagi beam that small, or a much lower
frequency where a loop antenna would work.

>Build an ultrasonic beacon and save everyone the grief. An AF
>oscillator, amp, and piezo buzzer is all you need, about $3 in parts. On
>receive: a microphone, amp, tone decoder, and VU meter. It's cheap,
>effective, legal, and might even keep the mosquitoes out of the camp.
>(Did I mention legal?)

As I see it, a more practical method would be to get your Technician
class nocode license and build a receiver for a ham band that decoded
some DTMF codes from your handheld tranceiver that would honk your truck
horn, or trigger off a compressed air boat horn.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

1344. Re: GPS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-18 00:00:00 UTC
From: Michael Young <nobody@all.org>
Message-ID: <932324501.400.21@news.remarQ.com>
Source record: 68482

Mark Zenier <mzenier@netcom.com> wrote in message
news:7mt47o$pi8@dfw-ixnews19.ix.netcom.com...
> As I see it, a more practical method would be to get your Technician
> class nocode license and build a receiver for a ham band that decoded
> some DTMF codes from your handheld tranceiver that would honk your
truck
> horn, or trigger off a compressed air boat horn.

I was playing with a smoke detector earlier. It has a fairly large piezo
buzzer in a resonant cavity, and is quite loud. If I were to build a
homing beacon today, that smoke detector would become a parts donor.

1345. Re: Adding tone board to 3AT?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-19 00:00:00 UTC
From: BamBam <kl0an@my-deja.com>
Message-ID: <7mtq1lddu1@nnrp1.deja.com>
Source record: 68391

Jeff,

Check your ham mags for a company called Communications Specialist or Specialties... They specialize in a chip for adding pll tones. It's a pretty small board and takes a keen eye and low power solder iron... Might want to find someone you trust to install it and that can work with small boards. I also installed the dip switches on the back of my Icom 2AT (old thuumbwheel model) so that I can change the pl tone settings because not all repeaters use the same ones. I think the board, dip switch, and shipping was around $30 - 35... A little high but, the radio is pretty much useless without them.

73
Paul Jordan
kl0an

--
There never seems to be enough time to do the
things you want to do once you find them...
Jim Croce - Time in a Bottle

In article <raoul-1607990957060001@pt194199.olympus.net>,
raoul@olympus.net (Le Grande Raoul) wrote:
> Group:
>
> Got my trusty 3AT out of the drawer and tried to access a few
repeaters
> and find that tones are necessary for a bunch of them in my area.
>
> Someone must be using a tone board with the 2/3/4AT series and can
anyone
> give me a suggestion for a nice, clean installation of one in my
radio?
>
> thanks. 73
> Jeff KB7AIL
>
> --
> "It's better to be shot from a cannon than squeezed from a tube,
> That's why there's fast motorcycles, bubba...."
> -Dr. H. S. Thompson paraphrasing Grace Slick
>

--
There never seems to be enough time to do the
things you want to do once you find them...

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1346. Re: ferrite bead inductance AL value

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-19 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <7mtntjkpb1@neptunium.btinternet.com>
Source record: 68392

Instead of asking questions on this very unreliable newsgroup, why don't you just wind one or two turns around the bead, measure its impedance or inductance on one of these simple antenna analysers, and sort it out for yourself.

Inductance and reactance are directly proportional to the square of number of turns.

Don't give up. It's quite easy really.

Reg, G4FGQ

1347. Re: ny schematics for a tubed RF amplifier for 27-28MHz?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-19 00:00:00 UTC
From: n8wwm@aol.com
Message-ID: <19990718225755.13647.00002209@ng-cb1.aol.com>
Source record: 68393

Panos...

Are you nuts?

1348. Re: LCD Readout for Rotator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-19 00:00:00 UTC
From: la8ak@online.no
Message-ID: <379248eb.191645058@news.online.no>
Source record: 68394

On Sat, 17 Jul 1999 15:53:59 -0500, Doug Smith <w9wi@bellsouth.net>
wrote:

>Hansanter wrote:
>> I'm looking for a circuit that I can install into my homemade antenna
>> rotator to enable an LED or LCD heading readout to about 1 to 3 degrees
>> accuracy. I'm currently using a 10K pot in the rotator as a voltage
>> divider to an analogue meter which works, well, just OK. I know it
>> involves an A/D converter but I'm not well up on this stuff. I'd
>> appreciate any help on this or better still a schematic diagram (online
>> would be great).
>
>I would suggest the easiest thing to do is to use a digital panel
>meter. Feed 3.60 volts up to the pot (so that when you get to due
>north, you get 3.60 back down from the arm). Disable the leading zeroes
>and the decimal point, and there you go -- at due north, the panel meter
>reads 360.
>
>That's assuming you have a panel meter whose full scale is more than 3.6
>volts. Some max out at 2 volts - I suppose you could feed 0.36 volts up
>but I bet you'd start having noise & interference problems with that.
>(even 3.6 may be too low) I'd feed up something higher and then put a
>voltage divider right before the panel meter.
>
>Personally, I'd leave it analog though. When working at unusual
>directions (for example, about 290deg. for operation here in the States)
>I have trouble visualizing exactly where I'm pointing from a digital
>display. With an analog display, I know exactly where I'm beaming.
>--
>Doug Smith W9WI
>Pleasant View (Nashville), TN EM66
>http://personal.bellsouth.net/~w9wi
>
>
modern rotators cover 450 degrees or more, any suggestions for digital
display for such? I'd choose to have 270 degrees for ccw stop, and
this is also most practical with 360 degree rotators at this QTH for
VHF/UHF DX operation.

73 jan-martin LA8AK

1349. Yaesu/Vertex FTH-2009 programming cable?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-19 00:00:00 UTC
From: gumb@hotmail.com
Message-ID: <3792c02b.8049950@news.earthlink.net>
Source record: 68395

Ne1 know of any plans to make this cable?
Mike

1350. Re: Looking plans dualband (VHF/UHF) antenna for HT.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-19 00:00:00 UTC
From: Alexey Lomazin <milker@onego.ru>
Message-ID: <3792f632.0@news.global-one.ru>
Source record: 68396
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Leland C. Scott ????? ? ????????? <7mp7qd$89d@nnrp4.farm.idt.net> ...
>Save yourself some trouble and get a PRYME RD-19 antenna, dual band V/UHF
>and is only 19 cm long.
>http://www.pryme.com/radio.shtml#ANTENNAS
>
>Or if you don't like that one then check out the DIAMOND RH3 antenna, dual
>band V/UHF and is only 4.45 cm long.
>
>http://www.rfparts.com/diamond/

Are you joking? Pay 25$ for 0.5$ thing, especially if you incom's is about 80$ per month... It's Russia, fellow... :(Having plans I can do this antenna from realy nothing - one used BNC, piece of old coax, and 1 meter of copper gauge. I just making such monoband antennas - to 2 and 11 meters - it's very simple.

1351. Modeling a tapped inductor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-19 00:00:00 UTC
From: Michael Young <nobody@all.org>
Message-ID: <932383579.551.16@news.remarQ.com>
Source record: 68397

In trying to understand how a published radio design works, I'm modeling the VFO section in Microsim's PSpice. How do I represent a tapped inductor? Part of the confusion comes from my not understanding what it does in the circuit, compounded by a less than clear understanding of what how a tapped winding behaves.

The toroid has 35 turns total, and tapped at 8 turns above the ground side. It looks to be part of a tank circuit at the output of the oscillator. The tank drives the gate on a JFET, and its source ties back to the tap in the inductor on the tank. (Please see http://www.redhotradio.com/Rh20_1.pdf.)

Part of my confusion is the squared relationship between turns and inductance. 35 turns on this toroid (A.L = 43) would give 5.28 uH. 27 and 8 turns gives 3.13 uH and 0.27 uH respectively. Is this modeled as two inductors in series? As a very tightly coupled transformer? Or something else altogether?

Thanks.

Michael.
KG9PU

1352. Re: 1 KW Automatic HF Antenna Tuner Wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-19 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7mv2no$dt2$1@news1.fast.net>
Source record: 68398

-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

Roger Palmer <rpalmer@islandnet.com> wrote in message
news:01bcf3b0$bc6bb420$3fac35c6@Roger.islandnet.com...
> I am looking for an automatic antenna tuner for my boat. It will be
> driving a non-resonant inverted L antenna with a total length of
about 35
> feet. Ground will be directly to the hull of my steel boat. My
Icom AH-2
> works beautifully, but it cannot handle more than 100 Watts. I am
adding a
> 1 KW linear amplifier, and I need something that can accomodate this
power
> level.
>
> I have been spoiled by the AH-2, and want a truly automatic unit.
SGC
> makes a tuner, but it can only handle 500 Watts. A surplus unit is
the
> most likely candidate. I have come across a naval surplus tuner
using
> motor driven roller inductor and vacuum variables - this would be
perfect,
> but the current owner doesn't want to sell.
>
> Operating voltage can be 12 or 24 VDC, or 120 VAC. The unit will be
> mounted outside.
>
> I would prefer not to have to build it myself, but this may be the
ultimate
> solution. Any ideas?

Be satisfied with your current setup? I had an AH-2 on my 42'
sailboat,
tuning the backstay, and it worked great from 160-10.

I also had a rather large battery bank (2 X 880 AH) and can't imagine
putting the load of a 1kW amp on a boat system (unless you have a
REALLY large boat and a substantial generator).

I guess I'm just one of those folks who can't understand the "need"
for
a kilowatt ... I never had a problem with 100-150W on HF.

Carl - wa6vse

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-----BEGIN PGP SIGNATURE-----
Version: PGP for Personal Privacy 5.5.3

iQA/AwUBN5MOA5e+N6+q84HiEQK6UACeKZv5CQPusisujOawwsSL/cKuamEAoPXV
2IlWusGHUVB7kDT6wVJxkDnC
=Q+6L
-----END PGP SIGNATURE-----
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1353. ICOM R-7000 for Sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-19 00:00:00 UTC
From: Quick Brown Fox <slingshot01@worldnet.att.net>
Message-ID: <37934D46.44EE@worldnet.att.net>
Source record: 68399

i have an ICOM R-7000 in mint condition with a remote
control and a Video decoder for TV singnals it worth alot and i
need to sell it to support my family so make me a good offer ok

1354. Re: Modeling a tapped inductor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-19 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <379320D9.5D494E7E@mwci.net>
Source record: 68400

Michael Young wrote:

> Part of my confusion is the squared relationship between turns and
> inductance. 35 turns on this toroid (A.L = 43) would give 5.28 uH. 27
> and 8 turns gives 3.13 uH and 0.27 uH respectively. Is this modeled as
> two inductors in series? As a very tightly coupled transformer? Or
> something else altogether?

For a toroid coil where the core has permeability 10 or greater and the turns are close wound, a good approximation is to think of it as conventional transformer where the impedance ratio equals the square of the turns ratio. It's like a conventional autotransformer.

In an air core solenoid core the coefficient of coupling between the tapped portion and the full coil can be low, and a more complicated approach is needed. A good discussion of this is in Krauss, Bostian and Raab "Solid State Radio Engineering".

Bill W0IYH

1355. toroids in hf amp tank outputs?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-19 00:00:00 UTC
From: Tim <tvendt@kear.tds.net>
Message-ID: <01bed1ef$aa917180$789347cc@default>
Source record: 68401

Greetings... Has anyone seen any info on using toroids for inductors in tank coils in hf amplifiers....I believe ten tec does it on their Titan but have no schematics for that.... What I'm looking for is if anyone is aware of any books or articles that might be available that would discuss using these in this application.
Thanks
Tim KB1MM
tvendt@kear.tds.net

1356. Info using HT-33a amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-19 00:00:00 UTC
From: Tim <tvendt@kear.tds.net>
Message-ID: <01bed1f1$1c5971e0$789347cc@default>
Source record: 68402
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Greetings.... I am wondering if anyone has any words of wisdom using an HT-33a amp with modern solidstate transcievers and how you hooked it up... I have had one for several years that a friend gave to me that had a bad bias,filament,etc transformer when he gave it to me. One can be had from peter dahl for less than $100. what has your experiences been with it and is it worth keeping around and using....should I strip it and use it for parts for a more "modern" design amp? I am assuming of course that the rest of the amp is ok. High voltage is right up there and all and everything else seems to be ok, even the tube (PL-172). Any info would be appreciated.

Thanks
Tim KB1MM
tvendt@kear.tds.net

1357. F.S. Amperex 3-500Z's

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-19 00:00:00 UTC
From: W3BV <w3bv@arrl.net>
Message-ID: <37932530.808DC411@arrl.net>
Source record: 68403
Cross-posted to: rec.radio.swap,rec,radio.amateur.equipment,rec.radio.amateur.homebrew

For Sale: Brand new, unused Amperex 3-500Z's. $150 each. You ship.

Alan, W3BV

1358. F.S. Yaseu FT-736R

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-19 00:00:00 UTC
From: W3BV <w3bv@arrl.net>
Message-ID: <379330F2.774DC7BE@arrl.net>
Source record: 68404
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

For Sale: Immaculate Yaseu FT-736R VHF/UHF all-mode fixed station transceiver. Purchased new by me and has less than 100 hours total use. There is not a single scratch, smudge or blemish on it. It is still like brand new and has always been in a non-smoking environment.

This 736R has the optional Subaudible Tone Squelch (FTS-8), Electronic Keyer Unit, DC Power Cable. I have the original box, operating manual, service manual and hand mic.

Price: $1125.

Alan, W3BV

1359. L.O.S.A Contribution Form

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-19 00:00:00 UTC
From: cjX@hth.com
Message-ID: <378f81a9.60984512@news.sverige.net>
Source record: 68405
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

```
List Of Stamp Applications (L.O.S.A for short)
==============================================

If you have done something (big or small) with the BASIC Stamp
that you are willing to tell others please use the form below and
write a short description, nothing fancy is needed just a simple
explanation. If you have source code to share that's even better but
it's not necessary.

Then e-mail the form to:

cj@hth.com

With the following as the subject:

L.O.S.A Contribution

Or you could point your Web-browser to the following URL and fill in
the L.O.S.A form on the Web-page...

http://www.hth.com/losa.htm

The latest version of L.O.S.A is always available at the above
mentioned both in ASCII and in ZIP-file format for easy download.
An index of L.O.S.A is posted to the following mailing lists and
news groups, I will update it approx. once a month.

Mailing lists:

BASIC Stamp Mailing List

News groups:

comp.robotics.misc
comp.home.automation
sci.electronics
sci.electronics.misc
rec.radio.amateur.homebrew

FTP-site:

ftp://ftp.parallaxinc.com/pub/text/losa.txt

You can also find the latest version on the following URL...

http://www.hth.com/losa.htm

[--- cut ---]
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```
================================================================================
- L.O.S.A Contribution Form -
================================================================================
New Contribution [ ] Update [ ]
--------------------------------------------------------------------------------

Title :
Author: Date:

E-mail: (optional)
--------------------------------------------------------------------------------

Stamp model : BASIC Stamp/BS1-IC/BS2-IC/BS2SX-IC
Code available: YES/NO
Filename : (optional)
URL : (optional)
--------------------------------------------------------------------------------
Description : (5-50 rows describing your application)

================================================================================

[--- cut ---]

Regards,

/Christer

[NOTE: Clear the "X" from my e-mail address if you want to e-mail me]

-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
Send and receive serial data over the power lines... For more info
about the PLM-24 Power Line Modem go to http://www.hth.com/plm-24/
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```

1360. Re: Looking plans dualband (VHF/UHF) antenna for HT.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-19 00:00:00 UTC
From: Lee Scott <DownWithJunkMail@Spam.Net>
Message-ID: <7mvk7v$oao@nnrp4.farm.idt.net>
Source record: 68406
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Oh well you never said that cost was a factor. Here in the west many times its cheaper and faster to buy something then screwing around trying to building it yourself. Good luck.

Leland C. Scott
KC8LDO

--
"We learn in time that subjects are not controversial,
but how we communicate about them and the
elements of personal blame we add in anger. "
Alexey Lomazin wrote in message <3792f632.0@news.global-one.ru>...
>
>Leland C. Scott ????? ? ????????? <7mp7qd$89d@nnrp4.farm.idt.net> ...
>>Save yourself some trouble and get a PRYME RD-19 antenna, dual band V/UHF
>>and is only 19 cm long.
>>http://www.pryme.com/radio.shtml#ANTENNAS
>>
>>Or if you don't like that one then check out the DIAMOND RH3 antenna, dual
>>band V/UHF and is only 4.45 cm long.
>>
>>http://www.rfparts.com/diamond/
>
>
>Are you joking? Pay 25$ for 0.5$ thing, especially if you incom's is about
80$
>per month... It's Russia, fellow... :(Having plans I can do this antenna
from
>realy nothing - one used BNC, piece of old coax, and 1 meter of copper
gauge.
>I just making such monoband antennas - to 2 and 11 meters - it's very
simple.
>
>

1361. Re: ferrite bead inductance AL value

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-19 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <3793563D.F2D52500@teleport.com>
Source record: 68407

At what frequency will the choke be used? How much DC current will be going through it?

Roy Lewallen, W7EL

Calhoun wrote:
>
> Hi, can anyone tell me the AL for the FB43-101 ferrite bead.
> I nedd to make a 1 microhenry choke using one
>
> thanks Calhoun

1362. The old Sardine Sender coil question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-19 00:00:00 UTC
From: Tim <ka8ddz@worldnet.att.net>
Message-ID: <37936C81.90D2E6E0@worldnet.att.net>
Source record: 68408

The old Sardine Sender from 10/78 QST (I don't have a copy) has 5 coils in it, it used the ones that were available from Radio Shack at the time. I am looking to re-use these for another project and need to know what they were.

I just need to identify what the value of the coils were (prior to changing them for the Sardine Sender) Were there 4 of 1 value and 1 of another? This should be enough to answer my question.

Many thanks,

Tim ka8ddz

1363. Re: ARRL Simulation software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-19 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <37937BE9.7D38@ixpres.com>
Source record: 68409

Alex wrote:
>
> Can anyone tell me about this software, the price is attractive,but I'd like
> to hear from somone who has actually used it.
>
> Thanks
> Alex

Alex OM,

I have found it very useful for ham radio homebrewing. It is a
stripped-down version of Compact Software's professional version.
There seems to be some doubt as to ARRL's continued support of this
product, but I would not let that get in the way of using it. I have
been using mine for over 3 years now.
My XYL gave it to me as a birthday present (I personally never buy
software that I cannot try out first or have guaranteed returnability
for refund; been burned too many times). I started using it, and liked
it, so in this case I would not have had Buyer's Remorse even if I had
actually purchased it myself.

73 and GL,
Don, W6JL

1364. Re: Microwave Modules MML 144/100-LS Circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-19 00:00:00 UTC
From: Martin John Hallsworth <Martin@g1gyc.demon.co.uk>
Message-ID: <932413767.3771.0.nnrp-13.9e98acde@news.demon.co.uk>
Source record: 68410
Cross-posted to: alt.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

Thanks Trevor.
Received it ok.

73 de G1GYC Martin

Trevor Day wrote in message ...
>In article <932320781.26052.0.nnrp-01.9e98acde@news.demon.co.uk>, Martin
>John Hallsworth <Martin@g1gyc.demon.co.uk> writes
>>Wanted Circuit diagram and component values for MML144/100 LS
>
>Sent by e-mail..
>--
>Trevor Day G3ZYY

1365. does anyone have plans for a `super-duper`AM tuner ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-19 00:00:00 UTC
From: bige77@webtv.net
Message-ID: <8948-37937A4A-67@newsd-133.iap.bryant.webtv.net>
Source record: 68411

deo gratia

1366. Re: Parasitics and the Dentron amp bandswitch....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-19 00:00:00 UTC
From: skipp@logan.ucdavis.edu
Message-ID: <7n014g$1v7$3@mark.ucdavis.edu>
Source record: 68412

The proper way to fix your amplifiers is to install parasitic suppressors
which work, then replace the bandswitch. Otherwise you'll be back for
another bandswitch. Go to Rich Measures web page, read the information
about parasitics. It's my recomendation that you buy one of his retrofit
kits for you amplifier and install it.
Your next step would be to call Amp Supply, Jerremy Commincations or RF
Parts to purchase a new switch.

then get on with the show...

try Rich's web pages at:

http://www.vcnet.com/measures

good luck

cheers

skipp

skipp@pilot.ucdavis.edu

please, no spam mail... thank you.

: Oris (oris@dirtball.com) wrote:
: > Frank Dinger <frank.dinger@zetnet.co.uk> wrote in article
: > > > Greetings... I have a Clipperton L that has a roasted
: > > > bandswitch....actually it roasted many moons ago and I just hardwired
: > > > Dentron. Has anyone ever replaced the switch? What did you use????
: > >
: Well Tim
: I have had the same problem with my Clipperton L. I used the band
: switch out of the heathkit SB 220. I works a whole lot better than that
: peice of crap that Detron put in there. I also replaced the parasidics
: in the process. I got the band switch new from Nebraska parts. It was
: alittle high but well worth it. There is one problem though. In
: replacing the band switch I did away with 10-meters. The switch doesnot
: have the conectors for that postion. You could always make up a external
: switch for ten. I choose not to do that because being that the amp
: doesn't have a 10-meter position I can sell it to anyone. I'm haveing
: rig problems right now. The digital board in my TS-930 has craped and I
: need another one. My news server is fozen again. So I haven't been able
: to put out a want for the board. Do you think that you can help me?
: Heck I would trade the 930 and the clipperton L for a TS-940 Well I
: hope that I helped you
: 73 from Oris
: N3CND

1367. Ramsey kits... How good are they?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-19 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <37939C3E.D5ABE586@midwestmicro-tek.com>
Source record: 68413

I'm tring to homebrew a tube style reciever and am having some problems with it. Be that as is may, I would like to build a reciever a receiver to "get by with" until I get my homebrew on line. I was looking at the Ramsey kits for the 80 and 40 meter bands. I've read the advertisements and looked at the specs but I'm wondering just how good are they? Does any one know of anything better?

Thanks.

73 Rick

1368. RE: ARRL Simulation Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-19 00:00:00 UTC
From: luke@trio.COM.AU
Message-ID: <199907192342.QAA24477@mailbox1.ucsd.edu>
Source record: 68414

Hi,
If your not doing very large simulations, there is a program called
Aplac which might be better. It is free (the student version) but it is
memory limited,
although I have never run out of memory yet. The manuals are available to
download in .pdf, and the models are much more comprehensive than ARRL.
ARRL is a good program, but I think Aplac would be worth looking at first.

http://www.aplac.hut.fi/aplac/main.html

Regards,
Luke
VK3EM

1369. Re: F.S. Yaseu FT-736R

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-19 00:00:00 UTC
From: Eddie <k4jp@wireco.net>
Message-ID: <3793E079.DA221A2E@wireco.net>
Source record: 68415
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I am interested....Can you give me your phone number so I may call and
discuss it with you....Thanks
Eddie K4JP

W3BV wrote:

> For Sale: Immaculate Yaseu FT-736R VHF/UHF all-mode fixed station
> transceiver. Purchased new by me and has less than 100 hours total
> use. There is not a single scratch, smudge or blemish on it. It is
> still like brand new and has always been in a non-smoking environment.
>
> This 736R has the optional Subaudible Tone Squelch (FTS-8), Electronic
> Keyer Unit, DC Power Cable. I have the original box, operating manual,
> service manual and hand mic.
>
> Price: $1125.
>
> Alan, W3BV

1370. Re: lower cost RF design software ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-19 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <3793F112.77BE@pop.removethistomailme.net>
Source record: 68416

Jim Weir wrote:
>
> reberhardt@nospam.org (Russell Eberhardt)
> shared these priceless pearls of wisdom:
>
> ->Have a look at ARRL Radio Designer, available from ARRL for about
> ->$150. It is a cut down version of SuperCompact.
>
> And it is patent, worthless garbage. I had my school order a copy, and if the
> cost of the damned paperwork to run it back through the system wouldn't have
> been more than the program cost, it would have gone back immediately.
>
> Trash.
>
> Jim
> Jim Weir, VP Eng. RST Eng. WX6RST
> A&P, CFI, and other good alphabet soup

What are some of the specific problems you encountered?

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

1371. Re: toroids in hf amp tank outputs?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-20 00:00:00 UTC
From: wa1wla@my-deja.com
Message-ID: <7n0eiu$c8u$1@nnrp1.deja.com>
Source record: 68417

In article <01bed1ef$aa917180$789347cc@default>,
"Tim" <tvendt@kear.tds.net> wrote:
> Greetings... Has anyone seen any info on using toroids for inductors
in
> tank coils in hf amplifiers....I believe ten tec does it on their
Titan but
> have no schematics for that.... What I'm looking for is if anyone is
aware
> of any books or articles that might be available that would discuss
using
> these in this application.
> Thanks
> Tim KB1MM
> tvendt@kear.tds.net

Hi Tim, I am using toroids with my 8877, stacked two for the "L" section
of the PL, and stacked two for 160 meters.
I aslo have a crude DOS program writen by a friend to calculate wire
length.
I am in SW CT, so sent me a personal for farther comunications.
73 De WA1WLA
>

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1372. Re: lower cost RF design software ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-20 00:00:00 UTC
From: jim@rst-engr.com
Message-ID: <3793e1d4.16781294@news.gv.net>
Source record: 68418

reberhardt@nospam.org (Russell Eberhardt)
shared these priceless pearls of wisdom:

->Have a look at ARRL Radio Designer, available from ARRL for about
->$150. It is a cut down version of SuperCompact.

And it is patent, worthless garbage. I had my school order a copy, and if the cost of the damned paperwork to run it back through the system wouldn't have been more than the program cost, it would have gone back immediately.

Trash.

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

1373. Re: ARRL Simulation software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-20 00:00:00 UTC
From: jim@rst-engr.com
Message-ID: <3794e247.16896953@news.gv.net>
Source record: 68419

"Alex" <aturner@netunlimited.net>
shared these priceless pearls of wisdom:

->Can anyone tell me about this software, the price is attractive,but I'd like
->to hear from somone who has actually used it.

Total garbage. If you don't mind your computer locking up randomly, not being
able to use your graphics card, or other "features" then you might get something
useful out of it.

In my book, it is absolute trash. Don't you wonder why they don't have a "demo"
version?

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

1374. FOR SALE & FREE

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-20 00:00:00 UTC
From: kf8od@aol.com
Message-ID: <19990719225308.15438.00000359@ng-fj1.aol.com>
Source record: 68420

Check out my for sale and swap page.
www.qsl.net/kf8od/swappage.html

73,Mike
KF8OD
Long live QRO!

1375. FS Tube Substitution Handbook

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-20 00:00:00 UTC
From: Larry Asp <larry.asp@sympatico.ca>
Message-ID: <3793F24C.7858@sympatico.ca>
Source record: 68421

Radio Shack Tube Substitution Handbook 1980 publication. Actually a
Howard Sams book with a RS jacket. $3.00 plus postage.

1376. Re: ARRL Simulation software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-20 00:00:00 UTC
From: Christopher Cox <cobox@netexp.net>
Message-ID: <01bed2a5$2db00620$cc60b6cd@cbx-nt>
Source record: 68422

Two thumbs up and one down.

What kind of hardware are you running the software on?

Regards

Christopher Cox

1377. Re: ARRL Simulation software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-20 00:00:00 UTC
From: n7ws@arrl.net
Message-ID: <37946b81.26343838@news.azstarnet.com>
Source record: 68423

On Tue, 20 Jul 1999 02:44:41 GMT, jim@rst-engr.com (Jim Weir) wrote:

>"Alex" <aturner@netunlimited.net>
>shared these priceless pearls of wisdom:
>
>->Can anyone tell me about this software, the price is attractive,but I'd like
>->to hear from somone who has actually used it.
>
>Total garbage. If you don't mind your computer locking up randomly, not being
>able to use your graphics card, or other "features" then you might get something
>useful out of it.
>
>In my book, it is absolute trash. Don't you wonder why they don't have a "demo"
>version?
>
>Jim
>Jim Weir, VP Eng. RST Eng. WX6RST
>A&P, CFI, and other good alphabet soup

Well....

I had one of the first retail copies. In fact, when I ordered, it was backordered. I did find a few bugs, although I never had my machine lock up.

Support is a problem. I originally wrote some letters to ARRL and they finally suggested that I talk to Ulrich Rohde directly. He took my phone calls with no problem. I believe that Version 1.5 is a partial result of my feedback, although when it came out, ARRL expected me to pay for the *upgrade* because I had such an old copy! (We finally got around that)

Rohde has since sold Compact (to Ansoft I believe) and now runs Synergy. Newkirk who used to support ARD at ARRL now works for Rohde at Synergy.

I bought a second copy to use on the job. Both were originally running under Win3.1 and now the office is running under WinNT and the home copy under Win98. (Note: I didn't *install* either of these, but *copied* the files over. I don't know how installing would work)

The only problem I have with running under NT is that the "tile" screen mode doesn't tile.

This is still pretty powerful software for the price, although the lack of meaningful support is the real downside. I also suspicion (but don't know) that ARRL has a license for a limited number of copies and when they're all gone, it's over.

And, Jim. Are you a software competitor? I know I've seen your byline in the trade journals, just don't remember what you were writing about.

N7WS

1378. Re: The old Sardine Sender coil question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-20 00:00:00 UTC
From: C Bauman <cbauman@impulse.net>
Message-ID: <37947340$0$200@sienna.impulse.net>
Source record: 68424

Tim wrote in message <37936C81.90D2E6E0@worldnet.att.net>...
>The old Sardine Sender from 10/78 QST (I don't have a copy) has 5 coils
>in it, it used the ones that were available from Radio Shack at the
>time. I am looking to re-use these for another project and need to know
>what they were.
>
>I just need to identify what the value of the coils were (prior to
>changing them for the Sardine Sender) Were there 4 of 1 value and 1 of
>another? This should be enough to answer my question.

Actually, there were 7 coils, a 100-uH (microHenry) choke and 6 10-uH coils.
The two coils used in the output were modified.

Carl WB6YFZ

1379. Ramsey Kits - How Good are they?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-20 00:00:00 UTC
From: Jim <jdport@xoommail.com>
Message-ID: <7n1ul5$1mm@journal.concentric.net>
Source record: 68425

I've built several Ramsey kits, including 2 of their Ham transceivers.
They are not on the order of Heathkits, nor do they cost as much.
Their assembly manuals, on the other hand, are very nice for the
learning possibilities they present, and are much more useful for future
servicing and/or modification of the unit.
Having said that, I almost always have to add parts, such as small
capacitors, etc, to get the tuned circuits to resonate, and often a part or
two is missing or the wrong part. I still consider these kits to be
good values. It helps to be somewhat familiar with electronic parts
in general since the parts are often substitutes for what the manual calls
for. Having sold small kits myself, I realize the parts supply situation
and the need to stuff the kits with (at times) different parts than what
are depicted in the assembly manuals.
Jim W5AOX

1380. L.O.S.A Contribution Form

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-20 00:00:00 UTC
From: cjX@hth.com
Message-ID: <3794a16a.1841860@news.sverige.net>
Source record: 68426
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

[Sorry if this appears twice, had some problems with out ISP.]

List Of Stamp Applications (L.O.S.A for short)
==========

If you have done something (big or small) with the BASIC Stamp
that you are willing to tell others please use the form below and
write a short description, nothing fancy is needed just a simple
explanation. If you have source code to share that's even better but
it's not necessary.

Then e-mail the form to:

cj@hth.com

With the following as the subject:

L.O.S.A Contribution

Or you could point your Web-browser to the following URL and fill in
the L.O.S.A form on the Web-page...

http://www.hth.com/losa.htm

The latest version of L.O.S.A is always available at the above
mentioned both in ASCII and in ZIP-file format for easy download.
An index of L.O.S.A is posted to the following mailing lists and
news groups, I will update it approx. once a month.

Mailing lists:

BASIC Stamp Mailing List

News groups:

comp.robotics.misc
comp.home.automation
sci.electronics
sci.electronics.misc
rec.radio.amateur.homebrew

FTP-site:

ftp://ftp.parallaxinc.com/pub/text/losa.txt

You can also find the latest version on the following URL...

http://www.hth.com/losa.htm

```
[--- cut ---]

================================================================================
- L.O.S.A Contribution Form -
================================================================================
New Contribution [ ] Update [ ]
--------------------------------------------------------------------------------

Title :
Author: Date:

E-mail: (optional)
--------------------------------------------------------------------------------

Stamp model : BASIC Stamp/BS1-IC/BS2-IC/BS2SX-IC
Code available: YES/NO
Filename : (optional)
URL : (optional)
--------------------------------------------------------------------------------
Description : (5-50 rows describing your application)

================================================================================

[--- cut ---]

Regards,

/Christer

[NOTE: Clear the "X" from my e-mail address if you want to e-mail me]

-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
Send and receive serial data over the power lines... For more info
about the PLM-24 Power Line Modem go to http://www.hth.com/plm-24/
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
```

1381. Re: S-meters... Where do they go?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-20 00:00:00 UTC
From: spam@nospam.com
Message-ID: <3794a325.3157838@news.lin.foa.se>
Source record: 68427

Not quite true.....
If one would hook up a log-amp at a suitable stage in the IF, it would
indicate the signal strenght. No need to have a Automatic Gain Control
feedback loop is there??
Just a thought.....

Cheers

On Wed, 14 Jul 1999 19:45:23 GMT, ke4zv@bellsouth.net (Gary Coffman)
wrote:

>On Tue, 13 Jul 1999 11:01:08 -0500, Rick Haub <rhaub@midwestmicro-tek.com> wrote:
>>Okay, I'm building the Mate to the Mighty Midget from a 1966 QST
>>magazine article. I want to add an S-meter to it and the design that I
>>have needs to be hooked into the AGC circuit, well the MMM doesn't have
>>an AGC. It does, however, have a 20k pot to manualy adjust the gain.
>>Where should I hook the S-meter into?
>
>No AGC, no S-meter. S-meters work by monitoring the AGC voltage,
>if you don't have AGC, then there's no AGC voltage to monitor. So
>if you want a S-meter, you're first going to have to add AGC to the
>receiver.
>
>Gary
>Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
>534 Shannon Way | We break it |
>Lawrenceville, GA | Guaranteed |

1382. Re: F.S. Yaseu FT-736R- SOLD

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-20 00:00:00 UTC
From: W3BV <w3bv@arrl.net>
Message-ID: <3794D68F.E77EC616@arrl.net>
Source record: 68428
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

The FT-736R has been sold.

W3BV wrote:

> For Sale: Immaculate Yaseu FT-736R VHF/UHF all-mode fixed station
> transceiver. Purchased new by me and has less than 100 hours total
> use. There is not a single scratch, smudge or blemish on it. It is
> still like brand new and has always been in a non-smoking environment.
>
> This 736R has the optional Subaudible Tone Squelch (FTS-8), Electronic
> Keyer Unit, DC Power Cable. I have the original box, operating manual,
> service manual and hand mic.
>
> Price: $1125.
>
> Alan, W3BV

1383. FS/FT RF-102

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-20 00:00:00 UTC
From: NI4L <ni4l@bellsouth.net>
Message-ID: <37951BCB.4D99943A@bellsouth.net>
Source record: 68429

RF-102 3-1000Z, 10-80 METERS LEGAL LIMIT
Can not ship but can deliver within 150 mile of Winston salem N.C.
For sale or trade in ex cond floor model looking for desk top amp.
Chris NI4L

1384. Re: Manipulating data obtained from the WaveIn API calls - Resources wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-20 00:00:00 UTC
From: Cyberhax <cyberhax@thegrid.net>
Message-ID: <GDbl3.6027$bd3.526283@alfalfa.thegrid.net>
Source record: 68430
Cross-posted to: rec.radio.amateur.digital,rec.radio.amateur.homebrew,comp.lang.basic.visual.misc,rec.radio.scanner

Rich-

Some years ago when I bought a sound card it included a manual that descibed some of the programming techniques your curious about. You've probably checked out their (SoundBlaster) sight, but if not I'd give it a whirl.

73,

Shawn WB6JWB

Richard Whitcombe wrote in message
<7n3b38fbm5@plutonium.btinternet.com>...
>Im trying to understand how programs such as Poc32 and MDT-Monitor use data
>from the sound card to decode it into the ASCII text. I know how to get
>data into buffers using the WaveIn API command but i dont know how to
>manipulate it once there to convert it into the original sent ASCII code,
or
>in the case of Hamcom like decoders, into the 0 and 1 values used for
>RTTY,FEC etc modes.
>
>I have searched the net and many books but cant find any information on how
>to do this. The people who wrote these programs have to learn the basics
>somewhere so im hoping someone can point me towards some resources with
this
>information. My eventual aim is to write a program to decode modes such as
>RTTY, FEC using the sound card.
>
>The problem being the data stored in the buffers after receiving is not the
>direct equivalent to the ASCII data sent by the transmitter and i want to
>know how to convert it.
>
>On a side note, i notice one program comes with a VxD "Slicer.vxd" which
>allows windows to use the Hamcom type data slicer interfaces. Does anyone
>know where i can find info on this VxD which possibly means i could use it
>in my own programs.
>
>Any info, URLs or references accepted
>
>Thanks.
>
>
>--
>---

>Regards, Richard
>Richard.Whitcombe@BTInternet.com
>South Wales, UK
>ICQ 1556459
>
>
>

1385. Slightly off topic programming help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-21 00:00:00 UTC
From: Richard Whitcombe <Richard.Whitcombe@BTInternet.com>
Message-ID: <7n3b37fbm4@plutonium.btinternet.com>
Source record: 68333
Cross-posted to: btinternet.chatter.technical,rec.radio.amateur.homebrew

I dont know if this question fits into this nesgroup subject but its worth a try....

Im trying to write a program in VB to receive audio in from the sound card line-in and save it as a .WAV file. I want this to record audio data from my radio receivers.
I know to do this i need to use the WaveIn API calls and write using the RIFF format but have no idea how to do this. I cannot use MCI as i need to read sound levels of the incoming signal.
If anyone has any help, source code in VB or VC++ id appreciate it.

Thanks

--

Regards, Richard
Richard.Whitcombe@BTInternet.com
South Wales, UK
ICQ 1556459

1386. Manipulating data obtained from the WaveIn API calls - Resources wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-21 00:00:00 UTC
From: Richard Whitcombe <Richard.Whitcombe@BTInternet.com>
Message-ID: <7n3b38fbm5@plutonium.btinternet.com>
Source record: 68334
Cross-posted to: rec.radio.amateur.digital,rec.radio.amateur.homebrew,comp.lang.basic.visual.misc,rec.radio.scanner

Im trying to understand how programs such as Poc32 and MDT-Monitor use data from the sound card to decode it into the ASCII text. I know how to get data into buffers using the WaveIn API command but i dont know how to manipulate it once there to convert it into the original sent ASCII code, or in the case of Hamcom like decoders, into the 0 and 1 values used for RTTY,FEC etc modes.

I have searched the net and many books but cant find any information on how to do this. The people who wrote these programs have to learn the basics somewhere so im hoping someone can point me towards some resources with this information. My eventual aim is to write a program to decode modes such as RTTY, FEC using the sound card.

The problem being the data stored in the buffers after receiving is not the direct equivalent to the ASCII data sent by the transmitter and i want to know how to convert it.

On a side note, i notice one program comes with a VxD "Slicer.vxd" which allows windows to use the Hamcom type data slicer interfaces. Does anyone know where i can find info on this VxD which possibly means i could use it in my own programs.

Any info, URLs or references accepted

Thanks.

--

Regards, Richard
Richard.Whitcombe@BTInternet.com
South Wales, UK
ICQ 1556459

1387. Re: Slightly off topic programming help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-21 00:00:00 UTC
From: Don Ward <Don@kay-dee.demon.co.uk>
Message-ID: <zXdeqBAZwXl3Ew7X@kay-dee.demon.co.uk>
Source record: 68335
Cross-posted to: btinternet.chatter.technical,rec.radio.amateur.homebrew

In article <7n3b37fbm4@plutonium.btinternet.com>, Richard Whitcombe
<Richard.Whitcombe@BTInternet.com> writes
>I dont know if this question fits into this nesgroup subject but its worth a
>try....
>
>Im trying to write a program in VB to receive audio in from the sound card
>line-in and save it as a .WAV file. I want this to record audio data from
>my radio receivers.
>I know to do this i need to use the WaveIn API calls and write using the
>RIFF format but have no idea how to do this. I cannot use MCI as i need to
>read sound levels of the incoming signal.
>If anyone has any help, source code in VB or VC++ id appreciate it.
>
>Thanks
>
>
>
You can get all the programming info you need from:
http://www.hut.fi/~then/programming.html. It's a brilliant source of
programming info and there is a section devoted to sound cards.
The two links there I found best for the Sound Card were:
http://www.fys.ruu.nl/~bergmann/soundblaster.html and
http://www.itsnet.com/home/ldragon/Specs/adlib.html
Cheers
Don Ward, G0MDO
http://come.to/g0mdo
http://come.to/rafars

1388. Re: ARRL Simulation software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-21 00:00:00 UTC
From: reberhardt@nospam.org
Message-ID: <3795acbc.12708188@news.demon.co.uk>
Source record: 68336

On Tue, 20 Jul 1999 02:44:41 GMT, jim@rst-engr.com (Jim Weir) wrote:

>Total garbage. If you don't mind your computer locking up randomly, not being
>able to use your graphics card, or other "features" then you might get something
>useful out of it.
I have used it for several years and never had the problems you
mention. I suggest that there is something wrong with your graphics
card driver?

I have found it to be a very useful program and excellent value
compared to the professional versions.

Russell.
TO REPLY BY EMAIL:
Change nospam in reply address to iee

1389. Re: Slightly off topic programming help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-21 00:00:00 UTC
From: "Mr. Muckle" <jdwalton@home.com>
Message-ID: <37960BB4.9E507DC1@home.com>
Source record: 68337
Cross-posted to: btinternet.chatter.technical,rec.radio.amateur.homebrew

Try the newsgroup: "microsoft.public.vb.controls"

Richard Whitcombe wrote:

> I dont know if this question fits into this nesgroup subject but its worth a
> try....
>
> Im trying to write a program in VB to receive audio in from the sound card
> line-in and save it as a .WAV file. I want this to record audio data from
> my radio receivers.
> I know to do this i need to use the WaveIn API calls and write using the
> RIFF format but have no idea how to do this. I cannot use MCI as i need to
> read sound levels of the incoming signal.
> If anyone has any help, source code in VB or VC++ id appreciate it.
>
> Thanks
>
> --
> ---
> Regards, Richard
> Richard.Whitcombe@BTInternet.com
> South Wales, UK
> ICQ 1556459

1390. RIB ARTWORK

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-21 00:00:00 UTC
From: Mitch <mitch@nw.com.au>
Message-ID: <3795E78B.1A962C1C@nw.com.au>
Source record: 68338

ok people
i've found the artwork for the motorola RIB
so now we can make our OWN PCB BOARDS
so get it and enjoy

its at: www.nw.com.au/~mitch

regards to all
mitch

1391. Re: ARRL Simulation software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-21 00:00:00 UTC
From: Michael Young <nobody@all.org>
Message-ID: <932571350.667.38@news.remarQ.com>
Source record: 68339

Russell Eberhardt <reberhardt@nospam.org> wrote in message
news:3795acbc.12708188@news.demon.co.uk...
> I have found it to be a very useful program and excellent value
> compared to the professional versions.

How does it compare in functionality and usability with the SPICE
derivatives?

Thanks.

Michael.

1392. Re: lower cost RF design software ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-21 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <37adf37c.833170057@news.atl.bellsouth.net>
Source record: 68340

On Tue, 20 Jul 1999 02:42:33 GMT, jim@rst-engr.com (Jim Weir) wrote:
>reberhardt@nospam.org (Russell Eberhardt)
>shared these priceless pearls of wisdom:
>
>->Have a look at ARRL Radio Designer, available from ARRL for about
>->$150. It is a cut down version of SuperCompact.
>
>
>And it is patent, worthless garbage. I had my school order a copy, and if the
>cost of the damned paperwork to run it back through the system wouldn't have
>been more than the program cost, it would have gone back immediately.
>
>Trash.
>
>Jim
>Jim Weir, VP Eng. RST Eng. WX6RST
>A&P, CFI, and other good alphabet soup

That's pretty harsh. It is only a linear small signal modeling program,
so it isn't much good for modeling PAs, mixers, or oscillators, but
it is useful for analyzing filters, matching networks, small signal amps,
etc. I wouldn't call RD trash, just horribly horribly limited compared
to something like Design Lab.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

1393. Re: How built a Duplexer Home made ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-21 00:00:00 UTC
From: ve3jtr@rac.ca
Message-ID: <7n50uf$2q9$1@nnrp1.deja.com>
Source record: 68341

Here is an excellent article on building your own duplexer. Once you read it, you may, as I did, realize why they are so expensive to buy! Happy reading!

http://www.seits.org/duplexer/duplexer.htm

73 de Jeff VE3JTR

In article <7mor54$992$1@news.quebectel.com>,
"Gervais Fillion" <gfillio1@globetrotter.net> wrote:
> Hi ,thanks for reading. I wonder is there some way to built an home made
> Duplexer for the 2 meters band? is there something on the WEB about it? i
> found some infos in the ARRL Antenna Book but elsewhere??????
>
> thanks for any help!
>
> Gervais
> ve2ckn
> ve2ckn@rac.ca
>
>

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1394. Re: S-meters... Where do they go?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-21 00:00:00 UTC
From: Eamon Skelton <nospam@oceanfree.net>
Message-ID: <7n4v0jjbf1@fu-berlin.de>
Source record: 68342

Spammer <spam@nospam.com> wrote in message
news:3794a325.3157838@news.lin.foa.se...
> Not quite true.....
> If one would hook up a log-amp at a suitable stage in the IF, it would
> indicate the signal strenght. No need to have a Automatic Gain Control
> feedback loop is there??
> Just a thought.....
>

Or add a few extra lines of code to the I.F. DSP program.

73, Ed.

--
Eamon 'Ed' Skelton EI9GQ
Cork, Ireland.

My e-mail address really is:
nospam@oceanfree.net

Home brew radio page
http://www.qsl.net/ei9gq

1395. Re: Manipulating data obtained from the WaveIn API calls - Resources wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-21 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7n54n1$4i3$1@nnrp1.deja.com>
Source record: 68343
Cross-posted to: rec.radio.amateur.digital,rec.radio.amateur.homebrew,comp.lang.basic.visual.misc,rec.radio.scanner

In article <7n3b38fbm5@plutonium.btinternet.com>,
"Richard Whitcombe" <Richard.Whitcombe@BTInternet.com> wrote:
> Im trying to understand how programs such as Poc32 and MDT-Monitor use data
> from the sound card to decode it into the ASCII text. I know how to get
> data into buffers using the WaveIn API command but i dont know how to
> manipulate it once there to convert it into the original sent ASCII code, or
> in the case of Hamcom like decoders, into the 0 and 1 values used for
> RTTY,FEC etc modes.
>
> I have searched the net and many books but cant find any information on how
> to do this....
> (snip)

What you have are samples of a modulated signal. Now the fun begins:
you need to detect the signal and recover the modulation.

My two usual references on the subject are _Digital Signal Processing:
a Practical Approach_ by Ifeachor and Jervis, and _Communications
Systems_ by Haykin. I've heard good things about _Digital Signal
Processing in Communication Systems_ by Frerkin, and signed the
library's copy out to have a look at it.

This stuff is well documented, and fun!
--
Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1396. Re: Ramsey Kits - How Good are they?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-21 00:00:00 UTC
From: k8bvj@webtv.net
Message-ID: <5741-3796038A-18@newsd-231.iap.bryant.webtv.net>
Source record: 68344

I built that little 40mtr Q-AMP and it was nothing but junk never did
put out the claimed 20 watts of pwr---I tossed it Jack K8BVJ

http://community.webtv.net/k8bvj/AMATEURRADIO

1397. Re: Ramsey Kits - How Good are they?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-21 00:00:00 UTC
From: k8bvj@webtv.net
Message-ID: <5740-3796039D-36@newsd-231.iap.bryant.webtv.net>
Source record: 68345

I built that little 40mtr Q-AMP and it was nothing but junk never did
put out the claimed 20 watts of pwr---I tossed it Jack K8BVJ

http://community.webtv.net/k8bvj/AMATEURRADIO

1398. Re: Ramsey Kits - How Good are they?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-21 00:00:00 UTC
From: k8bvj@webtv.net
Message-ID: <5740-379603D3-37@newsd-231.iap.bryant.webtv.net>
Source record: 68346

Best kits going---TEN TEC

http://community.webtv.net/k8bvj/AMATEURRADIO

1399. FS Earphones

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-21 00:00:00 UTC
From: Larry Asp <larry.asp@sympatico.ca>
Message-ID: <37963E98.11D5@sympatico.ca>
Source record: 68347
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

I have a few Alnico single magnetic earphones. These are single a earphone, with a metal headband. Used, but in good shape. Ideal for simple crystal set projects etc. Ive tested each one on a xtal set to be sure. $6.00 each, postage included.

1400. Re: ARRL Simulation software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-21 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7n5qvvhb1@news1.fast.net>
Source record: 68348

-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

Michael Young <nobody@all.org> wrote in message
news:932571350.667.38@news.remarQ.com...
> Russell Eberhardt <reberhardt@nospam.org> wrote in message
> news:3795acbc.12708188@news.demon.co.uk...
> > I have found it to be a very useful program and excellent value
> > compared to the professional versions.
>
> How does it compare in functionality and usability with the SPICE
> derivatives?
>
> Thanks.
>
> Michael.

If you look closely, I believe you'll find that while it appears to
have some
nice features, it's REALLY stripped down from the commercial version.
(obvious, considering the price delta)

For example, I don't believe that ARRL Radio Designer does non-linear
analysis.

There are several excellent *free* SPICE implementations available for
download on the web. I think for most purposes, they are quite
sufficient,
cheaper, and more capable.

73,

- --

Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI
Fellow, Radio Club of America
Senior Member, IEEE
Member, ARRL
Join NCI - Hams for the 21st Century!
Help modernize ham radio and assure its future survival!
http://www.nocode.org

```
-----BEGIN PGP SIGNATURE-----
Version: PGP for Personal Privacy 5.5.3

iQA/AwUBN5Zu+Ze+N6+q84HiEQJPXwCffGEeG4IhY10IfUjE01UizFJEseEAnRBD
nkKPC2N1yDT8OnYhDzImf1FG
=apJh
-----END PGP SIGNATURE-----
```

1401. Motorola HT1000 manual

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-21 00:00:00 UTC
From: Gary and Diane Groves <jag@nwi.net>
Message-ID: <7n679f$na6$1@sparky.wolfe.net>
Source record: 68349

Does anyone have a manual for Motorola HT1000

jag@nwi.net

1402. Re: Slightly off topic programming help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-21 00:00:00 UTC
From: "Eric.Howgate" <eric.howgate@btinternet.com>
Message-ID: <7n6d1fqjl1@neptunium.btinternet.com>
Source record: 68350
Cross-posted to: btinternet.chatter.technical,rec.radio.amateur.homebrew

Richard

Sorry I can't help with your problem - but am interested in what you're aiming at. I have an old Reveal FM Tuner in my PC which works surprisingly well with a simple ribbon aerial. The tuner output is connected to the SB (PCI) line-in, - I've wondered about recording from it (and then converting to MP3) but don't know if Windows recorder would give useful results.

Perhaps you'd keep me in mind when you do get your control up and running ?

Thanks

Eric

Richard Whitcombe <Richard.Whitcombe@BTInternet.com> wrote in message news:7n3b37fbm4@plutonium.btinternet.com...
> I dont know if this question fits into this nesgroup subject but its worth a
> try....
>
> Im trying to write a program in VB to receive audio in from the sound card
> line-in and save it as a .WAV file. I want this to record audio data from
> my radio receivers.
> I know to do this i need to use the WaveIn API calls and write using the
> RIFF format but have no idea how to do this. I cannot use MCI as i need to
> read sound levels of the incoming signal.
> If anyone has any help, source code in VB or VC++ id appreciate it.
>
> Thanks
>
>
> --
> ---
> Regards, Richard
> Richard.Whitcombe@BTInternet.com
> South Wales, UK
> ICQ 1556459
>
>
>

1403. rib box help needed!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-21 00:00:00 UTC
From: Mitch <mitch@nw.com.au>
Message-ID: <3794A74B.21F2A4C1@nw.com.au>
Source record: 68431

has anyone got the ARTWORK for the motorola Rib box so i can eatch my
own board...please HELP!!!!
regards
mitch

1404. Re: Ramsey Kits - How Good are they?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-21 00:00:00 UTC
From: John Mc CLun <jmcclun@home.net>
Message-ID: <37952B72.F77DE862@home.net>
Source record: 68432

Jim -
You get what you pay for, but they are pretty good for the cost. I
have built 2 or 3 and use them. But I would put the money spent on the
6 meter into a new K2 kit or a OH-500. Just MTCW.

John
N3REY

Jim wrote:
>
> I've built several Ramsey kits, including 2 of their Ham transceivers.
> They are not on the order of Heathkits, nor do they cost as much.
> Their assembly manuals, on the other hand, are very nice for the
> learning possibilities they present, and are much more useful for future
> servicing and/or modification of the unit.
> Having said that, I almost always have to add parts, such as small
> capacitors, etc, to get the tuned circuits to resonate, and often a part or
> two is missing or the wrong part. I still consider these kits to be
> good values. It helps to be somewhat familiar with electronic parts
> in general since the parts are often substitutes for what the manual calls
> for. Having sold small kits myself, I realize the parts supply situation
> and the need to stuff the kits with (at times) different parts than what
> are depicted in the assembly manuals.
> Jim W5AOX

1405. Re: LCD Readout for Rotator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-22 00:00:00 UTC
From: "Mr. Muckle" <jdwalton@home.com>
Message-ID: <3796B1C2.26DF4C7@home.com>
Source record: 68351

Use a multi-turn pot! You won't have the easy 3.6VDC to 360 deg conversion, however.

J M Noeding wrote:

> modern rotators cover 450 degrees or more, any suggestions for digital
> display for such? I'd choose to have 270 degrees for ccw stop, and
> this is also most practical with 360 degree rotators at this QTH for
> VHF/UHF DX operation.
>
> 73 jan-martin LA8AK

1406. Re: Modeling a tapped inductor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-22 00:00:00 UTC
From: puppin@netpar.com.br
Message-ID: <37969eb9.62263409@news.bcandid.deja.com>
Source record: 68352

On Mon, 19 Jul 1999 06:25:44 -0500, "Michael Young" <nobody@all.org>
wrote:

>In trying to understand how a published radio design works, I'm modeling
>the VFO section in Microsim's PSpice. How do I represent a tapped
>inductor? Part of the confusion comes from my not understanding what it
>does in the circuit, compounded by a less than clear understanding of
>what how a tapped winding behaves.
>
>The toroid has 35 turns total, and tapped at 8 turns above the ground
>side. It looks to be part of a tank circuit at the output of the
>oscillator. The tank drives the gate on a JFET, and its source ties back
>to the tap in the inductor on the tank. (Please see
>http://www.redhotradio.com/Rh20_1.pdf.)
>
>Part of my confusion is the squared relationship between turns and
>inductance. 35 turns on this toroid (A.L = 43) would give 5.28 uH. 27
>and 8 turns gives 3.13 uH and 0.27 uH respectively. Is this modeled as
>two inductors in series? As a very tightly coupled transformer? Or
>something else altogether?
>
>Thanks.
>
>Michael.
>KG9PU
>
>
Hi Michael,
If the AL you reported is 43 nH/turns^2 , the inductances are:
35turns = 52.7uH
8turns = 2.7uh
The coupling factor can be estimated as a first try to be .9 .
You could roughly represent it in the Spice like a tranformer as
below:

L1 1 0 52.67uH
L2 2 0 2.75uH
K1 L1 L2 .9

Remember this is not taking into account the Rs, Rp and parasitic
capacitances.
Hope to be helpfull.

puppin@netpar.com.br

1407. Re: ARRL Simulation software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-22 00:00:00 UTC
From: reberhardt@nospam.org
Message-ID: <3796fbdc.11889684@news.demon.co.uk>
Source record: 68353

On Wed, 21 Jul 1999 10:34:57 -0500, "Michael Young" <nobody@all.org>
wrote:

>How does it compare in functionality and usability with the SPICE
>derivatives?
>
They are as different as chalk and cheese.

SPICE is a non linear time domain analysys program originally intended
for design of integrated circuits. The analysis depends on having
accurate models for all devices used. The transistor models do not
include package characteristics and these have to be added as part of
the circuit under analysis for RF and microwave circuits. This
results in a complicated network which is slow to analyse. There are
also convergence problems with some MOSFET models. Spice does however
enable distortion to be calculated. Spice works in the time domain so
it is like using an oscilloscope.

ARRL Radio Designer is a cut down version (some microwave models
omitted) of SuperCompact. SuperCompact is a linear circuit analysis
program based on the use of s-parameters and designed specifically for
RF and microwave use. It performs small signal analysis, ie., it
takes no account of distortion, but it does the analysis in the
frequency domain so it is like using a network analyser. It is fast
and has an optimiser built in so you can specify the performance you
want (eg., gain and VSWR at a number of frequencies) and let it adjust
the component values for a best fit.

Hope that helps.

P.S. I have no axe to grind - I use both.

Russell.
TO REPLY BY EMAIL:
Change nospam in reply address to iee

1408. Re: Modelling a tapped inductor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-22 00:00:00 UTC
From: Michael Young <nobody@all.org>
Message-ID: <932652890.881.53@news.remarQ.com>
Source record: 68354

OK, thanks. I used a MicroSim supplied K_Linear part, and now have a good idea of what's going on. I'm still guessing at what the parameter values should be. The netlist shows: "Kn_K4 L_L1 L_L3 L_L2 {K_coupling}", where L1 is the 5.27uH primary, and L3 and L2 are the secondaries at 3.14uH and 0.275uH respectively. Does this statement correctly model two secondary windings and one primary winding?

Also, the A.L given is actually 43uH per 100 turns. The numbers I get are smaller than yours by a factor of 10. (I used a slipstick to cough up the numbers, so they probably round differently... I don't keep a calculator by the PC.)

Thanks.

Michael.

Gilson Puppin <puppin@netpar.com.br> wrote in message news:37969eb9.62263409@news.bcandid.deja.com...
> Hi Michael,
> If the AL you reported is 43 nH/turns^2 , the inductances are:
> 35turns = 52.7uH
> 8turns = 2.7uh
> The coupling factor can be estimated as a first try to be .9 .
> You could roughly represent it in the Spice like a tranformer as
> below:
>
> L1 1 0 52.67uH
> L2 2 0 2.75uH
> K1 L1 L2 .9
>
> Remember this is not taking into account the Rs, Rp and parasitic
> capacitances.
> Hope to be helpfull.
>
> puppin@netpar.com.br

1409. **** WANTED: Tannoy & Jensen speakers circa 1940's to 1960's ****

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-22 00:00:00 UTC
From: lzayas@xsite.net
Message-ID: <379739ac.2875169@nntp.xsite.net>
Source record: 68355
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

WANTED: old Jenzen corner speakers ,TRI-axials, drivers,tweeters from
the 40's,50's,60's
Dual concentric TANNOYS.

e-mail or call <LZAYAS@XSITE.NET>

(773-594-1041) Chgo.

Thank You Louis

Louis Zayas
lzayas@xsite.net
773.594.1041
Chicago Illinois

1410. Re: Wanted: pin layout of MRF245 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-22 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.SOL.4.10.9907221503080.14626-100000@Stratus.CAM.ORG>
Source record: 68356

On Thu, 22 Jul 1999, Geert Pirens wrote:

> Hello,
>
> Do somebody nows what the pin layout is of a MFR245 ?
>
> All information is welcome !!
>
> 73. de ON1DQD
>

I've killed the cross-posting.

I'll try to describe the pinout for the MRF245, according to the Motorola RF Data manual.

The two end leads, where the holes, are emitter leads.

Of the other two leads, one is wider than the other. The wider one is the base, and the narrower one is the collector.

I hope that's clear.

Michael VE2BVW

1411. Re: QRP Power Source

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-22 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <3797A955.42B8C6C8@teleport.com>
Source record: 68357

Probably the most challenging of the charging options is charging from the car system. I really know very little about gelled-electrolyte cells, but do have quite a bit of experience with other types of sealed lead-acid batteries. The most common variety (liquid electrolyte types such as the ones made by Panasonic and Yuasa) have a maximum specification on the amount of current which can be drawn during charging. So you'd have to have a low-dropout current limiter to do the most effective job of charging. A simple series resistor would also do the job, but it might extend the charge time a great deal.

The Gates "Cyclon" sealed lead-acid batteries allow direct connection to an automobile ignition system for charging, and have no maximum current specification. The last time I checked, they came in 2.5, 5, and 25 Ah capacities. I bought an assembly of six of the 25 Ah cells at Dayton a few years ago for a very reasonable price. You can get them new from some of the mail-order battery supply houses. I've found them to be very reliable.

Of course, you could also do the automobile charging with a switching step-up supply or AC inverter and conventional supply, and a current-limited voltage regulator.

Charging any type of lead-acid cell from a solar panel will require a voltage regulator.

What I've done recently for portable operation is to size a NiCd battery for about 10 hours of typical operation, and couple it with a solar panel rated at about C/10 (1/10 the battery's one-hour current capacity). For example, for a rig that takes an average of 200 mA with a normal transmit/receive duty cycle, I use a 2 Ah battery (NiCd C cells) combined with a 200 mA solar panel. I start the operation with a fully charged battery. While I'm operating, the battery stays fully charged because the solar panel supplies the amount of power the rig requires. If I spend more time receiving or shut off the rig when the battery is fully charged, the battery isn't harmed by overcharging at a 200 mA (C/10) rate. This way, I don't need any regulator at all and can connect the solar panel directly to the battery. Of course, this system won't charge the battery significantly while you're actively operating, but it will maintain whatever charge the battery has, and won't overcharge it at a harmful rate. You can't use a lead-acid battery with this method, because it would be harmed by a C/10 overcharge.

Roy Lewallen, W7EL

Dr. Brad Ashley wrote:
>

> To The Group:
>
> Does any one have a schematic for a simply power system to run an IC-706 in
> Low power mode. I have been told that a 12v 7-10 ah GEL cell is the way to
> go. I would like to have the following options. Charge from AC, Charge from
> Auto 12 DC, Charge form Solar cells. If some one is currently doing this
> some other way that would be great to hear what your system is. Ultimately I
> would like to use this system camping and not drain out my car battery in
> the process of using the rig.
>
> Thanks Brad WB7TSO lowrider@gorge.net

1412. Re: QRP Power Source

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-22 00:00:00 UTC
From: "Thomas C. Sefranek" <tcs@cmcorp.com>
Message-ID: <3797A112.766C7D59@cmcorp.com>
Source record: 68358

"Dr. Brad Ashley" wrote:

> To The Group:
>
> Does any one have a schematic for a simply power system to run an IC-706 in
> Low power mode. I have been told that a 12v 7-10 ah GEL cell is the way to
> go. I would like to have the following options. Charge from AC, Charge from
> Auto 12 DC, Charge form Solar cells. If some one is currently doing this
> some other way that would be great to hear what your system is. Ultimately I
> would like to use this system camping and not drain out my car battery in
> the process of using the rig.
>
> Thanks Brad WB7TSO lowrider@gorge.net

I use the 706 in my truck, the alternator charges the battery, and I have a
solar panel
in parallel which can assist the charging when the engine is not running.
You can add a small auto battery charger in parallel too!

--
Thomas C. Sefranek WA1RHP
ARRL Instructor, Technical Specialist, VE Contact.
http://hamradio.cmcorp.com/41_Repeater/repeater.html
http://hamradio.cmcorp.com/inventory/Inventory.html

1413. Help Motorola HT1000

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-22 00:00:00 UTC
From: Gary and Diane Groves <jag@nwi.net>
Message-ID: <7n8d3j$8m4$1@sparky.wolfe.net>
Source record: 68359

Need to Know what the hell all the buttons do ? or I need manual for ht1000

JAG@NWI.NET

1414. Re: QRP Power Source

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-22 00:00:00 UTC
From: davem@groucho.cs.ubc.ca
Message-ID: <7n90ki$ahr@groucho.cs.ubc.ca>
Source record: 68360

Roy Lewallen <w7el@teleport.com> writes:
>The most common variety (liquid electrolyte types
>such as the ones made by Panasonic and Yuasa) have a maximum
>specification on the amount of current which can be drawn during
>charging. So you'd have to have a low-dropout current limiter to do the
>most effective job of charging. A simple series resistor would also do
>the job, but it might extend the charge time a great deal.

Sonnenschein makes sealed lead-acid cells that are compatible with
the Panasonic/Yuasa types - the same physical size and about the
same capacity for each size. But they don't require current limiting
during charging - the battery chemistry handles this "automagically".

The disadvantage is that the manufacturer specifies charging at 13.8 V,
not the 14.5 V or so put out by a typical car alternator. A hefty
silicon diode in series should drop just about the right amount of
voltage to take care of this.

Dave

1415. Re: QRP Power Source

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-22 00:00:00 UTC
From: Al Lorona <al_lorona@hp.com>
Message-ID: <379800D3.10B7@hp.com>
Source record: 68361

Dr. Brad Ashley wrote:
>
> To The Group:
>
> Does any one have a schematic for a simply power system to run
> an IC-706 in Low power mode. I have been told that a 12v 7-10 ah
> GEL cell is the way to go.

Hello, Brad,

I think Roy's advice is sound, if you read between his lines. I'll come out and say it overtly: when you have a need to run a "12 volt" radio from battery, make sure the battery is closer to 13.8 volts throughout the discharge period. Lead-acid or deep discharge marine batteries or even many sealed gel-cell (like the Yuasa mentioned by Roy) start out at 12.whatever volts and decrease from there. (At least) Two things happen when you operate a solid state rig from a < 12 V source. First, the maximum output power is adversely affected, and second, the IMD products generated in the transmitter typically increase dramatically as a result of the final being starved for voltage. The result of this is that everything may look like it's working but you'll sound horrible on-the-air.

For my emergency power/Field Day/portable source, I purchased ELEVEN NiCads. At 1.25 V/cell or so, that eleventh cell puts me at a safe voltage to keep my radio happy. (This also allows me to direct-connect my solar panel in the same manner that Roy described.) I recommend making sure that the battery you decide on gives you this flexibility.

I guess one drawback of what I just said is that the higher battery voltage will make it difficult or impossible to use the battery in your car to charge it. You're stuck with solar panel while portable, and AC (with regulator) while at home. Can you live with this?

Good luck!

R,

Al W6LX

--

While you're passing out the spam, don't forget these guys:

admin@loopback
$LOGIN@localhost
$LOGNAME@localhost

$USER@localhost
$USER@$HOST
root@mailloop.com

Chairman William Kennard: wkennard@fcc.gov
Commissioner Susan Ness: sness@fcc.gov
Commissioner Harold Furchtgott-Roth: hfurchtg@fcc.gov
Commissioner Michael Powell: mpowell@fcc.gov
Commissioner Gloria Tristani: gtristan@fcc.gov
US Postal Service: customer@email.usps.gov
Fraud Watch: fraudinfo@psinet.com
Federal Trade Commission: consumerline@ftc.gov

1416. QRP Power Source

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-23 00:00:00 UTC
From: "Dr. Brad Ashley" <Bashley@class.orednet.org>
Message-ID: <7n8159bmh1@news2.OregonVOS.net>
Source record: 68362

To The Group:

Does any one have a schematic for a simply power system to run an IC-706 in Low power mode. I have been told that a 12v 7-10 ah GEL cell is the way to go. I would like to have the following options. Charge from AC, Charge from Auto 12 DC, Charge form Solar cells. If some one is currently doing this some other way that would be great to hear what your system is. Ultimately I would like to use this system camping and not drain out my car battery in the process of using the rig.

Thanks Brad WB7TSO lowrider@gorge.net

1417. Re: Output transistors for HF power amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-23 00:00:00 UTC
From: No_Spam@No_Site.ca
Message-ID: <WIOI3.251$uc.698@198.235.216.4>
Source record: 68363
Cross-posted to: uk.radio.amateur,aus.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

On 1999-07-17 ctrXpoiYnt@halcZyon.com said:
>Newsgroups: uk.radio.amateur,aus.radio.amateur.misc,
rec.radio.amateur.equipment,rec.radio.amateur.homebrew
>Date: Sat, 17 Jul 1999 12:12:53 -0700
>Organization: WinStar NorthWest Nexus
>Lines: 47
>References: <7mo66b$6bv$2@brokaw.wa.com> <7mpnu0$ik0$1@fu-berlin.de>
>NNTP-Posting-Host: blv-pm401-ip55.nwnexus.net
>X-Trace: brokaw.wa.com 932239164 7578 206.63.34.155
(17 Jul 1999 19:19:24 GMT)
>NNTP-Posting-Date: 17 Jul 1999 19:19:24 GMT >X-Priority: 3
>X-Newsreader: Microsoft Outlook Express 5.00.2014.211

> Ed,
> Motorola is one of the culprits I've already indicted. Their app
> notes for HF power amps are old, many of them specify transistors
> which Moto has discontinued. The reps and app engineers I've
> contacted don't have suggestions for replacements.

I suspect it was more likely they couldn't be bothered. If you were a manufacturer looking for a large production run, they'd be tripping over themselves trying to find the right part for you.

> I get the clear
> impression Motorola is phasing out their HF power discretes.

While that might or might not be the case, the impression I got when contacting them for support is that I was small potatoes and wasting their time. My cousin works in the electronic engineering department at an area university, and he strikes out too!

When I was in "tech school" we quickly figured out which companies supported small fry and which ones didn't. For Motorola and SGS-Thompson, we were PNG (personna non grata). There were always Motorola data books around, but they'd been bought by the school. I remember trying to contact SGS-Thompson once for a data sheet on one of their ICs (during the pre-Internet 80s), after leaving several unacknowleged messages in voice mailboxes and writing many unanswered letters, it finally dawned on me that this wasn't going to get me anywhere. Didn't really bother me much until I heard they had bought out one of my favorites - Mostek. I knew then I was in for a difficult time.

These experiences contrasted greatly with my experiences with Texas Instuments, Analog Devices, AMD, Burr-Brown, Teltone, MX-COM, and the old Silicon Systems. They were always forthcoming with data books and

requests for literature. SSI's free K-series modem design handbook is one of the handiest books I've got when it comes to telco interfacing info. I recall writing for more info on an article in AD's Analog Dialogue magazine - got a hand-written reply in the mail from the author. Then there was the time I contacted MX-COM about their CTCSS and modem chips - ended up chatting on the phone with Dan Wrappe, the guy who runs (ran?) the company, for a half-hour on HIS dime, and he mailed some product samples to me. Reminds me of the little gifts I get from MAXIM whenever I inquire about their stuff. Never had any reason to contact Fairchild, Linear (LTC) or Nat. Semi - I was always able to find the info I needed on-hand and later on the 'Net, so I don't know what they're like. I'd been able to assemble a decent reference library from buying used data books at Hamfests, etc.

Unfortunately for Motorola and SGS-Thompson, students and hobbyists don't always remain just students and hobbyists, and when they enter professional life they take their experiences with them. I'll use their products now if an exact replacement is called for in a repair, but if it's design work I'll only turn to their product if there's nothing else available. They've both got fairly decent libraries on-line now, but I know what it's like if I need additional info.

However, not many of the companies I've mentioned deal in RF transistors (that I recall, anyway). I suggest that you think up some good search terms, and head to AltaVista, Lycos, Excite, HotBot, etc. and see what you can find. I'm sure that there are RF transistor manufacturers out there that actually want to do business, and will support a product and its development.

Here are a few old URLs I have that might be helpful - I hope they're still valid...

http://www.cera2.com/search/hunter.htm
http://www.boin-gmbh.com/linkpage/linkpage.htm
http://www.blackcatsystems.com/science/ic.html

> Gerrit Barrere
> ctrpXoinYt@halZcyon.com
> (please remove X, Y, and Z from return email address)

--
From the keyboard of Alan - VE3NNM (Kenora, ON, CANADA)
email: ve3nnm AT mailcity DOT com
http://members.xoom.com/kenoraradio/
---
posted using NetTamer | The TRUTH about Micro$oft
http://www.nettamer.net/tamer.html | http://www.vcnet.com/bms/

Intel's new Pentium 3! - http://www.bigbrotherinside.com

1418. 3C33 RCA JAN, 807 tubes wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-23 00:00:00 UTC
From: tubecntral@aol.com
Message-ID: <19990722211728.22967.00000281@ng-fd1.aol.com>
Source record: 68364

Hi, Homebrewers.. to make a pair, I need a single, NOS original box 3C33 RCA JAN tube, plus a matching set of 807 tubes, NOS in the orig. box...807's should be 4 alike, or two separate pairs. Please respond via email if you have them...
Thank you,
Joe Pratt, Tubecntral@aol.com

1419. 96 Mazda 626 mobile install?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-23 00:00:00 UTC
From: PopTician <zootv@erols.com>
Message-ID: <379800FF.A54F0BE6@erols.com>
Source record: 68365
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment

Ok, i know someone else out there must have a 96 Mazda 626 and must have put a mobile radio in it. Where did you mount the radio? I'm trying to find the best place for an Icom IC-2100H. The factory pocket under the radio looks promising if i can figure out how to get it out and secure the radio. Any other ideas?
thanks,
Mike
KD4RNF

1420. Re: Output transistors for HF power amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-23 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <37986eab.38991806@news.erols.com>
Source record: 68366
Cross-posted to: uk.radio.amateur,aus.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Didn't see the originial message, but I happened to be looking for some QRP level RF power amplifier transistors yesterday. Dan's Small Parts (do a web search) listed MRF 472's as being available. I ordered 4 for 18.50 including shipping. Good luck. 73 Bill N2CQR

1421. Schematic For 144-10SX II

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-23 00:00:00 UTC
From: kmchar <kmchar@alphalink.com.au>
Message-ID: <3798c82e@news.alphalink.com.au>
Source record: 68367

Hi

I am looking for a schematic for a 144-10SX II
Failing this I need to know the wiring of the microphone plug, on the actual microphone cable.

Thanks

Kelvin Charlson VK3HKC

1422. Re: QRP Power Source

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-23 00:00:00 UTC
From: David Dicarlo <r14793@email.sps.mot.com>
Message-ID: <379889CC.FDB5D28B@email.sps.mot.com>
Source record: 68368

Al Lorona wrote:
> I guess one drawback of what I just said is that the higher battery
> voltage will make it difficult or impossible to use the battery in your
> car to charge it. You're stuck with solar panel while portable, and AC
> (with regulator) while at home. Can you live with this?

With the SimpleSwitcher switching regulators available from National Semiconductor, that is not really true. I built a 12V gel cell charger using a switching regulator to boost the alternator voltage to 16.5-17V and fed it to a Unitrode/Benchmarq UC2906 lead acid battery charger.

The whole thing fit on a 2" square pcb with plenty of room left over and properly isolates the gel cell from the car battery and the charger IC takes car of the full charging cycle, including the float charge.

--david

1423. Re: QRP Power Source

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-23 00:00:00 UTC
From: "Dr. Brad Ashley" <Bashley@class.orednet.org>
Message-ID: <7na60m$2a7$1@news2.OregonVOS.net>
Source record: 68369

David

I think that you've discovered what I am looking for I was looking at
some sort of voltage multipler circuit to boost a 12v auto battery to drive
a fast charge gel cell charger while mobile. Would you be willing to share
your circuit design?

Thanks Brad WB7TSO lowrider@gorge.net

David Dicarlo wrote in message <379889CC.FDB5D28B@email.sps.mot.com>...
>Al Lorona wrote:
>> I guess one drawback of what I just said is that the higher battery
>> voltage will make it difficult or impossible to use the battery in your
>> car to charge it. You're stuck with solar panel while portable, and AC
>> (with regulator) while at home. Can you live with this?
>
>With the SimpleSwitcher switching regulators available from National
>Semiconductor, that is not really true. I built a 12V gel cell charger
>using a switching regulator to boost the alternator voltage to 16.5-17V
>and fed it to a Unitrode/Benchmarq UC2906 lead acid battery charger.
>
>The whole thing fit on a 2" square pcb with plenty of room left over and
>properly isolates the gel cell from the car battery and the charger IC
>takes car of the full charging cycle, including the float charge.
>
>--david

1424. Re: QRP Power Source

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-23 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <3798A982.F90B63D0@teleport.com>
Source record: 68370

I stand corrected with regard to the Yuasa. Their literature refers to a "unique suspended electrolyte", so the electrolyte might be gelled and not liquid as I had said. "Gel-cell" is a registered trademark of Globe Battery Division, and some sealed lead-acid batteries, such as the Gates and Panasonic, don't have gelled electrolyte. Gelled-electrolyte batteries are (or were -- my information is a bit out of date) made by Elpower and PowerSonic, and undoubtedly others, as well as Globe. The Exide shown on my old data sheet refers to "absorbed electrolyte", which sounds like the Gates system. Each of these technologies has its own characteristics.

Al brought up a good point regarding operating voltage. Most of these lead-acid batteries will provide about 12 to 13 volts during most of the discharge (depending on load current, temperature, and state of charge), so the radio has to be designed to operate in this voltage range. The full charge isn't extracted from the battery until you get below 11 volts, so if your rig quits at 12 your battery won't deliver its full capacity. I've gone two more steps beyond what Brad describes. My NiCd pack also has 11 cells, but is tapped at 9, 10, and 11. The solar panel goes across all 11, and the rig is connected across fewer cells when charging than when not. (NiCds can go to nearly 1.6 volts/cell when charging, and down to 1.2 during discharge.) The other thing I did was design my portable rig to operate down to 11 volts, and added an ALC circuit so the output power wouldn't go all over the map as the battery voltage changes.

A solar panel acts like a pretty decent constant current source, so if the one-hour battery capacity is about 10 or more times the solar panel output, the solar panel can be direct-connected regardless of the battery voltage. (Except, of course, that the battery voltage when charging has to be somewhat less than the panel's open-circuit voltage. The panel isn't a perfect current source, and the current does drop off as you approach its open-circuit voltage.)

While I'm talking about batteries, I'll mention a bad experience I've had recently. I bought a couple of new Panasonic lead-acid batteries. I charged and discharged them once or twice to verify that they were ok, and used them once or twice for Field Day. After Field Day, I charged them and put them into a refrigerator. One year later, the voltage was around 12 volts, well above the self-discharge minimum as it should be. However, they drew very little current when charging, and their capacity was only a small fraction of normal. Repeated cycling and other testing shows that one cell seems to have gone bad. The batteries discharge more-or-less normally, but at a voltage about 2 volts less than rated. Two batteries have done this on separate occasions, after having been

used only once or twice. The batteries are standard cyclic service types, not ones specially made for float use. I've been very pleased with Panasonic NiCd batteries over the years, but I won't buy their lead-acid batteries again. If you have any, I recommend that you cycle them before use to make sure they haven't failed.

Roy Lewallen, W7EL

Al Lorona wrote:

> Hello, Brad,
>
> I think Roy's advice is sound, if you read between his lines. I'll come
> out and say it overtly: when you have a need to run a "12 volt" radio
> from battery, make sure the battery is closer to 13.8 volts throughout
> the discharge period. Lead-acid or deep discharge marine batteries or
> even many sealed gel-cell (like the Yuasa mentioned by Roy) start out at
> 12.whatever volts and decrease from there. (At least) Two things happen
> when you operate a solid state rig from a < 12 V source. First, the
> maximum output power is adversely affected, and second, the IMD products
> generated in the transmitter typically increase dramatically as a result
> of the final being starved for voltage. The result of this is that
> everything may look like it's working but you'll sound horrible
> on-the-air.
>
> For my emergency power/Field Day/portable source, I purchased ELEVEN
> NiCads. At 1.25 V/cell or so, that eleventh cell puts me at a safe
> voltage to keep my radio happy. (This also allows me to direct-connect
> my solar panel in the same manner that Roy described.) I recommend
> making sure that the battery you decide on gives you this flexibility.
>
> I guess one drawback of what I just said is that the higher battery
> voltage will make it difficult or impossible to use the battery in your
> car to charge it. You're stuck with solar panel while portable, and AC
> (with regulator) while at home. Can you live with this?
>
> Good luck!
>
> R,
>
> Al W6LX

1425. Re: QRP Power Source

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-23 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <3798BDE5.58297EDD@erols.com>
Source record: 68371

Many 12 volt solar panels produce around 19 volts under no load. While
you can directly connect them to an SLA (sealed lead-acid) battery
(assuming the panel's maximum current rating is 1/10th or less of the
battery's capacity), you should be sure to disconnect when the battery
is fully charged. Otherwise as the charging current drops, the panel
output will continue to rise towards 19 volts and damage the battery.
The series mode charge controller does this for you automatically.

1426. Re: QRP Power Source

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-23 00:00:00 UTC
From: Michael Young <nobody@all.org>
Message-ID: <932762368.408.76@news.remarQ.com>
Source record: 68372

National Semiconductor has pretty good information on many of their products on their website. I looked briefly at some step-up switching regulators while I was browsing for something else. They might be suitable for what you're doing, but I didn't pay much attention at the time. The external parts count seemed pretty low, and the SMT packages will fit into a very small space. I thought at one time to build a number of small utility circuits on unetched PCB, and keep them on hand for when I need them. This would be one of the candidates for inclusion. There might even be a cottage industry for small, pre-packaged regulators, audio amps, and the like.

Michael.

Dr. Brad Ashley <Bashley@class.orednet.org> wrote in message news:7na60m$2a7$1@news2.OregonVOS.net...
> David
>
> I think that you've discovered what I am looking for I was looking at
> some sort of voltage multipler circuit to boost a 12v auto battery to drive
> a fast charge gel cell charger while mobile. Would you be willing to share
> your circuit design?

1427. Re: QRP Power Source

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-23 00:00:00 UTC
From: Al Lorona <al_lorona@hp.com>
Message-ID: <3798D333.57A4@hp.com>
Source record: 68373

Roy Lewallen wrote:
>
> While I'm talking about batteries, I'll mention a bad experience I've
> had recently. I bought a couple of new Panasonic lead-acid batteries. I
> charged and discharged them once or twice to verify that they were ok,
> and used them once or twice for Field Day. After Field Day, I charged
> them and put them into a refrigerator. One year later, the voltage was
> around 12 volts, well above the self-discharge minimum as it should be.
> However, they drew very little current when charging, and their capacity
> was only a small fraction of normal. Repeated cycling and other testing
> shows that one cell seems to have gone bad. The batteries discharge
> more-or-less normally, but at a voltage about 2 volts less than rated.
> Two batteries have done this on separate occasions, after having been
> used only once or twice. The batteries are standard cyclic service
> types, not ones specially made for float use. I've been very pleased
> with Panasonic NiCd batteries over the years, but I won't buy their
> lead-acid batteries again. If you have any, I recommend that you cycle
> them before use to make sure they haven't failed.
>
> Roy Lewallen, W7EL
>

I thought I was the only one who had this happen to him. On two separate occasions over the last ten years, new deep cycle marine batteries purchased for Field Day use, when charged and stored away for several months, exhibited exactly the same phenomenon as Roy described above. I thought at the time that I had ruined them out of neglect. Maybe this still has something to do with it. At any rate, the failures played a big role in my switch to big Nicads, with which I've been very happy.

I was ticked off, as you can imagine, because those batteries are expensive. Is there a right way to store lead-acid batteries over a period of up to a year?

R,

Al W6LX

--

While you're passing out the spam, don't forget these guys:

admin@loopback
$LOGIN@localhost
$LOGNAME@localhost
$USER@localhost

$USER@$HOST
root@mailloop.com

Chairman William Kennard: wkennard@fcc.gov
Commissioner Susan Ness: sness@fcc.gov
Commissioner Harold Furchtgott-Roth: hfurchtg@fcc.gov
Commissioner Michael Powell: mpowell@fcc.gov
Commissioner Gloria Tristani: gtristan@fcc.gov
US Postal Service: customer@email.usps.gov
Fraud Watch: fraudinfo@psinet.com
Federal Trade Commission: consumerline@ftc.gov

1428. FS: ACCU KEYER MEMORY DELUX brand new mint $30.00

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-23 00:00:00 UTC
From: leevnptn <leevnptn@email.msn.com>
Message-ID: <#pBLk9U1#GA.400@cpmsnbbsa02>
Source record: 68374

SEE http://homepages.msn.com/RedmondAve/kira10/index.html

1429. Re: QRP Power Source

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-23 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19990723170818.10002.00000624@ng-fa1.aol.com>
Source record: 68375

>Subject: Re: QRP Power Source
>From: Al Lorona al_lorona@hp.com
>Date: Fri, 23 July 1999 04:40 PM EDT
>Message-id: <3798D333.57A4@hp.com>

wrote:

>I thought I was the only one who had this happen to him. On two separate
>occasions over the last ten years, new deep cycle marine batteries
>purchased for Field Day use, when charged and stored away for several
>months, exhibited exactly the same phenomenon as Roy described above. I
>thought at the time that I had ruined them out of neglect. Maybe this
>still has something to do with it. At any rate, the failures played a
>big role in my switch to big Nicads, with which I've been very happy.
>
>I was ticked off, as you can imagine, because those batteries are
>expensive. Is there a right way to store lead-acid batteries over a
>period of up to a year?
>
I don't know if there is a good way to store lead-acids for long periods of time. I do know that lead-acid wet cells can last decades in float charge service. Basically this consists of keeping them on a voltage-regulated charge that just compensates for their self-discharge.

73 de Jim, N2EY

1430. DDS signal generator project

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-23 00:00:00 UTC
From: Ham <hduff@ica.net>
Message-ID: <3798DE74.55B376F@ica.net>
Source record: 68376

I'm interested in building an AF/RF signal generator using a DDS.
Does anyone know of a kit or of any previously published projects
on this subject ?
I'm looking for something that is standalone...not connected to a PC.
The only thing I've come across is the "Julieboard" from one of the Ham
magazines several years ago. It used a Harris DDS but needed to be
connected
to a PC.

My features wish list:
- 0 Hz to > 30 MHz (the higher, the better) output frequency,
- At least 10 Hz resolution,
- LCD display frequency,
- Rotary encoder with pushbutton cursor control (digit operator) for
frequency selection,
- Variable (Programmable ? :) output level in dbm or V p-p.

Anyone ?
Please reply via email, I don't check the newgroups very often.
Thanks de Hugh VA3TO
hduff@ica.net or duffh@aecl.ca

1431. Re: Tracking/homing device or plans needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-23 00:00:00 UTC
From: Christopher Cox <cobox@urec.net>
Message-ID: <01bed554$47a64240$767f473f@cbx-nt>
Source record: 68377

>
> Check out your local hobby store for model rocket tracking
> transmitters. They're low power, but might serve your needs.
>

They also do not exist in the form that you are refering to. A bird tracking setup is probably the best bet, they they cost....$600 after it is all said and done.

Christopher Cox
Tripoli 4901
KC8FRJ

1432. Re: QRP Power Source

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-23 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37990DBE.F2CF4926@teleport.com>
Source record: 68378

Al Lorona wrote:
>
> I thought I was the only one who had this happen to him. On two separate
> occasions over the last ten years, new deep cycle marine batteries
> purchased for Field Day use, when charged and stored away for several
> months, exhibited exactly the same phenomenon as Roy described above. I
> thought at the time that I had ruined them out of neglect. Maybe this
> still has something to do with it. At any rate, the failures played a
> big role in my switch to big Nicads, with which I've been very happy.
>
> I was ticked off, as you can imagine, because those batteries are
> expensive. Is there a right way to store lead-acid batteries over a
> period of up to a year?

I have pretty complete technical information, including storage and charging recommendations, for the Panasonic batteries (as well as several other brands), and there's no mention of any problem with this treatment. All manufacturers recommend that you don't allow a six-cell (12 volt) battery to self-discharge below around 10 - 10.5 volts, and most will be permanently damaged if you do. The Panasonics, in fact, are claimed to be able to recover from even this treatment. A lead-acid battery should go for a year without self-discharging below the recommended minimum voltage unless it's at an elevated temperature for a good part of the time. In a refrigerator, there should be no problem at all. And this wasn't the problem, anyway -- mine never came near the recommended minimum voltage. You could leave a trickle charge on the battery, but according to the technical data, it would shorten the battery life. (Shorten it, that is, relative to what it should be.) And a trickle charger that doesn't have a correctly temperature compensated voltage can shorten the battery life even more, and quite dramatically, according to the manufacturers. I'm not sure that leaving a trickle charger connected would prevent this failure mode anyway.

I've had some old Gates cells for over 15 years that get used very occasionally, and typically get recharged about once a year. They're not even kept in the refrigerator, and I've never had any trouble with them. Only the Panasonics have done this to me. I'm sad to hear that others have this sudden failure mode also. Wonder if it's peculiar to liquid electrolyte systems or some particular construction method.

NiCds have their own set of problems, too, but they've gotten a lot more reliable over the years. The main thing to avoid with NiCds is cell reversal. When I fully discharge a NiCd battery, I never discharge more than four cells at a time, and terminate the discharge at one volt per cell to avoid this. One of the chief advantages of lead-acid batteries

is the low self-discharge rate. In an emergency, I can get the ones out of the refrigerator and expect to have most of their capacity available. (That is, unless they pull a Panasonic and die for no reason.) You have to fiddle with NiCds a lot more frequently to be assured they'll be ready when you need them.

Roy Lewallen, W7EL

1433. Re: QRP Power Source

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-23 00:00:00 UTC
From: "Al, N2NKB"
Message-ID: <7nb68b$f1l$1@bgtnsc03.worldnet.att.net>
Source record: 68379

The QRZ site has an interesting essay on lead acid batteries.
Al
http://qrz.com/files/library/

Roy Lewallen wrote in message <37990DBE.F2CF4926@teleport.com>...
>Al Lorona wrote:
>>
>> I thought I was the only one who had this happen to him. On two separate
>> occasions over the last ten years, new deep cycle marine batteries
>> purchased for Field Day use, when charged and stored away for several
>> months, exhibited exactly the same phenomenon as Roy described above. I
>> thought at the time that I had ruined them out of neglect. Maybe this
>> still has something to do with it. At any rate, the failures played a
>> big role in my switch to big Nicads, with which I've been very happy.
>>
>> I was ticked off, as you can imagine, because those batteries are
>> expensive. Is there a right way to store lead-acid batteries over a
>> period of up to a year?
>
>I have pretty complete technical information, including storage and
>charging recommendations, for the Panasonic batteries (as well as
>several other brands), and there's no mention of any problem with this
>treatment. All manufacturers recommend that you don't allow a six-cell
>(12 volt) battery to self-discharge below around 10 - 10.5 volts, and
>most will be permanently damaged if you do. The Panasonics, in fact, are
>claimed to be able to recover from even this treatment. A lead-acid
>battery should go for a year without self-discharging below the
>recommended minimum voltage unless it's at an elevated temperature for a
>good part of the time. In a refrigerator, there should be no problem at
>all. And this wasn't the problem, anyway -- mine never came near the
>recommended minimum voltage. You could leave a trickle charge on the
>battery, but according to the technical data, it would shorten the
>battery life. (Shorten it, that is, relative to what it should be.) And
>a trickle charger that doesn't have a correctly temperature compensated
>voltage can shorten the battery life even more, and quite dramatically,
>according to the manufacturers. I'm not sure that leaving a trickle
>charger connected would prevent this failure mode anyway.
>
>I've had some old Gates cells for over 15 years that get used very
>occasionally, and typically get recharged about once a year. They're not
>even kept in the refrigerator, and I've never had any trouble with them.
>Only the Panasonics have done this to me. I'm sad to hear that others
>have this sudden failure mode also. Wonder if it's peculiar to liquid
>electrolyte systems or some particular construction method.

>
>NiCds have their own set of problems, too, but they've gotten a lot more
>reliable over the years. The main thing to avoid with NiCds is cell
>reversal. When I fully discharge a NiCd battery, I never discharge more
>than four cells at a time, and terminate the discharge at one volt per
>cell to avoid this. One of the chief advantages of lead-acid batteries
>is the low self-discharge rate. In an emergency, I can get the ones out
>of the refrigerator and expect to have most of their capacity available.
>(That is, unless they pull a Panasonic and die for no reason.) You have
>to fiddle with NiCds a lot more frequently to be assured they'll be
>ready when you need them.
>
>Roy Lewallen, W7EL

1434. Re: QRP Power Source

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-23 00:00:00 UTC
From: Michael Young <nobody@all.org>
Message-ID: <932782855.415.33@news.remarQ.com>
Source record: 68380

There's a lot of information, some good but mostly bad, floating around about NiCd care. I used to be very active with R/C cars and helicopters, which use NiCds to power the control electronics. These are nitro powered beasts, unlike the electric cars you might be more familiar with. The engine keeps on running even after the controls are gone. For obvious safety and economic reasons, battery care is a very near and dear topic.

The best advice I've seen comes from a retired battery engineer and R/C enthusiast. He has a web page with this information, but I can't find the address in my bookmarks. I'll post it later if I find it. He explains and debunks the memory myth, among other things, and puts forth very simple procedures to lengthen the useful life of NiCds. Not surprisingly, much of it has to do with charging and storage. I first came across this information about five years ago, and my flight packs are still tip-top. Commonsense says I can replace the batteries once a year more cheaply than I can replace the model ($1800 invested in the airborne package). However, I have not needed to; they still test out fine after three years of use.

To paraphrase, NiCds should be stored with a full charge, and the charge topped gently for a short period every day. For weekly cycle use, such as weekend flying or operating, charge them fully before storing, and trickle charge them for one hour every twenty four hours. My flight packs take a fast charge at 2.5C. I charge them in the car on the way home from the flying field (about 20 minutes from full discharge, usually much less). When I get home and unpack the gear, the batteries go on a 50 mA trickle charger. The trickle charger is hooked to a simple $5 household timer; it turns on for one hour every day. This minimizes crystal formation and other problems that arise when the cells are partially discharged. The short time cycle also keeps them from overcharging; shorter trickle periods might be possible if you are concerned about this.

With that said, NiCds might not be the best solution for our radios. Other solutions, NiMH and Lithium Ion come to mind, offer better power density and better discharge characteristics. Strong vibrations, typical of model helicopters, will kill them, but maybe this isn't so important in our more fragile gear. Also, NiMH cells fail open when they go, killing the entire pack. NiCds take the mechanical abuse much better, and fail closed, allowing partial voltage if and when they die.

Anyway, that's food for thought. Cellphones and ricebox HT's moved away from NiCds some years ago. NiMH or lithium ion seem to me to be better choices for backpack rigs than gel cells or NiCds.

Michael.

1435. Visit hamradio-online.com - great stories and other info since 1995

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-23 00:00:00 UTC
From: Ed and Kim Mitchell <vbook@vbook.com>
Message-ID: <ZSam3.4125$VL2.432764@news.direcpc.com>
Source record: 68381
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

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Please pay us a visit and read some of current stories, such as "The Saving of Oleg" (a gripping true story), "EMF Researcher Fakes Data", The "Wanna Tinker" Construction project series, now at installment #18, and "Opinion: Marketing Amateur Radio". Plus, if you have not read it yet, check out the danger to Amateur Radio coming from home computer networks that use home telephone wiring - these horrible devices operate from 5.5 to 9.5 Mhz - right in the middle of the HF frequencies, spewing forth radio frequency interference and receiving it just as well. Unfortunately for ham radio, as of May 1999, they account for nearly 1 in 4 home computer networks now being installed.

I hope you can stop by and enjoy this web site. If you have a story to contribute, please send it along.
Thanks,
73, Ed, KF7VY
http://hamradio-online.com, since 1995

1436. Re: QRP Power Source

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-24 00:00:00 UTC
From: none@nowhere.com
Message-ID: <37996e22.7767823@news.squonk.net>
Source record: 68283

On 23 Jul 1999 21:08:18 GMT, n2ey@aol.com (N2EY) wrote:

>
>wrote:
>
>>I thought I was the only one who had this happen to him. On two separate
>>occasions over the last ten years, new deep cycle marine batteries
>>purchased for Field Day use, when charged and stored away for several
>>months, exhibited exactly the same phenomenon as Roy described above. I
>>thought at the time that I had ruined them out of neglect. Maybe this
>>still has something to do with it. At any rate, the failures played a
>>big role in my switch to big Nicads, with which I've been very happy.
>>
>>I was ticked off, as you can imagine, because those batteries are
>>expensive. Is there a right way to store lead-acid batteries over a
>>period of up to a year?
>>
>I don't know if there is a good way to store lead-acids for long periods of
>time. I do know that lead-acid wet cells can last decades in float charge
>service. Basically this consists of keeping them on a voltage-regulated charge
>that just compensates for their self-discharge.
>
>73 de Jim, N2EY

As to the cold storage - I've read through Powersonic's
manuals, and the best I can come up with is that they
shouldn't be stored in a high heat area, and shouldn't be
stored discharged. So the fridge should work OK.

But - from what I can tell, the longest storage life could
be obtained by connecting to a constant voltage source of
13.5-13.8 V (for a 12v battery, of course). This is the
recommended standby voltage, the battery will pull whatever
current it needs to maintain full charge without being
harmed at all. The voltage keeps the battery happy.

What I do:

Keep my gell's (powersonic, but I've used panasonic before)
connected to an old regulated 12v CB type 2A power supply.

Based on the literature, they should last several years this
way (powersonic claims 6-7, I've seen 5 as more realistic in
computer UPS's) Plus, the batteries are always 100%
whenever I need them.

Just random thoughts

1437. Help info on QB 4/1100

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-24 00:00:00 UTC
From: geoffg7rmg@aol.com
Message-ID: <19990724013340.10002.00000857@ng-fa1.aol.com>
Source record: 68284

Hello,I need some data on a Mullard PA valve(tube) type QB 4/1100,QY 4/400,many thanks.
Geoff G7RMG

1438. Ten-Tec 238 antenna tuner, HELP !

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-24 00:00:00 UTC
From: tubecntral@aol.com
Message-ID: <19990724034924.17085.00001048@ng-fs1.aol.com>
Source record: 68285

Hi, I have a nice Ten-Tec 238 antenna tuner....BUT (aarrrggH!) the dial cord is broken, and it looks like a bear to figure out where what-loops-where, etc. to replace it.
Does anyone have a dial-stringing diagram to share?
I got this from an estate, and could not locate the manual for it...perhaps the string diagram it is in there? Thanks in advance for any guidance in re-stringing and calibrating the dial scale back up.
Thank you,
Joe Pratt, Tubecntral@aol.com

1439. Re: DDS signal generator project

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-24 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <vjAMjBAOuWm3EwzH@falstaf.demon.co.uk>
Source record: 68286

In article <3798DE74.55B376F@ica.net>, Ham <hduff@ica.net> writes
There have been several VFO designs published in the UK based on an
Analog Devices DDS chip. They are all controlled by a PIC and looking
at the DDS data sheet I believe that programming it would be very easy.
The device that most people have used seems to do DC to 50MHz so you
should be able to get what you want. The only issue would be modulating
the output if you wanted AM or FM for alignment.

Rgds

Robin

PS, I believe that there was also a circuit published in QEX some time
ago using the same device
>ï¿½
>I'm interested in building an AF/RF signal generator using a DDS.
>Does anyone know of a kit or of any previously published projects
>on this subject ?
>I'm looking for something that is standalone...not connected to a PC.
>The only thing I've come across is the "Julieboard" from one of the Ham
>magazines several years ago. It used a Harris DDS but needed to be
>connected
>to a PC.
>
>My features wish list:
>- 0 Hzï¿½ toï¿½ > 30 MHz (the higher, the better) output frequency,
>- At least 10 Hz resolution,
>- LCD display frequency,
>- Rotary encoder with pushbutton cursor control (digit operator) for
>ï¿½ frequency selection,
>- Variable (Programmable ? :)ï¿½ output level in dbm or V p-p.
>
>Anyone ?
>Please reply via email, I don't check the newgroups very often.
>Thanks de Hughï¿½ VA3TO
>hduff@ica.netï¿½ orï¿½ duffh@aecl.ca
>ï¿½
>ï¿½
>ï¿½
>

Robin Birch robin@falstaf.demon.co.uk

M1ASU/2E0ARJ Old computers and radios always welcome

1440. Telescope brass tubing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-24 00:00:00 UTC
From: Peter Bolch <nc-bolchpe@netcologne.de>
Message-ID: <7nbs3r$3kn$1@news.netcologne.de>
Source record: 68287

Hi,

in the ARRL Microwave Experimenters Manual telescope brass tubing is
recommended for making cavity and interdigital filters. According to the
book this
tubing can be found in every hobby shop. I haven't seen something like this
here.
What is this tubing intended for originally? And what is it? Just tubes with
different diameter? Or really sets of telescopic tubes already slotted?

Peter

1441. Re: Help info on QB 4/1100

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-24 00:00:00 UTC
From: awn <samuel.morse@nomail.cpod.fr>
Message-ID: <01bed5b4$75954920$078127d4@f6awn.cpod.fr>
Source record: 68288

Good Morning Geoff,

this is a part of an information I gave in a past Megahertz Magazine,
in my chronicle "Les carnets d'Oncle Oscar". Hope to be of some help
..

73 from Francis, F6AWN/P (Qth : CAEN)

<<
Ce tube est une t�trode d'�mission de puissance en ampoule de verre et
culot m�tallique 5 broches, � monter verticalement. Son diam�tre est
d'environ 9 cm et sa hauteur d'environ 15 cm. Cette lampe permet
d'obtenir facilement une puissance alimentation maximum de 1400 Watts
jusqu'� 100 MHz, avec une haute tension maximum de 4000 V. Voici les
principales caract�ristiques de cette lampe :

Caract�ristiques de la QB4/100

Poids 190 g
Tension chauffage filament 5 V
Intensit� chauffage filament 14.1 A
Capacit� cathode-grille 1 12.7 pF
Capacit� grille 1-anode 0.12 pF
Conditions de fonctionnement en classe C :
Tension anodique en porteuse 4000 V maxi
Courant anodique 350 mA maxi
Puissance d'alimentation anode 1400 W maxi
Dissipation anodique 400 W maxi
Tension Grille 2 600V maxi
Dissipation grille 2 35 W maxi
Tension negative grille 1 -500 V maxi
Courant grille 1 25 mA maxi
Fr�quence maximum 110 MHz
Temp�rature de l'ampoule 350� C maxi
Temp�rature du connecteur d'anode 220� C maxi

GEOFFG7RMG <geoffg7rmg@aol.com> a �crit dans l'article
<19990724013340.10002.00000857@ng-fa1.aol.com>...
>
> Hello,I need some data on a Mullard PA valve(tube) type QB 4/1100,QY
> 4/400,many thanks.
> Geoff G7RMG
>

1442. Re: Tracking/homing device or plans needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-24 00:00:00 UTC
From: Robert Lyons <boblyons@umich.edu>
Message-ID: <3799AF16.7E196EB5@umich.edu>
Source record: 68289

Christopher Cox wrote:
>
> >
> > > Check out your local hobby store for model rocket tracking
> > > transmitters. They're low power, but might serve your needs.
> > >
> >
> > They also do not exist in the form that you are refering to.

Ummm - I've held them in my hand. It's a transmitter that you
put in the rocket, and a hand-held receiver that (in theory)
has a directional antenna for leading you to your wayward rocket.
As recently as a year ago, they were depicted in the Estes
catalog. Not that such a device would help the original poster
very much. I doubt the entire concept of using one to find the
way back to camp.

Bob, KI8AB

1443. Re: QRP Power Source

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-24 00:00:00 UTC
From: "KF4FDJ (Mike in Ft. Myers, FL)" <seven77@gate.net>
Message-ID: <3799AE85.FC1298D1@gate.net>
Source record: 68290

Michael and group,

> He
> explains and debunks the memory myth, among other things, and puts forth
> very simple procedures to lengthen the useful life of NiCds. Not
> surprisingly, much of it has to do with charging and storage.

I've been reading with fascination, "The Care and Feeding of Batteries,"
on this reflector.

Although NiCads have no memory as such, many times a NiCad will begin to
lose capacity, especially when stored at lower temperatures. A chain of
gas bubbles develops between anode and cathode, effectively creating a
circuit path which circumvents a great deal of the electrolytic,
rendering the battery capacity less than optimum.

Several years ago Popular Electronics magazine had an article on
building a NiCad zapper. The circuit essentially discharges a capacitor
across the battery terminals, and blasts the bubble traces away. We
built one of these at work back then and it worked on a good number of
seemingly dead cells.

I don't have one now, but have had good luck using a Piezo "zapper" to
do the same thing to my HT batteries. The piezo zapper is the
crystal/hammer contraption found in lighters, gas grill igniters, and
"patent medicine" pain zappers. A hammer strikes the "fire crystal,"
and causes it to give up a short duration high voltage (10,000 - 30,000
V) jolt. One camping manufacturer makes an easily cannibalized unit to
ignite their gas lanterns.

73, Mike in Fort Myers, FL

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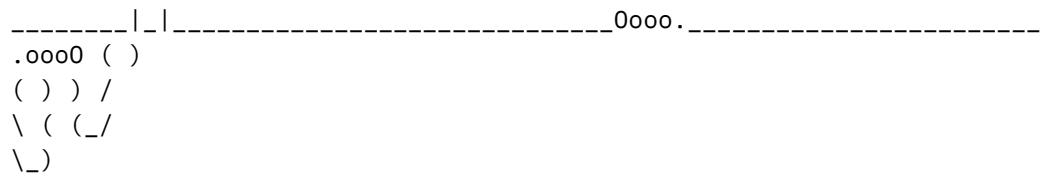
| |\| (o)(o) |/|
^ --- * -----------------.OOOo--oo--oOOO.------------------- *
||| | | * Mike Gilchrist - KF4FDJ ..... AMSAT Area Coordinator *
|X| | | * P.O. Box 763 .... AMSAT member #31884 *
[X]~~~|k| * Fort Myers, FL 33902 .... ARRL member #1781549 *
/ \ |f| * http://www.gate.net/~seven77 telephone 941.772.7907 *
| | |4| * kf4fdj@amsat.org .... EL96ap *
| P | |f| * I.S. Professional ..... CNA .... Computer Consultant *
| 3 |=|d| * AO10, AO27, FO20, FO29, RS13, RS15, MIR, E Layer *
| D | |j| * Bringing Oscar demos to the Lee County Schools. *
|_____|=| | *
/*X*\ | | * Black holes were created when God divided by zero. *



1444. Re: Telescope brass tubing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-24 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <3799B41F.4306@pop.valley.net>
Source record: 68291

Peter Bolch wrote:
>
> Hi,
>
> in the ARRL Microwave Experimenters Manual telescope brass tubing is
> recommended for making cavity and interdigital filters. According to the
> book this
> tubing can be found in every hobby shop. I haven't seen something like this
> here.
> What is this tubing intended for originally? And what is it? Just tubes with
> different diameter? Or really sets of telescopic tubes already slotted?

Hello--
Next to a small bin filled with chunks of balsa and basswood, our
local hobby shop features a small display of structural plastic
and metal strips and assorted shapes; the brass tubing comes in
various sizes that do indeed telescope together-- the tubes are solid
brass.

You might want to do an internet search for "hobby supplies"-- that may
turn up some leads to suppliers or even the vendor of the display. The
brass tubing sells for anywhere from $.50 to $1/50 per one-foot section.

73,
Brad AA1IP

1445. Re: Telescope brass tubing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-24 00:00:00 UTC
From: Dale Parfitt <parinc@bellsouth.net>
Message-ID: <3799C0C8.B3D9A724@bellsouth.net>
Source record: 68292

Peter Bolch wrote:

> Hi,
>
> in the ARRL Microwave Experimenters Manual telescope brass tubing is
> recommended for making cavity and interdigital filters. According to
> the
> book this
> tubing can be found in every hobby shop. I haven't seen something like
> this
> here.
> What is this tubing intended for originally? And what is it? Just
> tubes with
> different diameter? Or really sets of telescopic tubes already
> slotted?
>
> Peter

Hi Peter,

Most hobby shops carry a line of the tubing mfg. by K&S out of Chicago I
believe.
Also extensive tubing carried by Small Parts, Inc in Miami FL- they have
a 1-800 #.

Dale W4OP

1446. Re: Tracking/homing device or plans needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-24 00:00:00 UTC
From: Robert Lyons <boblyons@umich.edu>
Message-ID: <3799C40E.E33285BC@umich.edu>
Source record: 68293

Robert Lyons wrote:
>
> Christopher Cox wrote:
> >
> > >
> > > Check out your local hobby store for model rocket tracking
> > > transmitters. They're low power, but might serve your needs.
> > >
> >
> > They also do not exist in the form that you are refering to.
>
> Ummm - I've held them in my hand. It's a transmitter that you
> put in the rocket, and a hand-held receiver that (in theory)
> has a directional antenna for leading you to your wayward rocket.
> As recently as a year ago, they were depicted in the Estes
> catalog. Not that such a device would help the original poster
> very much. I doubt the entire concept of using one to find the
> way back to camp.
>
> Bob, KI8AB

Chris informs me that the "transmitter" I saw was probably a
piezoelectric sounder and the "receiver" for that is an amplified
mike. Guess I didn't look closely at it, assuming it was radio-
based. I'm blushing with embarrasment. :) - Bob, KI8AB

1447. Re: Help info on QB 4/1100

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-24 00:00:00 UTC
From: geoffg7rmg@aol.com
Message-ID: <19990724155500.10005.00001254@ng-fa1.aol.com>
Source record: 68294

Bon Soir Francis,
Merci beaucoup pour m'envovez des reseignements comme le tube QB4/!00,c'est parfait.Etes-vous QRV en
144mHz parceque je habite en Dorset loc IO80TU ,peut etre nous avons une QSO?Je vous remercie pour votre aide.
73's Geoff

1448. WTB Tektronix 485 Manual

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-24 00:00:00 UTC
From: Robin G3LBA <robin@g3lba.freeserve.co.uk>
Message-ID: <7nd9b0$f3l$1@news4.svr.pol.co.uk>
Source record: 68295

Anyone have an original Tek 485 service manual to sell. Robin G3LBA

1449. Re: Ten-Tec 238 antenna tuner, HELP !

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-24 00:00:00 UTC
From: daveiq0@aol.com
Message-ID: <19990724174846.27043.00000792@ng-cb1.aol.com>
Source record: 68296

I have always found the folks at Ten-Tec to be very helpful.Why not go to the source? 73, Dave

1450. Re: lost remote control robot car

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-24 00:00:00 UTC
From: "Al, N2NKB"
Message-ID: <7ndrod$jn1$1@bgtnsc02.worldnet.att.net>
Source record: 68297

Alan,
I think that it is very noble that you found this car and are looking
for the owner. There is a very good chance that the owner is an
amateur radio operator who is a homebrew, so don't feel bad
about posting in this newsgroup.
Typically amateur radio operators like to build gadgets, and they
have more privileges than "civilians" with radio control.
Al Rooney, N2NKB

Alan Eldridge wrote in message <37996DEF.FC2248CD@dragonbbs.com>...
>First off, if this hits the wrong newsgroup, I apologize. I'm not
>trying to deliberately spam everyone. <g>
>
>For reasons I'll keep to myself, I have a very expensive looking
>very sophisticated remotely controlled (radio) car. It has video
>on board and a bunch of other neat features. This is not something
>you would find at Radio Shack, we're talking custom suspension,
>balloon tires, etc.
>
>Anyway, I want to find the owner. More info, and pictures
>are at my web site at:
>
>http://www.dragonbbs.com/members/1009/lost_robot.htm
>
>No, I'm not trying to drive up my site count, or sell anything.
>
>Please note I have my real address on this...I'm just trying
>to help someone out who has lost a very expensive toy.

1451. Re: S-meters... Where do they go?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-24 00:00:00 UTC
From: "Samuel R. Edwards" <legendarydrooler@worldnet.att.net>
Message-ID: <379A86E6.501A@worldnet.att.net>
Source record: 68298

Gary Coffman wrote:
>
> On Tue, 13 Jul 1999 11:01:08 -0500, Rick Haub <rhaub@midwestmicro-tek.com> wrote:
> >Okay, I'm building the Mate to the Mighty Midget from a 1966 QST
> >magazine article. I want to add an S-meter to it and the design that I
> >have needs to be hooked into the AGC circuit, well the MMM doesn't have
> >an AGC. It does, however, have a 20k pot to manualy adjust the gain.
> >Where should I hook the S-meter into?
>
> No AGC, no S-meter. S-meters work by monitoring the AGC voltage,
> if you don't have AGC, then there's no AGC voltage to monitor. So
> if you want a S-meter, you're first going to have to add AGC to the
> receiver.

LOL!!!! No AGC = No S-Meter = TOTAL BS!!!
In case you idiots don't know u can get relative S-Meter readings from
the audio chain. Ain't the best S-Meter in the world but it
will probably work for the radio that he's talking about and give
him some kind of relative reading. What he needs to do is look
at the HW-8 mod books copy that circuit and give that a shot.
Saying No AGC = No S-Meter is plan old dumb.

1452. Re: QRP Power Source

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-24 00:00:00 UTC
From: Al Lorona <al_lorona@hp.com>
Message-ID: <379A9A58.2D46@hp.com>
Source record: 68299

KC2FCR wrote:
> But - from what I can tell, the longest storage life could
> be obtained by connecting to a constant voltage source of
> 13.5-13.8 V (for a 12v battery, of course). This is the
> recommended standby voltage, the battery will pull whatever
> current it needs to maintain full charge without being
> harmed at all. The voltage keeps the battery happy.
>

Hi, KC2FCR,

I've been led to believe that leaving a constant voltage on a lead-acid battery for months at a time will actually ruin the battery through a process called "sulfation". I believe this is where the useful plate area is reduced, which results in lowered capacity (A-h). So I've always been reluctant to try your technique.

It's a lousy feeling to pull out your deep cycle battery after a long time, charge it up, and go to use it only to find that everything seems okay, except that the terminal voltage is only 10 V. Like I said earlier, I finally got fed up with that and invested in 100 A-h nicads which now comprise my emergency power source. They're not the most portable battery, but today I left the solar panel on it all day and after fourteen hours of sunlight they're raring to go at a terminal voltage of 13.8 V. 100 A-h later, they will read 12.0 V on my voltmeter.

R,

Al W6LX

--

While you're passing out the spam, don't forget these guys:

admin@loopback
$LOGIN@localhost
$LOGNAME@localhost
$USER@localhost
$USER@$HOST
root@mailloop.com

Chairman William Kennard: wkennard@fcc.gov
Commissioner Susan Ness: sness@fcc.gov
Commissioner Harold Furchtgott-Roth: hfurchtg@fcc.gov
Commissioner Michael Powell: mpowell@fcc.gov
Commissioner Gloria Tristani: gtristan@fcc.gov
US Postal Service: customer@email.usps.gov

Fraud Watch: fraudinfo@psinet.com
Federal Trade Commission: consumerline@ftc.gov

1453. Re: FS Tube Substitution Handbook

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-24 00:00:00 UTC
From: Larry Asp <larry.asp@sympatico.ca>
Message-ID: <3798E2AC.38BE@sympatico.ca>
Source record: 68382

Larry Asp wrote:
>
> Radio Shack Tube Substitution Handbook 1980 publication. Actually a
> Howard Sams book with a RS jacket. $3.00 plus postage.

The book has been spoken for. Thanks to all who responded.

1454. Re: lost remote control robot car

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-25 00:00:00 UTC
From: "Laszlo I. Morocz" <kf4pv@spammenotlmorocz.com>
Message-ID: <01bed631$efaa2780$f4f11e26@p133>
Source record: 68300

Don't keep us in suspense. When you do get it back to the rightful owner,
tell us the whole story.

73 de Laszlo KF4PV
--
To reply, remove the text spammenot from the e-mail address.

Alan Eldridge <alan.eldridge@dragonbbs.com> wrote in article
<37996DEF.FC2248CD@dragonbbs.com>...
<snip>
> For reasons I'll keep to myself, I have a very expensive looking
> very sophisticated remotely controlled (radio) car.<snip>
> Please note I have my real address on this...I'm just trying
> to help someone out who has lost a very expensive toy.
>

1455. Re: Ten-Tec 238 antenna tuner, Thanks!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-25 00:00:00 UTC
From: tubecntral@aol.com
Message-ID: <19990724215720.20894.00001606@ng-fe1.aol.com>
Source record: 68301

Thanks to all who responded! Will have a diagram to work from soon...you guys are the best!

Thank you,
Joe Pratt, Tubecntral@aol.com

1456. Re: S-meters... Where do they go?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-25 00:00:00 UTC
From: Tony Hwang <2810311762@home.com>
Message-ID: <379AA1B6.ABA09940@home.com>
Source record: 68302

Hi,
One thing I know is audio output reading can be more accurate some
times.
When I work on beam antennas to set it up re: F/B ratio, gain, I plug a
VU meter into headphone jack of my RX after turning off AGC. Then using
a GDO at some distance as a reference signal, I trim or tune my antenna.
This is more dependable than AGC derived S-meter reading.

"Samuel R. Edwards" wrote:
>
> Gary Coffman wrote:
> >
> > On Tue, 13 Jul 1999 11:01:08 -0500, Rick Haub <rhaub@midwestmicro-tek.com> wrote:
> > >Okay, I'm building the Mate to the Mighty Midget from a 1966 QST
> > >magazine article. I want to add an S-meter to it and the design that I
> > >have needs to be hooked into the AGC circuit, well the MMM doesn't have
> > >an AGC. It does, however, have a 20k pot to manualy adjust the gain.
> > >Where should I hook the S-meter into?
> >
> > No AGC, no S-meter. S-meters work by monitoring the AGC voltage,
> > if you don't have AGC, then there's no AGC voltage to monitor. So
> > if you want a S-meter, you're first going to have to add AGC to the
> > receiver.
>
> LOL!!!! No AGC = No S-Meter = TOTAL BS!!!
> In case you idiots don't know u can get relative S-Meter readings from
> the audio chain. Ain't the best S-Meter in the world but it
> will probably work for the radio that he's talking about and give
> him some kind of relative reading. What he needs to do is look
> at the HW-8 mod books copy that circuit and give that a shot.
> Saying No AGC = No S-Meter is plan old dumb.

1457. Re: ARRL Simulation software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-25 00:00:00 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <7nee8g$pn5@nnrp2.farm.idt.net>
Source record: 68303

If you want to try out a "spice" type simulator then you may wish to check
out some of the low cost circuit simulation packages out there at the
following URLs:

AIM-SPICE
http://www.aimspice.com/

B2 SPICE Version 2
http://www.beigebag.com/b2spice2.htm

SPICE-IT from CAD-Migos Software Tools
http://www.beigebag.com/b2spice2.htm

CircuitMaker from Microcode Engineering
http://www.microcode.com/

Electronics Workbench from Interactive Image Technologies
http://www.interactiv.com/

TopSPICE from Penzar Development
http://www.penzar.com/topspice.htm

SpiceAge for Windows from "Those Engineers"
http://www.spiceage.com/spiceage.htm#spiceage

TINA PRO from DesignSoft Inc.
http://www.tina.com/

For a good student (limited in circuit size) check out these
URLs:

FTP site for Microcap V version 2 from Spectrum Software
Down load "demo.zip" Win95/98/NT program
http://www.spectrum-soft.com/down/

Full working evaluation version of ICAP/4 for Windows
from Intusoft
http://www.intusoft.com/demos.htm

-
Now if you want to try out some free spice circuit simulators
then check out these URLs:

FTP site with a copy of "spice3.exe"
ftp://ftp.demon.co.uk/pub/ibmpc/win95/apps/emulators

WinSpice3 for Windows (32 bit)
http://www.willingham2.freeserve.co.uk/winspice.html

Chipmunk System
http://www.pcmp.caltech.edu/chipmunk/
There are about 12 different computer systems/OS supported
including DOS/Win95 version on this site at:
http://www.pcmp.caltech.edu/chipmunk/pickup/platforms.html

For a free DOS based PCB layout program without any limits
(i.e. not a demo but was FULL DOS version) check out
Easytrax (DOS) freeware and DOS utilities on the Protel
site:
http://www.protel.com/?tab=sales&page=sales/main.htm&menu=Java

Please note that "Easytrax" is the name of the software package before
is was sold to Microcode Engineering (CircuitMaker). The package was
rewritten to run under windows and is sold as "TraxMaker" from
Microcode Engineering.

You can also check out this URL to see if you find anything of
interest. The web page has a collection of other CAD software
you may wish to try.

http://www.engr.unl.edu/ee/eeshop/cad.html

This should give you a good idea about what is out there. I myself use
the pro version of Microcap V at work, the DOS student version of
Microcap IV and the full Pro version of CircuitMaker at home.

73's,

Leland C. Scott
KC8LDO

ARRL member
NCI member

"You ask what Morse Code is good for? I'll tell you. Morse
Code is used exclusively by Electronics Based life forms to
communicate amongst themselves using advanced Organic
Digital Signal Processors, running state of the art Artificial
Intelligence Software, to perform the highly complex
transmit encryption, receive decryption and error correction
functions."

1458. WTB: EDDYSTONE 898 DIAL

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-25 00:00:00 UTC
From: kc5lhr@my-deja.com
Message-ID: <7nfhg2$1bf$1@nnrp1.deja.com>
Source record: 68304

Hello;

I am looking for an EDDYSTONE 898 DIAL or similar precision

multiband dial suitable for a homebrew receiver.

Bob, KC5LHR, Albuquerque

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1459. Wierd conditions on bands

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-25 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <379b6937.78804522@news.erols.com>
Source record: 68305

I noticed very poor conditions on 40 meters on Sunday morning. Those hams that I could hear all seemed to be talking about how bad conditions were. I went to some of the propagation pages on the Web, but was surprised to find them reporting normal HF prop conditions. See:

http://www.ips.gov.au/asfc/current/propobs.html

Then, around noon on Sunda7 (1600 GMT) I got on 20 CW with my HB QRP setup and worked K4IBZ in Florida (i'm in Virginia). Bill could hear my oscillator between keydowns! I measure only 15 milliwats out from the oscillator!

Can anyone explain these strange conditions?

Thanks, 73 Bill N2CQR

1460. FA: Warning!!! This is a spam!!!! Tubes!! Cheap!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-25 00:00:00 UTC
From: bendowers@aol.com
Message-ID: <19990725105853.09936.00001847@ng-cj1.aol.com>
Source record: 68306

600 non sorted, untested loose tubes on sale now on Ebay. Less then 10 hours left at time of this posting, and at a bid less than $.12 each. Don't let this one get by you.
Go to below to check out.
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=133561637

Also click on sellers other auctions to check out our other cb items for auction.

1461. Need schematic for Super Drive Cathode 4cx250

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-25 00:00:00 UTC
From: <>
Message-ID: <7nfev4anl2@news.tdl.com>
Source record: 68307

Trying to build HF Amp with 4cx250 in super driven cathode configuration.
Does anyone out there have a schematic? Also need power Xfmer 2200 volts.

Thanks

1462. Re: Help info on QB 4/1100

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-25 00:00:00 UTC
From: awn <samuel.morse@nomail.cpod.fr>
Message-ID: <01bed6bd$542dc000$188127d4@f6awn.cpod.fr>
Source record: 68308

Hello !

Happy to be of some help ...

Sorry for 144, only a pocket, and often in the box !
If you can enter in the local repeater (144.325 out / -600 in) ...

Just doing some QSO's on 7 MHz in CW ... with a dipole in the attic.

Just another thing : The QB4/1100 is a good choice to replace the
3-500Z, just some work to enlarge the hole of the base socket ... A
friend said me it's an indestructible tube.

73 and see you later, Geoff
Francis
F6AWN

GEOFFG7RMG <geoffg7rmg@aol.com> a crit dans l'article
<19990724155500.10005.00001254@ng-fa1.aol.com>...
> Bon Soir Francis,
> Merci beaucoup pour m'envovez des reseignements comme le tube
QB4/!00,c'est
> parfait.Etes-vous QRV en
> 144mHz parceque je habite en Dorset loc IO80TU ,peut etre nous avons
une QSO?Je
> vous remercie pour votre aide.
> 73's Geoff
>

1463. Re: QRP Power Source

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-25 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <7nfgo3$89l$1@autumn.news.rcn.net>
Source record: 68309

It probably depends on the particular battery type. All lead-acid batteries are not the same. I've looked at a couple of mfg recommendations for SLA batteries and they recommend a constant "float voltage" charge to maintain the battery. In fact, these batteries are often maintained that way for long periods of time in back up systems like a computer UPS.

> > But - from what I can tell, the longest storage life could
> > be obtained by connecting to a constant voltage source of
> > 13.5-13.8 V (for a 12v battery, of course). This is the
> > recommended standby voltage, the battery will pull whatever
> > current it needs to maintain full charge without being
> >
>
> Hi, KC2FCR,
>
> I've been led to believe that leaving a constant voltage on a
lead-acid
> battery for months at a time will actually ruin the battery through
a
> process called "sulfation". I believe this is where the useful
plate
> area is reduced, which results in lowered capacity (A-h). So I've
always
> been reluctant to try your technique.

1464. More free SPICE links (was - Re: ARRL Simulation software)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-25 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7nfknd$6gu$1@news1.fast.net>
Source record: 68310

```
-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

Also... check out the web page at:
http://saturn.uni-mb.si/~dogsa/rnv/f_free_spice.html
for another entire list of *FREE* SPICE implementations which can be
downloaded.

Some of the listings there may be, like the ones below, "demo"
versions, but many are
fully-functional, unlimited implementations ... and at least several
have extensive documentation.

73,
- --
Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI
Fellow, Radio Club of America
Senior Member, IEEE
Member, ARRL
Join NCI - Hams for the 21st Century!
Help modernize ham radio and assure its future survival!
http://www.nocode.org

Leland C. Scott <no-spam@junk-mail.net> wrote in message
news:7nee8g$pn5@nnrp2.farm.idt.net...
> If you want to try out a "spice" type simulator then you may wish to
check
> out some of the low cost circuit simulation packages out there at
the
> following URLs:
>
> AIM-SPICE
> http://www.aimspice.com/
>
> B2 SPICE Version 2
> http://www.beigebag.com/b2spice2.htm
>
> SPICE-IT from CAD-Migos Software Tools
> http://www.beigebag.com/b2spice2.htm
>
> CircuitMaker from Microcode Engineering
```

> http://www.microcode.com/
>
> Electronics Workbench from Interactive Image Technologies
> http://www.interactiv.com/
>
> TopSPICE from Penzar Development
> http://www.penzar.com/topspice.htm
>
> SpiceAge for Windows from "Those Engineers"
> http://www.spiceage.com/spiceage.htm#spiceage
>
> TINA PRO from DesignSoft Inc.
> http://www.tina.com/
>
>
- ---
- -----
> For a good student (limited in circuit size) check out these
> URLs:
>
> FTP site for Microcap V version 2 from Spectrum Software
> Down load "demo.zip" Win95/98/NT program
> http://www.spectrum-soft.com/down/
>
> Full working evaluation version of ICAP/4 for Windows
> from Intusoft
> http://www.intusoft.com/demos.htm
>
>
- ---
- -----
> -
> Now if you want to try out some free spice circuit simulators
> then check out these URLs:
>
> FTP site with a copy of "spice3.exe"
> ftp://ftp.demon.co.uk/pub/ibmpc/win95/apps/emulators
>
> WinSpice3 for Windows (32 bit)
> http://www.willingham2.freeserve.co.uk/winspice.html
>
> Chipmunk System
> http://www.pcmp.caltech.edu/chipmunk/
> There are about 12 different computer systems/OS supported
> including DOS/Win95 version on this site at:
> http://www.pcmp.caltech.edu/chipmunk/pickup/platforms.html
>
>
- ---
- -----

> For a free DOS based PCB layout program without any limits
> (i.e. not a demo but was FULL DOS version) check out
> Easytrax (DOS) freeware and DOS utilities on the Protel
> site:
> http://www.protel.com/?tab=sales&page=sales/main.htm&menu=Java
>
> Please note that "Easytrax" is the name of the software package
before
> is was sold to Microcode Engineering (CircuitMaker). The package was
> rewritten to run under windows and is sold as "TraxMaker" from
> Microcode Engineering.
>
>
- --
- -----
> ----
> You can also check out this URL to see if you find anything of
> interest. The web page has a collection of other CAD software
> you may wish to try.
>
> http://www.engr.unl.edu/ee/eeshop/cad.html
>
> This should give you a good idea about what is out there. I myself
use
> the pro version of Microcap V at work, the DOS student version of
> Microcap IV and the full Pro version of CircuitMaker at home.
>
> 73's,
>
> Leland C. Scott
> KC8LDO
>
> ARRL member
> NCI member
>
> "You ask what Morse Code is good for? I'll tell you. Morse
> Code is used exclusively by Electronics Based life forms to
> communicate amongst themselves using advanced Organic
> Digital Signal Processors, running state of the art Artificial
> Intelligence Software, to perform the highly complex
> transmit encryption, receive decryption and error correction
> functions."
>
>
-----BEGIN PGP SIGNATURE-----
Version: PGP for Personal Privacy 5.5.3

iQA/AwUBN5tV4pe+N6+q84HiEQIrhgCghUMVzN4/8RiHknN92Eq9OkvqPskAnixO
/+gAtTceV26cNoIKm23Eatnp
=jSrv

```
-----END PGP SIGNATURE-----
```

1465. Class E 160m PA ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-25 00:00:00 UTC
From: Philip de Cadenet <BigMobile@g4zow.freeserve.co.uk>
Message-ID: <sDF1SMA+D2m3EwRI@g4zow.freeserve.co.uk>
Source record: 68311

Hope someone on the ng can help me.

I recently received a re-print of the Comm's quarterly article describing a 10 dollar FET class-E 700w PA for 160m.

In this article it mentions that this unit had been in use for a couple of years and that it incorporated a class-S modulator for AM!

I E-mailed one of the publishers and was told he's no nearer publishing the modulator design than they were a year ago.

I'd like to build that modulator.

Has anyone worked with this design or are there any further sources of high efficiency modulators?

Tnx

Phil G4ZOW
http://www.bigradios.com - My favourite site.

1466. need info on Ballantine 323 true rms meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-25 00:00:00 UTC
From: Rod Davis <rdavis@abac.com>
Message-ID: <379B750F.DACDE61F@abac.com>
Source record: 68312

Hi All,

I need operatin information on a Ballantine 323 True RMS meter:

Does the operating manual suggest leaving the instrument in the battery
charge
position all the time?

What battery voltage range is normal/acceptable?

Thanks in advance,

Rod KM6SN

1467. WTB: Kenwood TS-130 or Similar HF RIG

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-25 00:00:00 UTC
From: tje@usol.com
Message-ID: <379c8795.15463153@news.usol.com>
Source record: 68313
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.boatanchors

Looking for a good used Kenwood TS-130 or similar HF rig. Physical condition not all that important as long as it works well. CW fiilter would be a plus bot not necessary. Please reply via email with what you and asking price.
--
Tim, K8TJ

1468. Re: DDS signal generator project

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-25 00:00:00 UTC
From: Kevin Gibson <kgibson@isl.net>
Message-ID: <379BA5D3.9E28AC0B@isl.net>
Source record: 68314

See the following URL for info on the WB2V DDS VFO/Signal Generator:

http://www.njqrp.org/ham-pic/projects.htm

--

N0KLV

------------== Posted via Newsfeeds.Com, Uncensored Usenet News ==----------
http://www.newsfeeds.com The Largest Usenet Servers in the World!
-------== Over 73,000 Newsgroups - Including Dedicated Binaries Servers ==-----

1469. Re: QRP Power Source

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-26 00:00:00 UTC
From: noone@nowhere.com
Message-ID: <379bdf6d.167399975@news.squonk.net>
Source record: 68315

On Sat, 24 Jul 1999 22:02:16 -0700, Al Lorona
<al_lorona@hp.com> wrote:

>KC2FCR wrote:
>> But - from what I can tell, the longest storage life could
>> be obtained by connecting to a constant voltage source of
>> 13.5-13.8 V (for a 12v battery, of course). This is the
>> recommended standby voltage, the battery will pull whatever
>> current it needs to maintain full charge without being
>> harmed at all. The voltage keeps the battery happy.
>>
>
>Hi, KC2FCR,
>
>I've been led to believe that leaving a constant voltage on a lead-acid
>battery for months at a time will actually ruin the battery through a
>process called "sulfation". I believe this is where the useful plate
>area is reduced, which results in lowered capacity (A-h). So I've always
>been reluctant to try your technique.

Actually, sulfation is what happens to a lead acid battery
that is connected to a constant voltage that is too low.
The charge process stops before the lead sulphate has been
removed from the plates. If the voltage is too high, the
water in the electrolyte breaks down, which for a gelled
battery is bad news, as it's sealed. Having the proper
voltage (13.5-13.8) is critical to keeping the battery
healthy....without a true regulated voltage source, you'd be
correct to be sceptical.

>
>It's a lousy feeling to pull out your deep cycle battery after a long
>time, charge it up, and go to use it only to find that everything seems
>okay, except that the terminal voltage is only 10 V. Like I said
>earlier, I finally got fed up with that and invested in 100 A-h nicads
>which now comprise my emergency power source. They're not the most
>portable battery, but today I left the solar panel on it all day and
>after fourteen hours of sunlight they're raring to go at a terminal
>voltage of 13.8 V. 100 A-h later, they will read 12.0 V on my voltmeter.
>
>R,
>
>Al W6LX

Just random thoughts

1470. Pro-2009 help needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-26 00:00:00 UTC
From: Bill Crann <bcrann@nf.sympatico.ca>
Message-ID: <379bdb4b.0@209.128.1.3>
Source record: 68316
Cross-posted to: alt.radio.scanner,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.scanner

I have a RS Pro-2009 8CH scanner. It has developed a problem. It will not stop scanning automatically. The squelch control will not stop the scanner from scanning no matter how low you set it. You just here all the stations while it is scanning. While it is scanning you will hear a second of audio then you have to hit the manual key to find out which station is active. It receives fine but it is very annoying having to use the manual key to stop the scanning. It doesn't sound like it anything very serious. Can anyone help me??? Thanks for your time.

This has been crossed posted on the following: alt.radio.scanner, rec.radio.amateur.equipment, rec.radio.amateur.homebrew, rec.radio.scanner. SORRY :-)

Bill

1471. 6AF11 Compactron homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-26 00:00:00 UTC
From: abcd1234 <abcd1234@ix.netcom.com>
Message-ID: <7nhkp5$3un$1@news1.exit109.com>
Source record: 68317

there is this compactron tube 6AF11 available at reasonable cost from AES:

1 pentode (22 mA Ip)

1 hi mu triode

1 med mu triode

any ideas about homebrew or any published designs for this tube :-

like

1. regen RX using 1 6af11
low mu = regen detector
hi mu triode + pentode as audio stages

2. superhet using 2 6af11
6af11 no 1
pentode = RF amp
low mu triode = mixer like in R390a
hi mu triode = oscillator

6af11 no 2
pentode IF amp @ 5.18 Mhz use 1n4007 gate for AGC
hi MU triode = BFO
diode balanced detector for SSB
low Mu triode as audio amp , drives headphones

Should work very well on 80m and 40m and provide atleast 120db+ gain

3. 2 6AF11 PP audio amp about 6 watts out

1472. Re: voice recorder

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-26 00:00:00 UTC
From: Tim <ka8ddz@worldnet.att.net>
Message-ID: <379C6587.E7C22E7C@worldnet.att.net>
Source record: 68318

RS sells the chip set for about $20

">>>Snokid<<<" wrote:

> I'm looking for something simple I think....I want to build a digital voice
> recorder/playback device like MFJ sells...any help?
>
> thanks Bob
> KB8VRU

1473. Re: Repeater Controller

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-26 00:00:00 UTC
From: The Martell's <mike-n-terri@erols.com>
Message-ID: <379C6BB4.5E7FB381@erols.com>
Source record: 68319

hijacker@spray.se wrote:

> Hi!
>
> I was wondering if someone has a nice circuit for a
> repeatercontroller with a pic16f84?
> Please mail me a link/pic with it if you do.
>
> Thanks / John, sm0whq
>
> Sent via Deja.com http://www.deja.com/
> Share what you know. Learn what you don't.

Try http://www.nhrc.net/, he sells kits, I bought/built an NHRC-4, nice
& compact.

Mike..KA1IFQ.

1474. Re: EDDYSTONE 898 DIAL

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-26 00:00:00 UTC
From: John Mortlock <jmort@global.freeserve.co.uk>
Message-ID: <7ni1d6$j7e$1@news7.svr.pol.co.uk>
Source record: 68320

I think I have a new unused Eddystone 898 dial packed away.
I got it for a project and never got round to using it.
I have no idea what it might be worth ??.

If your interested I'll try to dig it out.

John G3UGY

kc5lhr@my-deja.com wrote in message <7nfhg2$1bf$1@nnrp1.deja.com>...
>Hello;
>
>I am looking for an EDDYSTONE 898 DIAL or similar precision
>
>multiband dial suitable for a homebrew receiver.
>
>Bob, KC5LHR, Albuquerque
>
>
>Sent via Deja.com http://www.deja.com/
>Share what you know. Learn what you don't.

1475. latching circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-26 00:00:00 UTC
From: drmarc@wwa.com
Message-ID: <LO%m3.416$XM5.11418@ord-read.news.verio.net>
Source record: 68321

I need recommendations for a latch circuit.

Want the input to latch to come from the drive of the audio output of a 2-meter rig (I guess any audio output would be the same)so we are talking maybe 1.5 V

I want the latch to stay on once triggered and can be reset by momentary switch to ground or something similar. I do NOT want a circuit that will contstantly latch and reset for each trigger. I imagine a simple IC would do most of it.

Marc Schneider, Psy.D.
e-mail to: <drmarc@wwa.com>
(call sign: W4NVY)

1476. Batteries for Portable Use

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-26 00:00:00 UTC
From: "Dr. Robert Suding" <robert@qadas.com>
Message-ID: <379C8E55.3C8286E8@qadas.com>
Source record: 68322

Lead batteries (wet, gel or solid) are voltage charged. This means that the charging voltage is held constant and the battery's voltage rises until it matches the charging voltage. As the battery's voltage approaches the charging voltage the current tapers off to near zero. A 12v lead based battery is charged to around 14.5 volts.

When the battery voltage measures 14.5 volts, the charging voltage is reduced to around 13 volts, called a "Float" value. Most good batteries will float at about 13.25 volts indefinitely, thus seeing no charge. Should the battery voltage fall below 13 volts, the 14.5 volt charge is reapplied.

Most wallwart 1 amp lead trickle chargers keep charging away, and drastically shorten the life of the lead battery. By putting a couple of series diodes in the + lead (include a shorting switch for full charge) the wallwart's output voltage can be trimmed back to provide the float charge manually.

Full charge of a lead battery is ~13.25 volts and end of charge is ~11 volts. Replace the battery when it does not keep the 13.25 volts for a couple of days off the charger.

Nicad batteries are current charged. A typical wallwart nicad charger delivers a higher voltage dropped through a fixed resistor that sets the average current throughout the charge period to around the C/10 value mentioned by W7EL. As the battery is charged, its terminal voltage rises but the current stays somewhat constant. Nicads are traditionally charged for about 16 hours at this C/10 rate. After the battery is fully charged, any further charge is converted to heat (BAD, BAD, BAD!) When a nicad battery reaches 120 degree F (not uncommon on a hot day outside), it loses 40% of its capacity, and does not recover this capacity completely after cooling.

A new nicad pack will lose its charge in ~ 1 month. To prevent overheating after reaching full charge, yet maintain the full charge level, the nicad pack should be put on a "Trickle" charge which just replaces the energy lost due to self discharge. This is commonly set to C/50, though new batteries lose less and could be set to C/200 just as well. The nicad's wallwart could have a resistor (with a shunting switch for full charge) added.

A fully charged nicad pack will measure about 1.45 volts/cell. End of life is 1.2 volts/cell. Legally dead is 1.1 volts/cell, but the amount of time during use between 1.2 volts/cell & 1.1 volts/cell or less is often measured in minutes due to the rapid down slope of the "death curve", which starts at 1.175 volts on a new battery!

As nicads age, the end of charge terminal voltage goes up, often exceeding 1.5 volts/cell, as does the initiation of the "death curve" point to about 1.225 volts/cell. The inter plate insulation inside the cell also breaks down and the battery self discharges faster, and will eventually short out if not maintained on a trickle charge.

I replace the nicad pack if the full charge voltage while on trickle charge exceeds 1.5 volts, or if the battery does not maintain >1.2 volts/cell when left to self discharge for 1 week.

Metal hydride batteries are operationally similar to nicads, except that they self discharge in 2 weeks.

For more information and diagrams, you can access my battery seminar notes that I use at the Toledo R/C show each year at

http://www.ultimatecharger.com

Dr. Robert Suding W0LMD
Conifer, Colorado

1477. Re: Wierd conditions on bands

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-26 00:00:00 UTC
From: Butch Magee <butchkay@netdoor.com>
Message-ID: <379CAFF0.E810F837@netdoor.com>
Source record: 68323

It's FM Bill, what can I say!

Butch KF5DE

Bill Meara wrote:

> I noticed very poor conditions on 40 meters on Sunday morning. Those
> hams that I could hear all seemed to be talking about how bad
> conditions were. I went to some of the propagation pages on the Web,
> but was surprised to find them reporting normal HF prop conditions.
> See:
>
> http://www.ips.gov.au/asfc/current/propobs.html
>
> Then, around noon on Sunda7 (1600 GMT) I got on 20 CW with my HB QRP
> setup and worked K4IBZ in Florida (i'm in Virginia). Bill could hear
> my oscillator between keydowns! I measure only 15 milliwats out from
> the oscillator!
>
> Can anyone explain these strange conditions?
>
> Thanks, 73 Bill N2CQR

1478. Re: Batteries for Portable Use

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-26 00:00:00 UTC
From: davem@groucho.cs.ubc.ca
Message-ID: <7niel6$hgh@groucho.cs.ubc.ca>
Source record: 68324

robert@qadas.com writes:

>Most wallwart 1 amp lead trickle chargers keep charging away, and
>drastically shorten the life of the lead battery. By putting a couple
>of series diodes in the + lead (include a shorting switch for full
>charge) the wallwart's output voltage can be trimmed back to provide the
>float charge manually.

It's also possible to get charge controller IC's specifically intended
for lead-acid battery charging. For example, I have one that charges
in 3 phases: First, it charges at a maximum current (current limit
set by choosing a resistor) until the voltage rises to about 14.6 V.
Then it maintains a constant 14.6 V across the battery while the charge
current drops to some lower value, perhaps 1/4 of maximum (set by another
resistor). Then it reduces the voltage to 13.65 V (adjusted by a pot)
for indefinite float charging.

On top of this, it's specifically designed to deal with loss of input
voltage to the charger circuit while the battery is still connected:
nothing is damaged, and battery drain is limited to 50 ua. Many regulated
power supplies either blow the pass transistor (too much base-emitter
reverse voltage) or drain the battery rapidly if the AC input power fails.

Dave

1479. Re: UN to Tax Internet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-26 00:00:00 UTC
From: William Ricker <wdr@world.std.com>
Message-ID: <FFHvDo.MGt@world.std.com>
Source record: 68325

> Read the agency's own press release about it at
> <http://www.undp.org/hdro/E3.html>

(1) Note that the report there does not say a penney per email, but one percent of that

"The Report suggests a "bit tax" on data sent through the Internet. A tax of one US cent on every 100 lengthy e-mails [electronic messages] would generate well over $70 billion a year."

That's $0.0001 per message -- if our messages really our our 2-cents worth, that's half of one percent :-) . Even the most prolific of us could afford this. It might mean mailing lists would have to have microcash subscription fees, or convert to newsgroup format so recipients were taxed on receipt.

This would be a global solution to SPAM though -- evastion of the email tax would be a major crime, but emailing to 6million addresses would be expensive if they didn't evade.

(2) A development agency report discussing a worthwhile but expensive goal (global minimal connectivity) suggesting a viable and reasonably painless funding mechanism to demonstrate affordability is not quite the same thing a a proposal for a tax. Connecting the rest of the world to the world wide web is wasteful? One of the better sounding proposals of out of the U.N., I'd think. Far better than digging arsenic laced wells in Bangladesh.

If you look closely, this in reallity would be a bandwidth utilization tax, much like you already have in your phone bills to help fund minimal phone service for rural folks and urban poor so 911 is everywhere.

--
Bill Ricker N1VUX wdr@world.std.com "The freedom of the press belongs
http://world.std.com/~wdr to those who own one."--A.J.Liebling

1480. Re: How built a Duplexer Home made ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-26 00:00:00 UTC
From: "Gary \"Joe\" Mayfield" <ka0yos@amsat.org>
Message-ID: <7nj4l1$b82$1@news.dakota.net>
Source record: 68326

The RSGB book has some info.

Also, QST had an article years ago using copper clad circuit board material.
Reprints are available from the ARRL.

73 and Good Luck,
Joe ka0yos

Doug Younker <dougy@ruraltel.net> wrote in message
news:3790357F.2082@ruraltel.net...
> Gervais Fillion wrote:
> >
> > Hi ,thanks for reading. I wonder is there some way to built an home made
> > Duplexer for the 2 meters band? is there something on the WEB about it?
i
> > found some infos in the ARRL Antenna Book but elsewhere??????
> >
> > thanks for any help!
> >
> > Gervais
> > ve2ckn
> > ve2ckn@rac.ca
>
> I think I recall the "other" amateur radio hand book had some details on
> a duplexer. Damned if I can recall the book's authors name
>
> --
> 73, Doug Younker N0LKK
> Near Plainville,KS
> dougy@ruraltel.net
>

1481. To Good Home: Non-Working Cordless Phones (2) for Parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-26 00:00:00 UTC
From: Mick the Cat <mick@thecat.com>
Message-ID: <379D49ED.34CD8061@thecat.com>
Source record: 68327

Hello
I'd hate to have to just trash these things... They're yours if you're willing to pay postage. Check them out at (no takers on eBay... thought I was going to be rich for a sec there):

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=107821549

If interested please email me at
rodger.eSPAMSUCKS@worldnet.att.net
(Please remove the word 'SPAMSUCKS' to send to this address. Do not reply to this posting.)

Thanks
Roger E.

1482. Small business without sales and bad credits!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-27 00:00:00 UTC
From: Deira <sergey@deira.dp.ua>
Message-ID: <BzPbQdt4cO@deira.dp.ua>
Source record: 68233

Have you dreamed about own business without taxes, laws, sales, equipment
and bank credits? How could this be real?

Look at http://www.fl-eldorado.cx

FLE ID: 38026738

New form of business just for you.

1483. Need VBJANT.ZIP

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-27 00:00:00 UTC
From: af389@lafn.ORG
Message-ID: <379DBF3D.D803AC4A@lafn.org>
Source record: 68234

Hi,

I need a software file called VBJANT.ZIP that I saw refered to
in a HAM newsgroup some time ago. It contains antenna designing info and
some info about a "440 resonator" that can be built. I am after the 440
resonantor info. Sorry, cannot be more specific about the "440
Resonantor", that is how it appears in my notes. My notes tell me to
"GET IT".

My search for the package on the Internet has not produced any results.
Does anyone recognize this file and know where I can find again?

Thanks and 73, W6MIK
--
David Shalita (Dave)
af389@lafn.org
Van Nuys, CA

1484. 12AU7 replacement?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-27 00:00:00 UTC
From: drbob92031@aol.com
Message-ID: <19990727104735.16969.00002141@ng-fo1.aol.com>
Source record: 68235

Hi;
Does anyone know of any replacements(substitutions) for the 12AU7 tube ?
Tnx de WA2EAW...Bob...<WA2EAW@AOL.COM>

1485. What is UHF and VHF

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-27 00:00:00 UTC
From: nova <nova@kaunas.aiva.lt>
Message-ID: <01bed8e3$794b33e0$87f7dbc1@www.aiva.lt>
Source record: 68236

What is UHF and VHF?
nova

1486. Re: Batteries for Portable Use

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-27 00:00:00 UTC
From: Boatanchor Bob NA4G <na4g@weedcon2.cropsci.ncsu.edu>
Message-ID: <7nkhsh$j18$1@uni00nw.unity.ncsu.edu>
Source record: 68237

Dr. Robert Suding <robert@qadas.com> wrote:
> Lead batteries (wet, gel or solid) are voltage charged. This means that
> the charging voltage is held constant and the battery's voltage rises
> until it matches the charging voltage. As the battery's voltage
> approaches the charging voltage the current tapers off to near zero.
> A 12v lead based battery is charged to around 14.5 volts.

For the sake of discussion, I will differ with you.

Any chargeable battery can be current charged, if you know the proper
current charging values to use.

I prefer to charge lead, wet nicad, or nickel-iron batteries
by traditional current charging methods that go back to the turn
of the century. Most of the time I cyclic charge, but sometimes
I float charge, all by current based methods.

Voltage charging will work, but you have to be very careful in
doing it, to put enough charge back into the battery, to replace
lost charge from use, from sulphation, and from leakage currents.
Failure to do this will slowly reduce the charge capacity of the
battery. More often than not, batteries that lose charge capacity,
in non-automotive use, are repeatedly UNDERCHARGED, in recent years.
One really needs to schedule recharge according to use patterns, and
not just a fixed voltage level, or long-term undercharging can occur.

The typical value that I use for floating charging on wet cells is C/400.

The typical value that I use for cyclic recharging is between C/10 for
12 hours to C/7 for 10 hours. That allows for a 20-30% overcharge,
under current charging parameters to allow for topping off the charge
due to heat dissipation losses. It is correct to never recharge
batteries at such current that they retain heat buildup beyond slightly
warm to the touch. If they feel hot, your recharge is at too high
a current, or if localized heating occurs, one or more individual cells
may have problems (usually dryness on ``sealed'' cells). The actual
overcharge values required can vary from 10% to 30%, depending upon
battery type, manufacturers' recommendations, practical considerations,
and charge useage patterns. It is correct to overcharge batteries
by minimally 10% on cyclic recharging, to insure full charge is taken
by the battery.

The typical value that I use for topping off recharging in standby
cyclic mode is C/10 for 3-5 hours. That is done about every 3 or 4
months to refresh the cells.

All rechargeable batteries should be cycle discharged once a year,
under expected use load, and then recharged at cyclic values.
Failure to do that will reduce the charge delivery capability of
most lead batteries. The so-called ``maintenance free'' or sealed
lead acid types are the worst of the lot in this regard.

Properly handled, charged, and used, batteries can last a long time.
For example, my banks of wet nicads are around 25-30 years old, and
still perfectly fine. They were surplus when I got them, 20 years ago,
and are in daily use. My nickel-iron cells are WWII era, and still
usable, although the wooden frames are beginning to deteriorate.
Most of my lead batteries are 10 years old or more, and still strong.
Most of my ``sealed'' lead batteries are approaching 7 years old,
and still strong.

Good Luck, and keep the batteries fresh! They are a great way to
run ham radio gear.

Bob/NA4G

1487. Re: 12AU7 replacement?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-27 00:00:00 UTC
From: tubecntral@aol.com
Message-ID: <19990727111631.20888.00002660@ng-fe1.aol.com>
Source record: 68238

>Hi;
> Does anyone know of any replacements(substitutions) for the 12AU7 tube ?

Sheesh, there are so many.
Here are some, I have most of these if needed....

5814 / 6670
ECC 82
5963
6067
6189
6680
7316
7489
7730
CV 4003
12AU7 A
12AU7 WA
M 8136 Cheers! Joe Pratt,
Tubecntral@aol.com

>Hi;
> Does anyone know of any replacements(substitutions) for the 12AU7 tube ?
>Tnx de WA2EAW...Bob...<WA2EAW@AOL.COM>
>
>
>
>
>
>

Thank you,
Joe Pratt, Tubecntral@aol.com

1488. Homebrewers Chat Room Now Open

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-27 00:00:00 UTC
From: Spencer Lazar <slazar19@sgi.net>
Message-ID: <379E1666.D29@sgi.net>
Source record: 68239

Greetings Homebrewers,

Homebrewers chat room now open on:

http://www.qth.com/stamper/search/bafoofnik.htm

Please enjoy your visit!

73, Spike W9XR

1489. Re: 12AU7 replacement?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-27 00:00:00 UTC
From: Jonesy <jonz@rmi.nospam.net>
Message-ID: <7nkqie$r7a$2@news1.rmi.net>
Source record: 68240

Drbob92031 <drbob92031@aol.com> wrote:
> Hi;
> Does anyone know of any replacements(substitutions) for the 12AU7 tube ?
> Tnx de WA2EAW...Bob...<WA2EAW@AOL.COM>

Well, if it's in a non-critical circuit, a 12AT7 or 12AX7 should serve.
The 12AT7's are/were rather 'prolific'.

gl es 73
Jonesy W3DHJ

--
SK
--
Marvin L. Jones jonz<AT>rmi.net
Gunnison, Colorado
157 days to go until the Year 2000 -- So what!
523 days to go until the 3rd Millennium of the C.E.

1490. Re: Heat strippable magnet wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-27 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <7nkqmugpb1@uranium.btinternet.com>
Source record: 68241

If you are referring to what is known as self-fluxing enamelled copper wire then your previous attempts to use it may have been unsuccessful due to a relatively low soldering iron bit temperature.

You need a very hot iron, one you could almost use as a cigarette lighter. Resin cored solder is still necessary. And be quick about it.

Do not use much of it in a poorly ventilated room - the fumes are toxic.

It saves the trouble of tediously scraping the enamel off wires with a razor blade before wrapping them around soldering tags, or whatever else provides the mechanical termination.

I am under the impression most recently manufactured enamelled copper wire has this type of self-removing insulation. The wire manufacturer's or suppliers specification may give some info. Its really good stuff with a very hot iron.
--
Regards, Reg G4FGQ Click Below.
http://www.btinternet.com/~g4fgq.regp

1491. Re: FS Earphones

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-27 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <7nkqn0gpb2@uranium.btinternet.com>
Source record: 68242
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

For Xtal sets they have to be very high impedance such as 2000 ohms or greater. The 8 or 16-ohm things are useless. They need an amplifier and battery.

What impedance are they ? A resistance check with a multi-range DC meter is a good guide. I would be interested in a small quantity if 1.5K-ohms or more.
--
Reg G4FGQ

1492. Re: Heat strippable magnet wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-27 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <379DF4A9.61BD8F90@teleport.com>
Source record: 68243

I don't know, either, where you can get it, but it was common where I used to work. One tip when you do find some: Use a hot iron. It strips much better with a 700 - 800 degree F tip temperature (or a solder pot) than with a cooler one.

Roy Lewallen, W7EL

Troglodite wrote:
>
> >
> >Some time ago, there was a suggestion here to use magnet wire for
> >breadboarding, and just burn the insulation off with the iron. I bought
> >some RS junk, and was disappointed that it didn't quite do what I was
> >hoping it would do (not a surprise from RS). Does anyone know who makes
> >the right stuff, and what they call it?
>
> I believe it's called "Strip-Ease" (or possibly "Solder Ease") and is made by
> Belden among others. Used to use it to wire couplers in pipe organs - haven't
> used any in years, but it should still be available.
>
> Doug Moore

1493. Re: What is UHF and VHF

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-27 00:00:00 UTC
From: Robert Lyons <boblyons@umich.edu>
Message-ID: <379DF28C.4E5A7032@umich.edu>
Source record: 68244

nova wrote:
>
> What is UHF and VHF?
> nova

UHF is Ultra High Frequencies, generally considered to be 300-3000 MHz
VHF is Very High Frequencies, 30-300 MHz.

Bob, KI8AB

1494. 3C33 tube sought...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-27 00:00:00 UTC
From: tubecntral@aol.com
Message-ID: <19990727135744.26510.00001931@ng-co1.aol.com>
Source record: 68245

Hi, Homebrewers, I need one NOS, original box 3C33 tube, should be RCA JAN...however, if you have an exactly alike pair of different-branded 3C33 NOS, that too may be acceptable. Please respond privately via email...
Sorry to use this bandwidth to find one, but I need to use all resources for a project....

Thank you,
Joe Pratt, Tubecntral@aol.com

1495. Re: What is UHF and VHF

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-27 00:00:00 UTC
From: Jonesy <jonz@rmi.nospam.net>
Message-ID: <7nkuu5dd1@news1.rmi.net>
Source record: 68246

nova <nova@kaunas.aiva.lt> wrote:
> What is UHF and VHF?
> nova

Well, 'traditionally':

VHF is Very High Frequency and is the range 30 mcs to 300 mcs
UHF is Ultra High Frequency and is the range 300 mcs to 3,000 mcs

This was all 'established' back in the days when 300-3000 mcs seemed
"ultra impossible"
"ultra difficult"
"ultra useless"
and when music was pleasant to listen to... :-)

73
Jonesy W3DHJ
--
Marvin L. Jones jonz<AT>rmi.net
Gunnison, Colorado
157 days to go until the Year 2000 -- So what!
523 days to go until the 3rd Millennium of the C.E.

1496. Re: Heat strippable magnet wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-27 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <ahy1DFAqCgn3Ewc4@ifwtech.demon.co.uk>
Source record: 68247

Reg Edwards wrote:
>If you are referring to what is known as self-fluxing enamelled copper
>wire then your previous attempts to use it may have been unsuccessful
>due to a relatively low soldering iron bit temperature.
>
>You need a very hot iron, one you could almost use as a cigarette
>lighter. Resin cored solder is still necessary. And be quick about it.
>
>Do not use much of it in a poorly ventilated room - the fumes are
>toxic.
>
>It saves the trouble of tediously scraping the enamel off wires with a
>razor blade before wrapping them around soldering tags, or whatever
>else provides the mechanical termination.
>
>I am under the impression most recently manufactured enamelled copper
>wire has this type of self-removing insulation. The wire
>manufacturer's or suppliers specification may give some info. Its
>really good stuff with a very hot iron.

It seems to strip more easily if you do scrape the wire just enough to bare some copper, and also hold the wire inside a blob of solder on the end of the iron (unless you have a solder pot). Both tricks improve the heat transfer, I suppose.

Also, don't try to strip a wire while soldering it to a PCB track. If the iron is hot enough to strip the enamel, it will probably damage the track before the wire comes clean.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

1497. Re: Heat strippable magnet wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-27 00:00:00 UTC
From: James Horn <jimhorn@svn.net>
Message-ID: <379e1231.0@news1.svn.net>
Source record: 68248

Thermally stripping magnet wire is a nuisance - you need a sufficiently hot iron but not so hot as to oxidize its tinning quickly. I've used an 800F temperature controlled Weller (425C) and *fine* (30 - 32 AWG / 0.20 - 0.25 mm) wire. Putting the end of the wire into a molten blob does help, as stated earlier. Wait a coupla seconds and you'll see the enamel bubbling / withdrawing from the end. Yes, it does make a stink.

That's the bad news. As I posted a week or two ago, it *does* work well, fairly quickly, and reliably. With some care in routing to prevent crosstalk, I've had both analog and digital prototypes as well as "green wired" printed circuit boards (i.e. corrected traces) work fine for decades now. Still works fine for .5mm pitch TSOPs, etc.

An alternative, which I usually use now for green wiring, is to use wire wrap style wire (green, to 'blend in' with the PCB) with the ends stripped. NoNix or similar strippers make that as fast and even more rugged. Less smelly, too.

Either way, do enjoy your project building!

Jim Horn WB9SYN/6

1498. 12 v.d.c. - need help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-27 00:00:00 UTC
From: "L. Dreadon" <ldreadonNOSPAM@rpindustries.com>
Message-ID: <01bed86e$4362c060$e20dd026@larry-dreadon.rpindustries.com>
Source record: 68249

Is there an FAQ or other collection of data where I might find a solution to the following problem. I am attempting to setup my laptop computer for extended battery operation. The factory (even tried a new one) battery dies after about an hours operation. .

Alternative #1 A 12 volt battery to inverter to computer. This system works until battery gets down to around 10.00 to 10.50 volts. Very inefficient and same battery as used in option #2 lasts about two and one half hours.

Alternative #2 I next tried a 12 volt lead acid gel-cell battery wired as a direct replacement for the factory battery. This battery is rated 10 amp hours. Checking voltage on this battery I find that the computer fails at 12.00 volts to 11.97 volts on my digital multi-meter. This set-up fails in about 2 hours.

The only option that I can think of at this time is to go to 18 or 24 volt battery pack and output the battery pack through a voltage regulator. However, I vaguely remember having seen a voltage doubler circuit used somewhere. Is there a posibility that a 12 volt battery feeding a voltage doubling circuit, feeding a voltage regulator be possible. Would this be more efficient than the inverter alternative? Any idea where might I find a circuit design?

Any/All suggestions appreciated,

Larry

1499. Re: Heat strippable magnet wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-27 00:00:00 UTC
From: Michael Young <nobody@all.org>
Message-ID: <rps51k$0$37nspbi$7gc@news.supernews.com>
Source record: 68250

OK, thanks Roy. I cranked the temp controlled iron to 800F, and it smokes the enamel off nicely. I haven't checked continuity yet, but the few test connections I made are mechanically sound.

I'm now wondering how to best prototype on the pad-per-hole boards. Do you normally leave component leads a bit long to allow room for wiring? Or is it more just as easy to melt the wire into the solder blob on the pad? Is there a trick to doing this?

Thanks.

Michael.

Reg Edwards <G4fgq.Regp@btinternet.com> wrote in message news:7nkqmugpb1@uranium.btinternet.com...
> You need a very hot iron, one you could almost use as a cigarette
> lighter. Resin cored solder is still necessary. And be quick about it.

1500. Re: lost remote control robot car

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-27 00:00:00 UTC
From: WebMonkey <demoman@rollanet.org>
Message-ID: <379E17FA.F62@rollanet.org>
Source record: 68251

Alan Eldridge wrote:
>
> First off, if this hits the wrong newsgroup, I apologize. I'm not
> trying to deliberately spam everyone. <g>
>
> For reasons I'll keep to myself, I have a very expensive looking
> very sophisticated remotely controlled (radio) car. It has video
> on board and a bunch of other neat features. This is not something
> you would find at Radio Shack, we're talking custom suspension,
> balloon tires, etc.
>
> Anyway, I want to find the owner. More info, and pictures
> are at my web site at:
>
> http://www.dragonbbs.com/members/1009/lost_robot.htm
>
> No, I'm not trying to drive up my site count, or sell anything.
>
> Please note I have my real address on this...I'm just trying
> to help someone out who has lost a very expensive toy.

have you tried the local law enforcement.
looks like a haz/sit rover.
--
A.C. Curtis
KBï¿½WLF
53.45 and 442.45, 77.0Hz enc/dec [multi-cast repeater system]
mailto:demoman@rollanet.org
http://www.rollanet.org/~demoman

1501. Re: Heat strippable magnet wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-27 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <379E1E2E.4F0144B9@teleport.com>
Source record: 68252

The best advice I can give on this is to try several methods, and use
what works best for you.

Roy Lewallen, W7EL

Michael Young wrote:
>
> OK, thanks Roy. I cranked the temp controlled iron to 800F, and it
> smokes the enamel off nicely. I haven't checked continuity yet, but the
> few test connections I made are mechanically sound.
>
> I'm now wondering how to best prototype on the pad-per-hole boards. Do
> you normally leave component leads a bit long to allow room for wiring?
> Or is it more just as easy to melt the wire into the solder blob on the
> pad? Is there a trick to doing this?

1502. Re: Batteries for Portable Use

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-27 00:00:00 UTC
From: davem@cs.ubc.ca
Message-ID: <7nl7q3nkr1@cascade.cs.ubc.ca>
Source record: 68253

"Laszlo I. Morocz" <kf4pv@spammenotlmorocz.com> writes:
>Sounds great, and if I knew the IC designator I'd probably run right out
>and get one :-)

It's a GA8532P. I don't know the manufacturer.

Other manufacturers have lead-acid charger chips, too.

Dave

1503. Re: What is UHF and VHF

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-27 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <37a820fe.145715189@news.atl.bellsouth.net>
Source record: 68254

On 27 Jul 1999 10:27:04 GMT, "nova" <nova@kaunas.aiva.lt> wrote:
>What is UHF and VHF?
>nova

UHF = Ultra High Frequency
VHF = Very High Frequency
HF = High Frequency (also called SW or ShortWave)
MF = Medium Frequency (also called MW or Medium Wave)
LF = Low Frequency (also called LW or Long Wave)
VLF = Very Low Frequency
ELF = Extremely Low Frequency

UHF= 300 MHz to 3,000 MHz (wavelength =1 meter to 0.1 meter)
VHF = 30 MHz to 300 MHz. (wavelength =10m to 1m)
HF = 3 MHz to 30 MHz (wavelength =100m to 10m)
MF = 300 kHz to 3 MHz (wavelength =1 km to 100m)
LF = 30 kHz to 300 kHz (wavelength =10 km to 1 km)
VLF = 3 kHz to 300 kHz (wavelength =100 km to 10 km)
ELF = 300 Hz to 3 kHz (wavelength =1000 km to 100 km)

Notice that each band is a power of 10 different from adjacent
bands. The reason that they have 3 in them is due to the speed
of light. If you use L=300/F (L in meters and F in MHz) to get
wavelength in meters, everything comes out in straight powers
of 10.

Signal propagation is different at the different frequencies.
For the most part, VHF and UHF are line of sight, making
range relatively short on the Earth's surface, limited by the
curvature of the Earth (but range can be very long in space).

The HF, MF, and to an extent the LF frequency bands use
refraction by the ionosphere to increase their range beyond
the curve of the Earth. This is sometimes called "skip" since
there are regions where the signal "skips over" areas on the
ground as it is being refracted by the ionosphere back down
toward the Earth's surface at a distant location. Spotty global
reach is possible at these frequencies, varying with the time
of day and the sunspot number.

MF, LF, VLF, and ELF also use another propagation mechanism
called ground wave where the signal follows the air/ground
boundary around the curve of the Earth. Range for this propagtion
mechanism improves with decreasing frequency. At VLF and ELF,
it is the primary propagation mode, and gives globe spanning results.
At MF and LF, groundwave coverage is less, giving regional coverage.

HF has some groundwave qualities too, but range is relatively short for this mechanism at HF, so skywave "skip" is the dominant long range mode for the short waves. VHF and UHF have little groundwave effect, and propagation is primarily line of sight (with forward scatter and exotic propagation modes also present for those able to take advantage of them).

Gary

Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

1504. Re: 12AU7 replacement?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-27 00:00:00 UTC
From: drmarc@wwa.com
Message-ID: <bgrn3.71$Ty1.1493@ord-read.news.verio.net>
Source record: 68255

In article <19990727104735.16969.00002141@ng-fo1.aol.com>,
drbob92031@aol.com (Drbob92031) wrote:
>Hi;
> Does anyone know of any replacements(substitutions) for the 12AU7 tube ?
>Tnx de WA2EAW...Bob...<WA2EAW@AOL.COM>

****

If you want that tube rather than a substitute I think I saw one at the North
Shore Radio Club (NS9RC) in Illinois.

Marc Schneider, Psy.D.
e-mail to: <drmarc@wwa.com>
(call sign: W4NVY)

1505. Re: Heat strippable magnet wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-27 00:00:00 UTC
From: Marty <marty-k2@snet.net>
Message-ID: <379E731C.7F68FAEF@snet.net>
Source record: 68256

Michael Young wrote:
>
> Some time ago, there was a suggestion here to use magnet wire for
> breadboarding, and just burn the insulation off with the iron. I bought
> some RS junk, and was disappointed that it didn't quite do what I was
> hoping it would do (not a surprise from RS). Does anyone know who makes
> the right stuff, and what they call it?
>

One such wire is or was Belden's Beldsol which uses a combination of
polyurethane and nylon as insulation. It wasn't necessary to strip the
insulation if the solder temperature could reach 750F.

Marty K1FHR

1506. Re: 12 v.d.c. - need help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-27 00:00:00 UTC
From: Eric Schumacher <e.schumacher@worldnet.att.net>
Message-ID: <379EA77C.39E425C1@worldnet.att.net>
Source record: 68257

Hi Larry

Many/most laptops use a 19 volt input developed from a switching wallmount adapter. The voltage at this point is not too critical since it is subsequently regulated within the laptop. ALL electronics, they have a catalog and a Web site http://www.allcorp.com/ either has or has had cigarette lighter to 19 VDC adapters. I bought mine there for $7.00 about four years ago. As I recall the voltage was slightly higher so I opened the case and reset the output to 19 volts. These things are relatively common in surplus and are made to run on "12" volt systems.

Lotsa Luck Eric WB6KCN

"L. Dreadon" wrote:
>
> Is there an FAQ or other collection of data where I might find a solution
> to the following problem. I am attempting to setup my laptop computer for
> extended battery operation. The factory (even tried a new one) battery
> dies after about an hours operation. .
>
> Alternative #1 A 12 volt battery to inverter to computer. This system
> works until battery gets down to around 10.00 to 10.50 volts. Very
> inefficient and same battery as used in option #2 lasts about two and one
> half hours.
>
> Alternative #2 I next tried a 12 volt lead acid gel-cell battery wired as
> a direct replacement for the factory battery. This battery is rated 10 amp
> hours. Checking voltage on this battery I find that the computer fails at
> 12.00 volts to 11.97 volts on my digital multi-meter. This set-up fails in
> about 2 hours.
>
> The only option that I can think of at this time is to go to 18 or 24 volt
> battery pack and output the battery pack through a voltage regulator.
> However, I vaguely remember having seen a voltage doubler circuit used
> somewhere. Is there a posibility that a 12 volt battery feeding a voltage
> doubling circuit, feeding a voltage regulator be possible. Would this be
> more efficient than the inverter alternative? Any idea where might I find
> a circuit design?
>
> Any/All suggestions appreciated,
>
> Larry

1507. Re: FS Earphones

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-27 00:00:00 UTC
From: Larry Asp <larry.asp@sympatico.ca>
Message-ID: <379D0FF9.37FE@sympatico.ca>
Source record: 68328
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

Larry Asp wrote:
>
> I have a few Alnico single magnetic earphones. These are single a
> earphone, with a metal headband. Used, but in good shape. Ideal for
> simple crystal set projects etc. Ive tested each one on a xtal set to be
> sure. $6.00 each, postage included.
Still have a couple of these left.

1508. Lot's of equipment for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-27 00:00:00 UTC
From: radiodoc37@aol.com
Message-ID: <19990727001644.18401.00001856@ng-cp1.aol.com>
Source record: 68329

Dentron MT2000 legal limit antenna tuner, very good condition. $150.00 Plus shipping

National NC-47 Receiver, Excellent condition inside, Repainted cabinet, with manual $110.00 plus shipping

SBE 6 tube linear base amplifier, uses six 6LQ6 tubes, 15-80 meters
Easy 600 watts peak output $250.00 plus shipping

Johnson Viking Mdl 1 AM/CW transmitter, plate modulated 6146's
good condition with manual $150.00 plus shipping, pick up in So. Cal. $150.00

Alan CTE RMS watt meter, 10/100/1000 watts $25.00

Uniden Force, commercial 36 channel mobile transceiver, tuned and programmed for 6 meters, With spare Eproms and manual $140.00 plus shipping

Siltronics Mdl 90 VFO, -6 model, very good condition $60.00 Plus shipping

Siltronics, 1011C transceiver with manual, Not tested, receives $125.00 Plus shipping

ElectroVoice 664 desk mic, beautiful desk mic $100.00 Plus shipping

Yaesu FT101EE, great condition, original NEC tubes working to full output, Stock mic, AC/DC cord, Manual $320.00 Plus shipping

Yaesu FL2100B amplifier, 10-80 meters, Uses a pair of 572Bs, Great condition, Full output, Manual $380.00 Plus shipping

Gonset GSB-101 amplifier, Uses three 811 tubes, Clean condition, with manual $225.00 Pick up in SO. Cal

JAZZ, 1Gb SCSI Drive, New In Box with one cartridge (New), cable manual, mounting kit etc. $150.00 Shipped

Home Brew 10 meter amplifier, Uses three 24 volt version of the 6146 tube, Made from a military PA deck, Homebrew supply, open chassis construction, RF sensing, Meter, Bias adjust, plate/load controls etc. $150.00 Plus shipping

Messenger 250 Classic 23 channel 11 meter radio, 50th anniversary, Brown and gold
beautiful radio with Box, $60.00

Amplifier, 10 meter, General Linear System PA deck using two 6LQ6s driving one 3-500Z, This is a 2 Peice amplifier mounted in what looks like a 3 drawer night stand, I call it the "Furniture Amplifier" Very unique $350.00 Pick up in So. Cal.

Tram D201, Good condition, Great AM, weak SSB, Maybe a tube, Manual $220.00

McCormick Commercial mobile radio, programmed with 16 packet frequencies, 40 watts output, great receive, AEA PK88 with manual, Both $170.00 plus shipping

6LQ6 Pulls, good output $20.00 Each

Abandoned Browning MKIII project, 2 receivers, 2 transmitters, One receiver works great, the other fair, New Nuvistors in both receivers, was in the process of making one good transmitter from the two, One transmitter missing knobs and the eagle. SAMs Service Manual, Pick up in So. Ca. area $300.00

All Items shipped upon receipt of MO UPS ground or Priority mail

Mike K. N6KYD
(805) 526-5487

1509. Heat strippable magnet wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-27 00:00:00 UTC
From: Michael Young <nobody@all.org>
Message-ID: <933058261.746.85@news.remarQ.com>
Source record: 68330

Some time ago, there was a suggestion here to use magnet wire for breadboarding, and just burn the insulation off with the iron. I bought some RS junk, and was disappointed that it didn't quite do what I was hoping it would do (not a surprise from RS). Does anyone know who makes the right stuff, and what they call it?

Thanks.

Michael.

1510. Re: Heat strippable magnet wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-27 00:00:00 UTC
From: troglodite@aol.com
Message-ID: <19990727074530.15882.00003571@ng-fi1.aol.com>
Source record: 68331

>
>Some time ago, there was a suggestion here to use magnet wire for
>breadboarding, and just burn the insulation off with the iron. I bought
>some RS junk, and was disappointed that it didn't quite do what I was
>hoping it would do (not a surprise from RS). Does anyone know who makes
>the right stuff, and what they call it?

I believe it's called "Strip-Ease" (or possibly "Solder Ease") and is made by Belden among others. Used to use it to wire couplers in pipe organs - haven't used any in years, but it should still be available.

Doug Moore

1511. Re: Batteries for Portable Use

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-27 00:00:00 UTC
From: "Laszlo I. Morocz" <kf4pv@spammenotlmorocz.com>
Message-ID: <01bed82a$ca1bd400$f4ee1e26@p133>
Source record: 68332

Sounds great, and if I knew the IC designator I'd probably run right out
and get one :-)

73 de Laszlo, KF4PV
--
To reply, remove the text spammenot from the e-mail address.

Dave Martindale <davem@groucho.cs.ubc.ca> wrote in article
<7niel6$hgh@groucho.cs.ubc.ca>...
> robert@qadas.com writes:
<snip>
> It's also possible to get charge controller IC's specifically intended
> for lead-acid battery charging.
<snip>
>
> Dave
>

1512. Re: linear amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-28 00:00:00 UTC
From: Bob Headrick <bobh@proaxis.com>
Message-ID: <rpvcm2$0$37nspbi$n2p@corp.supernews.com>
Source record: 68133

DougKD <doug@REMOVEworkingman.net> wrote in message
news:Zotn3.3950$K65.53684@news2.mia...
> Thanks! They were very helpful. They said to try the sites below for the
> plans. They pointed out what I already knew: Its illegal to operate one of
> these but its not illegal to have or sell the plans. Since I sometimes
ride
> 20 to 30 miles into the wilderness (no roads) alone, I'd like have a
backup
> way to get in touch with someone in an emergency (I have a cell phone).
> Would this offend someone? These areas are already sparsely populated and
> you hear very little cb traffic.

A big problem with CB amps is the harmonic output. CB amps can interfere
with airplane communications, and even in a sparsely located area you may be
5 miles from an airplane (straight up). There are way too many problems
out there, please don't be one of them :-).

- Bob

1513. Re: ARRL's QRP Book?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-28 00:00:00 UTC
From: Michael Young <nobody@all.org>
Message-ID: <rpvg3t$0$37nspbj$n2p@corp.supernews.com>
Source record: 68134

OK, thanks. I am new to QRP, so am looking for the usual ARRL gloss and glowing introduction; deeper insights into design is welcome as well. However... I have a Kenwood TS-570DG that leaves something to be desired in receiver performance; among other things, the AGC pumps strongly even on signals as much as 2 kHz away. I know I can add filters, but I recently became enamored with Elecraft's K2. The numbers sound better than excellent, and the glowing praise in some circles does nothing to deter me. Anyway, I only mean to say I doubt I can design a rig as good as the big boys do, and am looking at the design side more from the "I wish I knew" angle than any real desire to brew one up from scratch.

So, I'm looking for some background on your sub-culture, and also possibly insight into the technical and operating differences and difficulties. I got my start with ARRL books, and pretty much know to expect more glad-handing than details, and wondered if there were any strong negatives about this particular new title.

Thanks for your input on the book. I would also like to hear your thoughts and insights, too.

Michael.
KG9PU

Bob Nielsen <nielsen@primenet.com> wrote in message news:slrn7pv29q.2ba.nielsen@bob.localnet...
> On Wed, 28 Jul 1999 15:28:04 -0500, Michael Young <nobody@all.org> wrote:
> >Does anyone have thoughts on ARRL's QRP book?
> >
> >"ARRL's Low Power Communication--The Art and Science of QRP"
> >One of ham radio's most exciting and rewarding challenges. Here's the
> >lowdown on low power operating, from selecting gear, to advanced
> >operating
> >techniques, antennas, emergency communications, solar power, and more!
> >ARRL Order No. 7334--$14.95
> >QUICK-ORDER http://www.arrl.org/catalog/7334/
> >
> >TIA.
> >
> >Michael.
> >KG9PU
>
> I think it is good as an introduction to QRP. It also serves as a fairly

> complete "buyer's guide", describing a large number of commercial QRP
> radios and kits. If you are looking for design information, the
ARRL's
> "QRP Power" would be a good choice.
>
> Bob, W6SWE
>
> --
> Bob Nielsen Internet: nielsen@primenet.com
> Tucson, AZ AMPRnet: w6swe@w6swe.ampr.org
> DM42nh http://www.primenet.com/~nielsen

1514. SIRENS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-28 00:00:00 UTC
From: xray <xray@sprintmail.com>
Message-ID: <7nogj9cac1@oak.prod.itd.earthlink.net>
Source record: 68135

12 vdc sirens. Beautiful chrome plated finish. Each siren comes complete with a black mounting bracket. Best used for alarm circuits. While they last $12.00 each

1515. WTB: APC-7 to BNC/N/SMA adapters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-28 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <379FC9A8.2498@pop.removethistomailme.net>
Source record: 68136

Looking for two coax adapters to convert APC-7 to either BNC, N, or SMA. Gender not important, but prefer BNC or N female. Anybody got some of these?

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

1516. Re: 12 v.d.c. - need help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-28 00:00:00 UTC
From: noone@nowhere.com
Message-ID: <379e635e.332162562@news.squonk.net>
Source record: 68258

I'm stating the obvious, I suppose, but it sounds to me like
you need a 10-12V to 12V DC-DC convertor. You might want to
check if there is an automotive or airplane adaptor for your
laptop. If so, it might allow a lower than 12.x volt input
voltage. If not, you may be able to find a convertor module
that isn't too expensive. I think Digikey used to carry
these, but I seem to remember them as being fairly
expensive. (Like over $40)

There are a lot of little DC-DC convertor IC's out there,
but most I've seen are designed for much lower power than
your computer needs.

On Tue, 27 Jul 1999 20:25:25 GMT, "L. Dreadon"
<ldreadonNOSPAM@rpindustries.com> wrote:

>Is there an FAQ or other collection of data where I might find a solution
>to the following problem. I am attempting to setup my laptop computer for
>extended battery operation. The factory (even tried a new one) battery
>dies after about an hours operation. .
>
>Alternative #1 A 12 volt battery to inverter to computer. This system
>works until battery gets down to around 10.00 to 10.50 volts. Very
>inefficient and same battery as used in option #2 lasts about two and one
>half hours.
>
>Alternative #2 I next tried a 12 volt lead acid gel-cell battery wired as
>a direct replacement for the factory battery. This battery is rated 10 amp
>hours. Checking voltage on this battery I find that the computer fails at
>12.00 volts to 11.97 volts on my digital multi-meter. This set-up fails in
>about 2 hours.
>
>The only option that I can think of at this time is to go to 18 or 24 volt
>battery pack and output the battery pack through a voltage regulator.
>However, I vaguely remember having seen a voltage doubler circuit used
>somewhere. Is there a posibility that a 12 volt battery feeding a voltage
>doubling circuit, feeding a voltage regulator be possible. Would this be
>more efficient than the inverter alternative? Any idea where might I find
>a circuit design?
>
>Any/All suggestions appreciated,
>
>Larry

Just random thoughts

1517. linear amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-28 00:00:00 UTC
From: DougKD <doug@REMOVEworkingman.net>
Message-ID: <Strn3.5120$KP6.45991@news1.mia>
Source record: 68259

Can anyone point me to plans for a 100 watt mobile linear amp for a CB?

Thanks

1518. Re: linear amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-28 00:00:00 UTC
From: Dan K Nelson <w6dkn@qsl.net>
Message-ID: <Rvsn3.601$bm.28451@dfiatx1-snr1.gtei.net>
Source record: 68260

DougKD <doug@REMOVEworkingman.net> wrote in message
news:Strn3.5120$KP6.45991@news1.mia...
> Can anyone point me to plans for a 100 watt mobile linear amp for a CB?
>
> Thanks
>
>

Try www.fcc.gov ...

1519. Re: FS Earphones

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-28 00:00:00 UTC
From: Larry Asp <larry.asp@sympatico.ca>
Message-ID: <379E5802.2A0B@sympatico.ca>
Source record: 68261
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

Reg Edwards wrote:
>
> For Xtal sets they have to be very high impedance such as 2000 ohms or
> greater. The 8 or 16-ohm things are useless. They need an amplifier
> and battery.
>
> What impedance are they ? A resistance check with a multi-range DC
> meter is a good guide. I would be interested in a small quantity if
> 1.5K-ohms or more.
> --
> Reg G4FGQ
Reg - 1100 ohms on my meter - they are single earphones with a head band. I could send you one - if its not what you want - then keep it, no charge. Ill hang on to 3 or 4 in case you do want more.

1520. Re: linear amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-28 00:00:00 UTC
From: DougKD <doug@REMOVEworkingman.net>
Message-ID: <Zotn3.3950$K65.53684@news2.mia>
Source record: 68262

Thanks! They were very helpful. They said to try the sites below for the plans. They pointed out what I already knew: Its illegal to operate one of these but its not illegal to have or sell the plans. Since I sometimes ride 20 to 30 miles into the wilderness (no roads) alone, I'd like have a backup way to get in touch with someone in an emergency (I have a cell phone). Would this offend someone? These areas are already sparsely populated and you hear very little cb traffic.

http://www.panaxis.com/
http://www.cbcintl.com/TriPower.htm

I have no wish to "step on" anyone's right to the public airwaves with an amp that's too powerful - for the same reason that I don't throw my cigarette butts or candy wrappers out the window even if no one is around - I have respect for others. Yes, I strongly agree with the ban on powerful amps. I can only imagine what it would be like with no limits - there'd be a handful able to talk because they could afford the 500,000 watt mega amp. If I had an amp it would be for emergency use only. If I was in an area with cellular service I'd have no reason to use a CB and that pretty much covers every where there's people.

Dan K Nelson <w6dkn@qsl.net> wrote in message
news:Rvsn3.601$bm.28451@dfiatx1-snr1.gtei.net...
> DougKD <doug@REMOVEworkingman.net> wrote in message
> news:Strn3.5120$KP6.45991@news1.mia...
> > Can anyone point me to plans for a 100 watt mobile linear amp for a CB?
> >
> > Thanks
> >
> >
>
> Try www.fcc.gov ...
>
>
>
>
>

1521. Re: FS Earphones

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-28 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <7nlq1e$sv8$1@neptunium.btinternet.com>
Source record: 68263
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

Larry, stand by for a direct e-mail. Reg.

1522. Re: linear amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-28 00:00:00 UTC
From: maddog@io.com
Message-ID: <379e701c.5660727@news.io.com>
Source record: 68264

On Wed, 28 Jul 1999 09:53:57 -0500, "DougKD"
<doug@REMOVEworkingman.net> wrote:

>Thanks! They were very helpful. They said to try the sites below for the
>plans. They pointed out what I already knew: Its illegal to operate one of
>these but its not illegal to have or sell the plans.

hmmm... true as far as it goes, but as soon as you build it, you're in
violation.

Another angle legally, is that many states have already or are about
to pass laws making it illegal to have such equipment in your vehicle
(unless your licensed by the FCC).

73,
monty N5FC

1523. nearly free: test equipment at Oradell NJ, GSP exit 165 week Aug 11th

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-28 00:00:00 UTC
From: wa2ise@netcom.com
Message-ID: <7nm0ot$7sf@dfw-ixnews8.ix.netcom.com>
Source record: 68265
Cross-posted to: rec.radio.amateur.boatanchors,rec.audio.tubes,rec.radio.amateur.homebrew,rec.antiques.radio+phono

My mom wants to clear some space in her house and my departed dad's boatanchor style test equipment is to go. If you're in the area of Oradell NJ (2 miles east of exit 165 of the Garden State Parkway) the week of Aug 11th, help us get rid of this stuff. Things like VTVMs, generators, and such. Or almost free plus shipping, but we would perfer pickup. We also have a few audio "hifi" speakers too.

email me for directions and appointments.

1524. Re: Heat strippable magnet wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-28 00:00:00 UTC
From: Tom McDermott <Tom.Mcdermott@usa.alcatel.com>
Message-ID: <379EF9B7.CC548B1B@usa.alcatel.com>
Source record: 68266

This type of wire used to be sold in electronic stores about 20 years ago.
The decal has long since fallen off the side of the spool of wire, so I
don't know who manufactured it. You culd also buy a little plastic dispenser

that looked like a fat pencil with a metal tube at the dispensing end. The
wire
spool was at one end, and the wire fed through the tube at the dispensing
end.
This made it fast to wrap and cut the wire.

I built quite a few prototypes with the wire. My prefered technique was
to use a small dab of hot-melt glue to hold each IC socket to blank (no
copper)
perf-board, using just a small amount of glue. Then, on the reverse side of
the
perf-board, the socket pins are long enough to easily wrap the wire around.
Wrap the wire two or three times around the pin then loop it around the
destination pin and cut. For busses, it's even faster, just loop the wire
twice
around the pin then don't cut it off, just wire to the next pin, loop twice,
and
continue on.

It takes a good deal of heat to melt the insulation, I used a 50-watt pencil
type iron.
A little bit of solder on the tip helps to transfer heat from the iron to the
joint. Then
when the insulation is hot enough, flow solder to the pin. Had very good
results with
this technique, and it was very fast.

For digital circuits, I would start with ground and power wiring. Wire the
ground in
a full mesh, and the power in a full mesh also (lots of redundant wires).
Include
the bypass capacitors in the mesh. This provided very good and clean ground
and
power.

Tom McDermott
n5eg@tapr.org

Roy Lewallen wrote:

> The best advice I can give on this is to try several methods, and use
> what works best for you.

>
> Roy Lewallen, W7EL
>
> Michael Young wrote:
> >
> > OK, thanks Roy. I cranked the temp controlled iron to 800F, and it
> > smokes the enamel off nicely. I haven't checked continuity yet, but the
> > few test connections I made are mechanically sound.
> >
> > I'm now wondering how to best prototype on the pad-per-hole boards. Do
> > you normally leave component leads a bit long to allow room for wiring?
> > Or is it more just as easy to melt the wire into the solder blob on the
> > pad? Is there a trick to doing this?

1525. Re: linear amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-28 00:00:00 UTC
From: Lee Scott <DownWithJunkMail@Spam.Net>
Message-ID: <7nmvp1$ir@nnrp2.farm.idt.net>
Source record: 68267

DougKD wrote in message ...
>Thanks! They were very helpful.

Why don't you do a little studying and get a no code tech ham license? You can get the study guide at your local Radio Shack. That way you can run up to 1500 watts PEP LEGALLY on any ham band above 30 Mhz. If you pass a 5 wpm Morse Code test then you can run up to 200 watts PEP on the tech-plus section of the 10 meter band too. Once you have your ham license in hand I'm sure you will find many hams who would be willing to give you plans for power amps or even sell you one real cheap.

Leland C. Scott
KC8LDO
--
"We learn in time that subjects are not controversial,
but how we communicate about them and the
elements of personal blame we add in anger. "

1526. RS232 Interface Needed for FT1000d and LOGGER program

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-28 00:00:00 UTC
From: wa2rsx@worldnetwork.net
Message-ID: <379f1436.13631330@netnews.worldnet.att.net>
Source record: 68268

Hello Group:

I am interested in finding circuit diagrams for RS232 interfacing
between computer serial port and my FT1000d radio.

Has anyone made up a ckt board or know of a source for ckt schematics?
I presently have a few MAXIM RS232 sample chips, but am willing to go
with other chipsets, etc.

Thanks es 73s,
~Vince~

1527. Re: Heat strippable magnet wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-28 00:00:00 UTC
From: John Mock <kd6pag@qsl-nojunk.net>
Message-ID: <87wvvkn0sv.fsf@mongrel.kd6pag.ampr.org>
Source record: 68269

I am under the impression most recently manufactured enamelled copper wire has this type of self-removing insulation. The wire manufacturer's or suppliers specification may give some info. Its really good stuff with a very hot iron.

Yeah, recent RS wire i got seemed to do that reluctantly. And i use a fairly low temperature tip. But scraping may be the better approach.

-- KD6PAG (Networking Old-timer, "RF newbie")

1528. Re: linear amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-28 00:00:00 UTC
From: Philip de Cadenet <BigMobile@g4zow.freeserve.co.uk>
Message-ID: <DKxuQJArtvn3EwNV@g4zow.freeserve.co.uk>
Source record: 68270

Dan,

You should add RF Parts and CCI to your list of amp kit suppliers.
>http://www.panaxis.com/
>http://www.cbcintl.com/TriPower.htm
>
>I have no wish to "step on" anyone's right to the public airwaves with an
>amp that's too powerful - for the same reason that I don't throw my
>cigarette butts or candy wrappers out the window even if no one is around -
>I have respect for others. Yes, I strongly agree with the ban on powerful
>amps. I can only imagine what it would be like with no limits
There's no need to imagine. If you think your 75m ham band get hot try
listening in on Ch 6 of the CB.

You need 10kw to talk across the street!

I think a fella by the name of Bluegill up there in Chicago is the
undisputed world champion mobile amp builder.

I looked under the hood and in the back of his suburban at a recent CB
shoot out.

He can peak around 75kw on a broadcast size bird watt meter in the cab
though as their amp's run in class C on AM I imagine that 90% of that
power is made up of harmonics.

Phil G4ZOW / UK

1529. Radio Nordmende

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-28 00:00:00 UTC
From: Christian Kopp <Christian.Kopp@scn.de>
Message-ID: <379F5D08.3A9A94A1@scn.de>
Source record: 68271

Hello,

i hope anyone can help me or give me an info where i can get help.

So i got an old (i gues 20 years) Nordmende Radio Type Parcifal , and
the UFM part is broken, where can i find a map of this equipment.

CU

chris

1530. Re: Heat strippable magnet wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-28 00:00:00 UTC
From: Michael Young <nobody@all.org>
Message-ID: <rpupoq$0$37nspbi$n2p@corp.supernews.com>
Source record: 68272

Allied's catalog lists Belden Bledsoe #28AWG, 1/2 lb roll, for about $12. It's a bargain at that: enough to wire up tons of prototypes, make a few outlaw lowfer stealth longwires, and of course, it comes pre-wound as the world's best floppy disk eraser. The description says it's solderable without removing insulation at temps above 750 F.

Thanks, all, for the info.

Michael.

John Mock <kd6pag@qsl-nojunk.net> wrote in message news:87wvvkn0sv.fsf@mongrel.kd6pag.ampr.org...
> I am under the impression most recently manufactured enamelled copper
> wire has this type of self-removing insulation. The wire
> manufacturer's or suppliers specification may give some info. Its
> really good stuff with a very hot iron.
>
> Yeah, recent RS wire i got seemed to do that reluctantly. And i use a
> fairly low temperature tip. But scraping may be the better approach.

1531. ARRL's QRP Book?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-28 00:00:00 UTC
From: Michael Young <nobody@all.org>
Message-ID: <rpupue$0$37nspbi$n2p@corp.supernews.com>
Source record: 68273

Does anyone have thoughts on ARRL's QRP book?

"ARRL's Low Power Communication--The Art and Science of QRP"
One of ham radio's most exciting and rewarding challenges. Here's the
lowdown on low power operating, from selecting gear, to advanced
operating
techniques, antennas, emergency communications, solar power, and more!
ARRL Order No. 7334--$14.95
QUICK-ORDER http://www.arrl.org/catalog/7334/

TIA.

Michael.
KG9PU

1532. Re: KPFA hostile takeover/Save Pacifica

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-28 00:00:00 UTC
From: Bob Weiss <bweiss@carroll.com>
Message-ID: <379F6805.E1325090@carroll.com>
Source record: 68274

I agree that the takeover of Pacifica by Mary Frances Berry and the other Clintonites is a major problem. Pacifica is the only non-corporate broadcast network left (except for microradio/pirate stations, of course). The "mainstreaming" of Pacifica content to please a more "desirable" market is squashing the last outlet for progressive/left/radical programming , as well as more "quirky" or "free-form" radio originating from the local community. Hopefully the communities affected will band together to fight the national board's power grab before the stations are either sold to corporate interests (a possibility for KPFA and WBAI), or otherwise reduced to "liberal corporate" NPR/PBS clones. There is a demonstration at 5:30 every Friday afternoon outside of the new WBAI studios (120 Wall St, NYC), in support of the locked-out KPFA staff. Demand the return of RF power to the people!

Bob Weiss N2IXK
Long-Time WBAI listener

GtrGeorge wrote:

> Hi,
> just to make you aware: KPFA, one of the nations first noncommercial
> radio stations is in the middle of a hostile takeover by an administrative
> board that changed the bylaws to put themselves in charge. This is no
> small matter. The station may be put up for saleï¿½and if so we will lose one
> the flagship Pacifica station. This corporate cancer could spread to other
> related stationsï¿½like WBAI in NY.
> There is a legal struggle afoot and it needs your help, and there is a
> battle in the media. Help KPFAï¿½help free speech. Do what you can to get
> involved. If we lose these radio stations we will lose the only outlets
> that aren't influenced by the almighty dollar. If you never listened to
> these Pacifica stations..try them NOWï¿½While you can. If we don't act
> nowï¿½we may lose it all. 40 years of free speech down the drain. Its no
> joke. Get involved. Help. Please help. We have to communicate on the
> internet because the Radio stations have a gag-rule put on them by their
> management.
> -A WBAI Listener 7/28/99
> ..hey maybe you could broadcast this story...see what others know about
> it...it seems to me this is THE calling of independent broadcasters.

1533. Hamradio-Online.Com - New Design, please take our online poll

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-28 00:00:00 UTC
From: kf7vy@amsat.org
Message-ID: <2XJn3.4300$VL2.455230@news.direcpc.com>
Source record: 68275
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.ham-radio,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.spacerec.radio.scanner

I've set up a proposed new design for the http://hamradio-online.com web site.
I've added an online poll to seek your input on the new design - please visit
http://hamradio-online.com and give me your feedback - Thanks!

I'm also proposing to open up sections of this popular web site to volunteer
editors who could own their own sections on special interest topics.

Finally, I've just launched a new, very much improved, online discussion forum
and I'd like to see your feddback on that too. Post your comments on the
Discussion forum at http://hamradio-online.com

Thanks! 73, Ed, KF7VY
http://hamradio-online.com

1534. Re: Hamradio-Online.Com - New Design, please take our online poll

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-28 00:00:00 UTC
From: tom <tsokol@injersey.com>
Message-ID: <7nnthg$q22$1@nw003t.infi.net>
Source record: 68276
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.ham-radio,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.spacerec.radio.scanner

Gee, now what was that web address again?
:-)
Tom

Ed Mitchell wrote in message <2XJn3.4300$VL2.455230@news.direcpc.com>...
>I've set up a proposed new design for the http://hamradio-online.com web
site.
>I've added an online poll to seek your input on the new design - please
visit
>http://hamradio-online.com and give me your feedback - Thanks!
>
>I'm also proposing to open up sections of this popular web site to
volunteer
>editors who could own their own sections on special interest topics.
>
>Finally, I've just launched a new, very much improved, online discussion
forum
>and I'd like to see your feddback on that too. Post your comments on the
>Discussion forum at http://hamradio-online.com
>
>Thanks! 73, Ed, KF7VY
>http://hamradio-online.com
>

1535. Re: KPFA hostile takeover/Save Pacifica

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-28 00:00:00 UTC
From: c.c.tqbssz@KPFAXhosti.killspam.us.com
Message-ID: <7nnvnskaq1@samba.rahul.net>
Source record: 68277

Do "the people" who want to call the shots want to purchase/fund the
station too?

Stephen

Bob Weiss (bweiss@carroll.com) wrote:
: I agree that the takeover of Pacifica by Mary Frances Berry and the other
: Clintonites is a major problem. Pacifica is the only non-corporate broadcast
: network left (except for microradio/pirate stations, of course). The
: "mainstreaming" of Pacifica content to please a more "desirable" market is
: squashing the last outlet for progressive/left/radical programming , as well as
: more "quirky" or "free-form" radio originating from the local community.
: Hopefully the communities affected will band together to fight the national
: board's power grab before the stations are either sold to corporate interests
: (a possibility for KPFA and WBAI), or otherwise reduced to "liberal corporate"
: NPR/PBS clones. There is a demonstration at 5:30 every Friday afternoon outside
: of the new WBAI studios (120 Wall St, NYC), in support of the locked-out KPFA
: staff. Demand the return of RF power to the people!

: Bob Weiss N2IXK
: Long-Time WBAI listener

: GtrGeorge wrote:

: > Hi,
: > just to make you aware: KPFA, one of the nations first noncommercial
: > radio stations is in the middle of a hostile takeover by an administrative
: > board that changed the bylaws to put themselves in charge. This is no
: > small matter. The station may be put up for sale&#65533;and if so we will lose one
: > the flagship Pacifica station. This corporate cancer could spread to other
: > related stations&#65533;like WBAI in NY.
: > There is a legal struggle afoot and it needs your help, and there is a
: > battle in the media. Help KPFA&#65533;help free speech. Do what you can to get
: > involved. If we lose these radio stations we will lose the only outlets
: > that aren't influenced by the almighty dollar. If you never listened to
: > these Pacifica stations..try them NOW&#65533;While you can. If we don't act
: > now&#65533;we may lose it all. 40 years of free speech down the drain. Its no
: > joke. Get involved. Help. Please help. We have to communicate on the
: > internet because the Radio stations have a gag-rule put on them by their
: > management.
: > -A WBAI Listener 7/28/99
: > ..hey maybe you could broadcast this story...see what others know about
: > it...it seems to me this is THE calling of independent broadcasters.

1536. Re: ARRL's QRP Book?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-28 00:00:00 UTC
From: nielsen@primenet.com
Message-ID: <slrn7pv29q.2ba.nielsen@bob.localnet>
Source record: 68278

On Wed, 28 Jul 1999 15:28:04 -0500, Michael Young <nobody@all.org> wrote:
>Does anyone have thoughts on ARRL's QRP book?
>
>"ARRL's Low Power Communication--The Art and Science of QRP"
>One of ham radio's most exciting and rewarding challenges. Here's the
>lowdown on low power operating, from selecting gear, to advanced
>operating
>techniques, antennas, emergency communications, solar power, and more!
>ARRL Order No. 7334--$14.95
>QUICK-ORDER http://www.arrl.org/catalog/7334/
>
>TIA.
>
>Michael.
>KG9PU

I think it is good as an introduction to QRP. It also serves as a fairly complete "buyer's guide", describing a large number of commercial QRP radios and kits. If you are looking for design information, the ARRL's "QRP Power" would be a good choice.

Bob, W6SWE

--
Bob Nielsen Internet: nielsen@primenet.com
Tucson, AZ AMPRnet: w6swe@w6swe.ampr.org
DM42nh http://www.primenet.com/~nielsen

1537. Re: linear amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-28 00:00:00 UTC
From: Dan K Nelson <w6dkn@qsl.net>
Message-ID: <8oMn3.742$ds6.24769@dfiatx1-snr1.gtei.net>
Source record: 68279

Philip de Cadenet <BigMobile@g4zow.freeserve.co.uk> wrote in message
news:DKxuQJArtvn3EwNV@g4zow.freeserve.co.uk...
> Dan,
>
> There's no need to imagine. If you think your 75m ham band get hot try
> listening in on Ch 6 of the CB.
>
> You need 10kw to talk across the street!
>
> I think a fella by the name of Bluegill up there in Chicago is the
> undisputed world champion mobile amp builder.
>
> I looked under the hood and in the back of his suburban at a recent CB
> shoot out.
>
> He can peak around 75kw on a broadcast size bird watt meter in the cab
> though as their amp's run in class C on AM I imagine that 90% of that
> power is made up of harmonics.
>
> Phil G4ZOW / UK
>
>

Where did he get the 6,000+ amps to power the thing - must have been a
really big battery :>) ? I wonder if he could remember his name after a
few key-downs...

73 de W6DKN

1538. ? on simple beacon...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-28 00:00:00 UTC
From: Doug Phillips <kf6mwa@jps.net>
Message-ID: <379F92EE.28A075FA@jps.net>
Source record: 68280

Hello All,

I would like to know if someone has or knows where i can get the schematics for a simple beacon that I can build myself. I have all sorts of components from TV's, VCR's, and other random electronic devices. It doesn't matter what frequency that it transmitts on, but I need a range as far as i can get, preferibly over 500 ft. I would like a pulsating tone, if not a constant tone will be fine. Any info would be appreciated.

email: kf6mwa@jps.net

Thanks, Doug KF6MWA

1539. HF Panadapter plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-28 00:00:00 UTC
From: ke4ros <ke4ros@email.msn.com>
Message-ID: <#uEOafV2#GA.274@cpmsnbbsa02>
Source record: 68281

Hi all,
Anyone know where I can get plans for a homebrew panadapter for a 8.83Mhz IF. Seems I've seen plans somewhere, but I can't remember where. Any help would be appreciated...

thanks
Derf
ke4ros

1540. ZN414

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-28 00:00:00 UTC
From: "Robert A. Mueller, Ph.D." <bmueller@mcw.edu>
Message-ID: <379F9D7B.9A1C0274@mcw.edu>
Source record: 68282

I've been trying to find a source for the ZN414 (or equivalent unit) to use in a TRF circuit. Could someone please help me out? I have been unsucessful to date. TIA.

-Bob Mueller
Robert A. Mueller, Ph.D.
Medical College of Wisconsin
Milwaukee, WI 53226
bmueller@mcw.edu

1541. Heathkit Green Paint?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-29 00:00:00 UTC
From: Major Ron <majrabsr@rconnect.com>
Message-ID: <rpv6i3$0$37nspbj$n2p@corp.supernews.com>
Source record: 68137

Does anyone know of a source for an exact or close match to the two green paints colors used by Heath? Especially the 'splatter" type used on the cabinets and the 'wrinkle' style used on the panels. TIA, Ron, KA9ALC

1542. TM-741 turn on sequence problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-29 00:00:00 UTC
From: Tim <tvendt@kear.tds.net>
Message-ID: <T2Qn3.90$MQ1.45098@ratbert.tds.net>
Source record: 68138
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Greetings... I have a problem with my Kenwood TM-741 that is this.... when I turn it on, the display comes up with the word "ON" on it and then does nothing else....it just stays there. I can't turn unit off unless I unplug unit from P/S, hold down Function and MHZ and plug back in. When I do this, the full display comes up (all icons lit) and then I can shut it off. If I don't do this, I can unplug it, and then plug it in and it comes back up to the "ON" without my even hitting the on button. It did this back a few months ago but then stopped mysteriously and worked normally. Then last weekend it gagged on me again. I'm hoping someone else has had this problem and can remember what either they or Kenwood did to remedy this. TIA
Tim KB1MM
please e-mail direct your responses

1543. Re: KPFA hostile takeover/Save Pacifica

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-29 00:00:00 UTC
From: Bob Weiss <bweiss@carroll.com>
Message-ID: <379FC864.59D17825@carroll.com>
Source record: 68139

I think that the intent in "mainstreaming" the program content is to attract corporate underwriters and more funding from the Corporation for Public Broadcasting. Of course, such funding comes with strings attached. When Exxon, GE, and ADM start underwriting the Pacifica Network News, will we be hearing the same quality of muck-raking, rabble-rousing, no-holds-barred investigative journalism? I doubt it! When the government controls the pursestrings (through NEA/CPB grants), will Pacifica be as likely to air criticism of administration policies? Take a wild guess.....

Bob Weiss N2IXK

c.c.tqbssz@KPFAXhosti.killspam.us.com wrote:

> Do "the people" who want to call the shots want to purchase/fund the
> station too?
>
> Stephen
>
> Bob Weiss (bweiss@carroll.com) wrote:
> : I agree that the takeover of Pacifica by Mary Frances Berry and the other
> : Clintonites is a major problem. Pacifica is the only non-corporate broadcast
> : network left (except for microradio/pirate stations, of course). The
> : "mainstreaming" of Pacifica content to please a more "desirable" market is
> : squashing the last outlet for progressive/left/radical programming , as well as
> : more "quirky" or "free-form" radio originating from the local community.
> : Hopefully the communities affected will band together to fight the national
> : board's power grab before the stations are either sold to corporate interests
> : (a possibility for KPFA and WBAI), or otherwise reduced to "liberal corporate"
> : NPR/PBS clones. There is a demonstration at 5:30 every Friday afternoon outside
> : of the new WBAI studios (120 Wall St, NYC), in support of the locked-out KPFA
> : staff. Demand the return of RF power to the people!
>
> : Bob Weiss N2IXK
> : Long-Time WBAI listener
>
> : GtrGeorge wrote:
>
> : > Hi,
> : > just to make you aware: KPFA, one of the nations first noncommercial
> : > radio stations is in the middle of a hostile takeover by an administrative
> : > board that changed the bylaws to put themselves in charge. This is no
> : > small matter. The station may be put up for saleï¿½and if so we will lose one
> : > the flagship Pacifica station. This corporate cancer could spread to other
> : > related stationsï¿½like WBAI in NY.
> : > There is a legal struggle afoot and it needs your help, and there is a
> : > battle in the media. Help KPFAï¿½help free speech. Do what you can to get

> : > involved. If we lose these radio stations we will lose the only outlets
> : > that aren't influenced by the almighty dollar. If you never listened to
> : > these Pacifica stations..try them NOWï¿½While you can. If we don't act
> : > nowï¿½we may lose it all. 40 years of free speech down the drain. Its no
> : > joke. Get involved. Help. Please help. We have to communicate on the
> : > internet because the Radio stations have a gag-rule put on them by their
> : > management.
> : > -A WBAI Listener 7/28/99
> : > ..hey maybe you could broadcast this story...see what others know about
> : > it...it seems to me this is THE calling of independent broadcasters.

1544. Amateur Radio Search Engine Growing

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-29 00:00:00 UTC
From: #wharrell@surfsouth.com
Message-ID: <379fde06.9310312@enews.newsguy.com>
Source record: 68140

We are growing and need everyone with a web site or club site to add your url to the www.hamfind.com search engine dedicated to Amateur Radio. Helo us spread the wordbout the service. New features will be online soon..

Wayne Harrell
WD4LYV

1545. Re: Radio Nordmende

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-29 00:00:00 UTC
From: Dieter Mayr <d.mayr@salzburg.co.at>
Message-ID: <37A030B0.E4C53FFA@salzburg.co.at>
Source record: 68141

Christian Kopp schrieb:

> Hello,
>
> i hope anyone can help me or give me an info where i can get help.
>
> So i got an old (i gues 20 years) Nordmende Radio Type Parcifal , and
> the UFM part is broken, where can i find a map of this equipment.
>
> CU
>
> chris

Hello

You can try ELV- Schaltungs-service (www.elv.de/service/schalt.htm)
or maybe Schaltungsservice Lange Berlin, but i dont know, if they still
exist.
I had to do with them a couple of years ago but i dont have adress or
phone
available.

hope this will help

73, cu
de OE2CDM, Dieter

1546. Re: linear amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-29 00:00:00 UTC
From: Philip de Cadenet <BigMobile@g4zow.freeserve.co.uk>
Message-ID: <CqpuYHAIv$n3EwPL@g4zow.freeserve.co.uk>
Source record: 68142

>> He can peak around 75kw on a broadcast size bird watt meter in the cab
>> though as their amp's run in class C on AM I imagine that 90% of that
>> power is made up of harmonics.
>>
>> Phil G4ZOW / UK
>>
>>
>
>Where did he get the 6,000+ amps to power the thing
From 8 dual stator 400A locomotive generators all running via a
serpentine belt. I took photo's.

The big one from: www.electrodyne.com

They run big peak power numbers and only keydown for 10 seconds, just
like the drag cars at the strip. Also as I stated previously, they run
these things in class C so DC input to RF output efficiency is fairly
high numbers.
>- must have been a
>really big battery :>)
They do have battery banks to cushion the voltage drop I believe but the
latest trick is a bank of big capacitors to store the charge.

Peter Dahl supplies the 3-phase step-up transformers as they run strait
off the AC output on the alternators.

> ? I wonder if he could remember his name after a
>few key-downs...
I have suggested that he will go bald and become sterile imminently.
>73 de W6DKN
:-)

I don't condone all this, I'm licensed with a full ticket, I can't, but
I do admire the technical spunk. I feel there are few hams that given
all the money in the world could not pin even a 10kw bird slug hard over
- they'd just go to Ted Henry and ask him to build'em one instead!

One or two of the tube amplifiers were works of art, a brace of
3CX3000A7's, Jennings vac variables, the whole nine yards.

I just had to fly into Detroit to see all this. Even got a trophy for
longest distance travelled. Puts my homebrew 1200w mobile to shame.

Phil G4ZOW / UK

1547. Re: TM-741 turn on sequence problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-29 00:00:00 UTC
From: pmb1010@my-deja.com
Message-ID: <7npruk$o8i$1@nnrp1.deja.com>
Source record: 68143
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <T2Qn3.90$MQ1.45098@ratbert.tds.net>,
"Tim" <tvendt@kear.tds.net> wrote:
> Greetings... I have a problem with my Kenwood TM-741 that is this....
when I
> turn it on, the display comes up with the word "ON" on it and then
does
> nothing else....it just stays there. I can't turn unit off unless I
unplug
> unit from P/S, hold down Function and MHZ and plug back in. When I do
this,
> the full display comes up (all icons lit) and then I can shut it off.
If I
> don't do this, I can unplug it, and then plug it in and it comes back
up to
> the "ON" without my even hitting the on button. It did this back a few
> months ago but then stopped mysteriously and worked normally. Then
last
> weekend it gagged on me again. I'm hoping someone else has had this
problem
> and can remember what either they or Kenwood did to remedy this. TIA
> Tim KB1MM
> please e-mail direct your responses
>

My solution to similar problem:

Take apart radio.
Unsolder one end of lithium battery.
Turn on w/ 12v, which resets CPU.
Turn off.
Resolder lithium battery.

My problem was caused by having radio on in car, and starting
engine. Musta got a spike & corrupted rig CMOS. Now, I turn off the
radio before starting engine. Previous vehicle I had no problem
for years starting with rig on.

Vic

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1548. Re: 12 v.d.c. - need help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-29 00:00:00 UTC
From: abcd1234 <abcd1234@ix.netcom.com>
Message-ID: <7npfeh$t1i$1@news1.exit109.com>
Source record: 68144

one 555 chip or the 2 transistor square wave generator
followed by a complementary PNP-NPN buffer circuit followed by the
2-diode 2-cap charge pump voltage doubler using 6 amp switching diodes
as used in computer SMPS and panasonic HFS 1000 UF 35 V LOW ESR caps shoudl
give you

around (Vin + Vin -2) volts

and the laptops are usually designed to work around 18 -2 0 volts anyway.

Eric Schumacher wrote in message <379EA77C.39E425C1@worldnet.att.net>...
>Hi Larry
>
>Many/most laptops use a 19 volt input developed from a switching
>wallmount adapter. The voltage at this point is not too critical since
>it is subsequently regulated within the laptop. ALL electronics, they
>have a catalog and a Web site http://www.allcorp.com/ either has or
>has had cigarette lighter to 19 VDC adapters. I bought mine there for
>$7.00 about four years ago. As I recall the voltage was slightly higher
>so I opened the case and reset the output to 19 volts. These things are
>relatively common in surplus and are made to run on "12" volt systems.
>
>Lotsa Luck Eric WB6KCN
>
>"L. Dreadon" wrote:
>>
>> Is there an FAQ or other collection of data where I might find a solution
>> to the following problem. I am attempting to setup my laptop computer
for
>> extended battery operation. The factory (even tried a new one) battery
>> dies after about an hours operation. .
>>
>> Alternative #1 A 12 volt battery to inverter to computer. This system
>> works until battery gets down to around 10.00 to 10.50 volts. Very
>> inefficient and same battery as used in option #2 lasts about two and one
>> half hours.
>>
>> Alternative #2 I next tried a 12 volt lead acid gel-cell battery wired
as
>> a direct replacement for the factory battery. This battery is rated 10
amp
>> hours. Checking voltage on this battery I find that the computer fails
at
>> 12.00 volts to 11.97 volts on my digital multi-meter. This set-up fails
in

>> about 2 hours.
>>
>> The only option that I can think of at this time is to go to 18 or 24
volt
>> battery pack and output the battery pack through a voltage regulator.
>> However, I vaguely remember having seen a voltage doubler circuit used
>> somewhere. Is there a posibility that a 12 volt battery feeding a
voltage
>> doubling circuit, feeding a voltage regulator be possible. Would this be
>> more efficient than the inverter alternative? Any idea where might I
find
>> a circuit design?
>>
>> Any/All suggestions appreciated,
>>
>> Larry

1549. Re: 12 v.d.c. - need help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-29 00:00:00 UTC
From: "Mr. Muckle" <jdwalton@home.com>
Message-ID: <37A081D8.3D530699@home.com>
Source record: 68145

Since this is the homebrew ng, I would suggest looking at the switching regulators from Nat Semi, Linear Tech, Motorola etc. You can build a high power "boost" regulator from off-the shelf parts - the problem, however, is that you can't get more energy out than you put in. If the pack can't deliver the "horsepower" you just need a huskier battery.

Both Nat Semi and Motorola's websites have ample theory and practice on switching regulators.

Jack

"L. Dreadon" wrote:

> Is there an FAQ or other collection of data where I might find a solution
> to the following problem. I am attempting to setup my laptop computer for
> extended battery operation. The factory (even tried a new one) battery
> dies after about an hours operation. .
>
> Alternative #1 A 12 volt battery to inverter to computer. This system
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> somewhere. Is there a posibility that a 12 volt battery feeding a voltage
> doubling circuit, feeding a voltage regulator be possible. Would this be
> more efficient than the inverter alternative? Any idea where might I find
> a circuit design?
>
> Any/All suggestions appreciated,
>
> Larry

1550. where to buy FeedThru Caps?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-29 00:00:00 UTC
From: Paul Breed <Paul@Rasdoc.com>
Message-ID: <37A05F75.6F437537@Rasdoc.com>
Source record: 68146

Any Mail order or online sources for Feedthru capacitors?

Paul

1551. Re: TM-741 turn on sequence problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-29 00:00:00 UTC
From: art jury <art.jury@dfrc.nasa.gov>
Message-ID: <37A062A0.A33CE981@dfrc.nasa.gov>
Source record: 68147
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Check your power. My 742 does the same thing if the voltage is low.

Tim wrote:

> Greetings... I have a problem with my Kenwood TM-741 that is this.... when I
> turn it on, the display comes up with the word "ON" on it and then does
> nothing else....it just stays there. I can't turn unit off unless I unplug
> unit from P/S, hold down Function and MHZ and plug back in. When I do this,
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> months ago but then stopped mysteriously and worked normally. Then last
> weekend it gagged on me again. I'm hoping someone else has had this problem
> and can remember what either they or Kenwood did to remedy this. TIA
> Tim KB1MM
> please e-mail direct your responses

1552. Odds and ends for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-29 00:00:00 UTC
From: kindustr@gte.net
Message-ID: <6JZn3.133$m95.6277@dfiatx1-snr1.gtei.net>
Source record: 68148

I have various plate transformers, diodes, tubes, chassis', signal genrators, a freq counter, etc....

Lots of stuff from one time small repair shop. If interested, drop me a line and we can work out a deal. Will trade!

1553. Re: KPFA hostile takeover/Save Pacifica

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-29 00:00:00 UTC
From: c.c.tqbssz@KPFAXhosti.killspam.us.com
Message-ID: <7nps3g$310$1@samba.rahul.net>
Source record: 68149

OK, so no corporate funding, no CPB, no NEA. So just where are the $$$
needed to fund the operation supposed to come from?

Stephen

Bob Weiss (bweiss@carroll.com) wrote:
: I think that the intent in "mainstreaming" the program content is to attract
: corporate underwriters and more funding from the Corporation for Public Broadcasting.
: Of course, such funding comes with strings attached. When Exxon, GE, and ADM start
: underwriting the Pacifica Network News, will we be hearing the same quality of
: muck-raking, rabble-rousing, no-holds-barred investigative journalism? I doubt it!
: When the government controls the pursestrings (through NEA/CPB grants), will Pacifica
: be as likely to air criticism of administration policies? Take a wild guess.....

: Bob Weiss N2IXK

: c.c.tqbssz@KPFAXhosti.killspam.us.com wrote:

: > Do "the people" who want to call the shots want to purchase/fund the
: > station too?
: >
: > Stephen
: >
: > Bob Weiss (bweiss@carroll.com) wrote:
: > : I agree that the takeover of Pacifica by Mary Frances Berry and the other
: > : Clintonites is a major problem. Pacifica is the only non-corporate broadcast
: > : network left (except for microradio/pirate stations, of course). The
: > : "mainstreaming" of Pacifica content to please a more "desirable" market is
: > : squashing the last outlet for progressive/left/radical programming , as well as
: > : more "quirky" or "free-form" radio originating from the local community.
: > : Hopefully the communities affected will band together to fight the national
: > : board's power grab before the stations are either sold to corporate interests
: > : (a possibility for KPFA and WBAI), or otherwise reduced to "liberal corporate"
: > : NPR/PBS clones. There is a demonstration at 5:30 every Friday afternoon outside
: > : of the new WBAI studios (120 Wall St, NYC), in support of the locked-out KPFA
: > : staff. Demand the return of RF power to the people!
: >
: > : Bob Weiss N2IXK
: > : Long-Time WBAI listener
: >
: > : GtrGeorge wrote:
: >
: > : > Hi,
: > : > just to make you aware: KPFA, one of the nations first noncommercial
: > : > radio stations is in the middle of a hostile takeover by an administrative

: > : > board that changed the bylaws to put themselves in charge. This is no
: > : > small matter. The station may be put up for sale&#65533;and if so we will lose one
: > : > the flagship Pacifica station. This corporate cancer could spread to other
: > : > related stations&#65533;like WBAI in NY.
: > : > There is a legal struggle afoot and it needs your help, and there is a
: > : > battle in the media. Help KPFA&#65533;help free speech. Do what you can to get
: > : > involved. If we lose these radio stations we will lose the only outlets
: > : > that aren't influenced by the almighty dollar. If you never listened to
: > : > these Pacifica stations..try them NOW&#65533;While you can. If we don't act
: > : > now&#65533;we may lose it all. 40 years of free speech down the drain. Its no
: > : > joke. Get involved. Help. Please help. We have to communicate on the
: > : > internet because the Radio stations have a gag-rule put on them by their
: > : > management.
: > : > -A WBAI Listener 7/28/99
: > : > ..hey maybe you could broadcast this story...see what others know about
: > : > it...it seems to me this is THE calling of independent broadcasters.

1554. Re: where to buy FeedThru Caps?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-29 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7nqgav$761$1@nnrp1.deja.com>
Source record: 68150

In article <37A05F75.6F437537@Rasdoc.com>,
Paul Breed <Paul@Rasdoc.com> wrote:

> Any Mail order or online sources for Feedthru capacitors?

Have you tried Downeast Microwave? Any competent RF place
should have them. I bought a bunch last time I was at
Skycraft in Orlando...
--
Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte
Satellite: VA3SFL on UO-22, KO-25

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1555. Re: where to buy FeedThru Caps?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-29 00:00:00 UTC
From: david@slack.com
Message-ID: <37a08a9f@news.spies.com>
Source record: 68151

In article <37A05F75.6F437537@rasdoc.com>, Paul Breed <Paul@Rasdoc.com> wrote:
>Any Mail order or online sources for Feedthru capacitors?

Dan's Small Parts
Box 3634
Missoula, Montana 59806-3634
(406) 258-2782
http://www.fix.net/dans.html

Johnson Shop Products
P.O. Box 2843
Cupertino CA 95015
(408) 257-8614
(408) 253-6288 fax
johnsonshp@aol.com

1556. Re: 12 v.d.c. - need help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-29 00:00:00 UTC
From: Grif <kgriffit@wolfenet.com>
Message-ID: <37A0863A.5739@wolfenet.com>
Source record: 68152

Didn't get all the past posts,,, but if you're having battery life problems, maby your dc to ac inverter is not one of the newer hi efficiency units? Also,,, using gel cells, you may want to consider a 7 cell battery for extended use. While on the charger (which you will have to up the voltage a bit) it will be a bit hot at 16vdc or so,,, but off the charger and under use it will hold above 12 for much longer and allow you to use more of the charge capacity of the battery. Seems like the full size glider guys use them. Most of the electronic stuff for 12 volts is really built for a 6 cell battery under charge (14+vdc) and shut down befor using about 1/2 the capacity of the battery is used (like over 11 volts which I think you already found out)

The hot setup, of course, is a switcher with boost capacity,,, very hi efficiency and so on. Get every last drop of power out of the battery befor quitting. (don't be deep cycling an auto battery on a regular basis!)

1557. Re: Heathkit Green Paint?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-29 00:00:00 UTC
From: Dale Parfitt <parinc@bellsouth.net>
Message-ID: <37A090FC.8336011D@bellsouth.net>
Source record: 68153

Major Ron wrote:

> Does anyone know of a source for an exact or close match to the two
> green
> paints colors used by Heath? Especially the 'splatter" type used on
> the
> cabinets and the 'wrinkle' style used on the panels. TIA, Ron, KA9ALC

n0alo@southwind.net- Lynn bought out R&R paints.

Dale W4OP

1558. Re: ARRL's QRP Book?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-29 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <37A0A8D0.5345@ixpres.com>
Source record: 68154

Hi Michael OM,
ARRL's specialty books are tending toward "how to buy", instead of 'how to build', unfortunately. I have found that the older the book, the more technical meat is in it (ever see any 1920's and 1930's QSTs? how far we have come..). Doug DeMaw's QRP Notebook is useful, but even moreso is ARRL's Solid State Design For the Radio Amateur (much older, of course). All of the RSGB's books have more technical content than ARRL's, particularly the RSGB Handbook as compared with ARRL.
I have used the K2 transceiver. A very nicely designed and packaged rig. But a very high $$ per watt! For a fraction of that cost, you can buy an older 100W all-band all mode HF transceiver, and if you must run QRP, just turn the power (carrier insertion) down as low as you like. Then if QSB threatens the QSO, you have some recourse (QRO). If the receiver does not suit you, then modify it as you like, build some of it outboard, or build a separate receiver.
As for receivers, most of the amateur factory-made rigs with multiple-conversion superhet designs will have some spurs, phase noise, or dynamic range limitations. There are tradeoffs for all band coverage too. The question is, what is important to YOUR kind of operating? A homebrew direct conversion phasing receiver (like Rick Campbell's R2) can have excellent performance, exceeding that of many factory transceivers, at a tiny fraction of the cost. This is the route I have taken; it is the Fun Road, HI.
Watch out for "glowing praise" on new rigs. Value means different things to different people. Some want to justify their recent buying decision, so watch out for post-purchase praise unless you know the praisor well. Consider the source of information. Is it a magazine that accepts advertising from the manufacturer?
Hope I haven't insulted your intelligence by stating the obvious, but these are the considerations that come to my mind when I think about making changes to my station. Sometimes the answer is: don't change anything (yet).

73,
Don, W6JL

1559. Re: 12 v.d.c. - need help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-29 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7nq9erjep1@plutonium.btinternet.com>
Source record: 68155

How about using a multivibrator to chop the DC, feed the resultant AC into a voltage doubler(can be made from an ordinary bridge rectifier) and use this to drive an adjustable regulator such as an LM317.
see dc-dc convertors at http://hem2.passagen.se/sm0vpo for a practical circuit of a 12 to 24v convertor.

Best wishes from John.

1560. Re: linear amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-29 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <37A0AA69.A0B@ixpres.com>
Source record: 68156

> I do admire the technical spunk. I feel there are few hams that given
> all the money in the world could not pin even a 10kw bird slug hard over
> - they'd just go to Ted Henry and ask him to build'em one instead!
>
> longest distance travelled. Puts my homebrew 1200w mobile to shame.
>
> Phil G4ZOW / UK

Phil OM,
I love your post! Technically sweet, even if illegal. And here I thought that a lowly pair of 813's was high-power mobile, har. How many hams have built even just a 2KW mobile rig?
Here's to technical spunk!

73,
Don, W6JL

1561. Re: linear amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-29 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <37A0A6AA.75BA@pop.removethistomailme.net>
Source record: 68157

Philip de Cadenet wrote:

> I don't condone all this, I'm licensed with a full ticket, I can't, but
> I do admire the technical spunk. I feel there are few hams that given
> all the money in the world could not pin even a 10kw bird slug hard over
> - they'd just go to Ted Henry and ask him to build'em one instead!

I agree with you there, Philip -- it is sad that both the quality and quantity of technical discussions on rec.radio.cb generally exceed what you find on the ham groups.

Anyone who can manage tens of KW of RF power in a homebrew mobile installation is worthy of a hell of a lot of respect, even if he is being an illegal, inconsiderate bozo by doing so. Come the revolution, I would want to be on his good side! :)

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

1562. Re: linear amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-29 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.SOL.4.10.9907291547460.2906-100000@Stratus.CAM.ORG>
Source record: 68158

On Thu, 29 Jul 1999, Don W6JL wrote:

> > I do admire the technical spunk. I feel there are few hams that given
> > all the money in the world could not pin even a 10kw bird slug hard over
> > - they'd just go to Ted Henry and ask him to build'em one instead!
> >
> > longest distance travelled. Puts my homebrew 1200w mobile to shame.
> >
> > Phil G4ZOW / UK
>
> Phil OM,
> I love your post! Technically sweet, even if illegal. And here I
> thought that a lowly pair of 813's was high-power mobile, har. How many
> hams have built even just a 2KW mobile rig?
> Here's to technical spunk!
>
> 73,
> Don, W6JL
>

There was a time when there were regular articles about high power mobile operation. People would put a lot of effort into modifying their cars to handle to needed current, and there'd be a lot about suitable antennas (and sometimes some rather odd-looking mobile antennas).

And I've seen in forty year old magazines articles by about designs by Jo Emmet or Jo Jennings (the memory is garbled) describing high power amplifiers designed for mobile operation. I can picture one that ran in CQ that was really nice and small, and fed the whip directly.

Such articles stand out because they were addressing the problems of mobile use, rather than trying to figure out how to put that kilowatt amp from home in the car.

Michael VE2BVW

1563. Re: KPFA hostile takeover/Save Pacifica

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-29 00:00:00 UTC
From: Ken AB5A <airboySPAMSUX@juno.com>
Message-ID: <xc3o3.60258$AU3.1541067@news2.giganews.com>
Source record: 68159

My opinion on the whole mess is that Pacifica sold its soul to those it hates and took on a more "marketable" homogenized programming schedule then rammed it down the throats of the local stations. KPFT in Houston has the honor of being literally blown off the air in the 70s. It was a great station until Pacifica MADE them change their
programming to fit a mold. Well, F'em all. I remember when Ray was the station manager and their were volunteer
programmers like "Bishop Huey" who were so off the wall that you never knew what was going to hit you next. All
in all a very entertaining and informative station. Great local music. Now its TALK TALK TALK!!! About what? Socially responsible crap. Attempting to load you down with a guilt trip just like a bunch of religious zealots. Who cares!!!!
Pacifica centralized control and became NAZIS, just like all socialists eventually do.

Long live Free form Radio, perhaps the microbroadcasters will fill the gap.

Ken

1564. Re: linear amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-29 00:00:00 UTC
From: goldreged@aol.comJUNKBLOK
Message-ID: <19990729170514.10188.00003243@ng-ff1.aol.com>
Source record: 68160

<<And I've seen in forty year old magazines articles by about designs by Jo Emmet or Jo Jennings (the memory is garbled) describing high power amplifiers designed for mobile operation. I can picture one that ran in CQ that was really nice and small, and fed the whip directly.

Such articles stand out because they were addressing the problems of mobile use, rather than trying to figure out how to put that kilowatt amp from home in the car.
>>

I remember in a 1957 CQ that a Ham had 4-48V aircraft generators under the hood,. Then in the trunk, he had a bank of aircraft Dynamotors to feed a bank of tubes, thru the tuner circut, to a whip.... Talk about "Ham Ingenuity".... All that for a KW...

I just have a bank of 16 SRF 2062's or a bank of 8 2SC 2879's.... Does good for me.
Ed G.
(Please Remove "JUNKBLOK" to E-mail.
Unless it's a Flame.)
Check This Site !!!
http://www.charityweb.net/Safehaven

1565. Re: linear amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-29 00:00:00 UTC
From: Mike Lucas W5CHR <lucascom@email.msn.com>
Message-ID: <etUaGZg2#GA.141@cpmsnbbsa05>
Source record: 68161

John Miles wrote in message
>I agree with you there, Philip -- it is sad that both the quality and
>quantity of technical discussions on rec.radio.cb generally exceed what
>you find on the ham groups.
>
>-- jm KE5FX
>

John-I'm sure that you are not reading the same RRCB newsgroup that I have been following. While the sheer number of posts (and posters) beats the whey out of the homebrew NG, the stupid answers to even simple technical questions is enough to lower the IQ scores of unborn children!!! There are a few licensed amateurs on the NG, but some of them don't have clue, either. I have tried to recruit CBers into the amateur ranks, but once exposed to the useless jargon and red-neck mentality of typical CBers, few want to put in the work needed to get a license. Whether amateur radio survives, or CB for that matter, I will continue homebrewing gear and antennas,within the law, and with regard for my neighbors.

73 de
Mike Lucas W5CHR
Memphis,Tenn
lucascom@email.msn.com

1566. WHAT RADIO MODULATION USE AIRCRAFT FOR VOICE COMMUNICATION (AM or FM)?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-29 00:00:00 UTC
From: nova <nova@kaunas.aiva.lt>
Message-ID: <01bdbac6$bbee75e0$8af7dbc1@www.aiva.lt>
Source record: 68162

Fellows,
WHAT RADIO MODULATION USE AIRCRAFT FOR VOICE COMMUNICATION (AM or FM)?
Thanks
Nova

1567. Re: linear amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-29 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <37A0D2CA.49F@pop.removethistomailme.net>
Source record: 68163

Mike Lucas W5CHR wrote:
>
> John Miles wrote in message
> >I agree with you there, Philip -- it is sad that both the quality and
> >quantity of technical discussions on rec.radio.cb generally exceed what
> >you find on the ham groups.
> >
> >-- jm KE5FX
> >
>
> John-I'm sure that you are not reading the same RRCB newsgroup that I have
> been following. While the sheer number of posts (and posters) beats the whey
> out of the homebrew NG, the stupid answers to even simple technical
> questions is enough to lower the IQ scores of unborn children!!!

To be truthful I am mostly relying on specific search results I've seen
on DejaNews. I have often seen fragments of threads on RRCB that
answered questions that weren't being asked, much less discussed, on the
ham newsgroups.

I'm sure thread deterioration, personal flamewars, and other societal
failures occur regularly on the CB newsgroup. But have you surfed
rec.radio.amateur.misc lately?

> There are
> a few licensed amateurs on the NG, but some of them don't have clue, either.
> I have tried to recruit CBers into the amateur ranks, but once exposed to
> the useless jargon and red-neck mentality of typical CBers, few want to put
> in the work needed to get a license.

Are you sure you didn't mean to say "...mentality of typical amateurs"
in your last sentence? Because if we're to judge members of both groups
by the behavior exhibited on their respective general newsgroups, I
don't think it makes much difference. :-(

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

1568. NEED RS 232 INTERFACE PLANS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-29 00:00:00 UTC
From: ke4ros <ke4ros@email.msn.com>
Message-ID: <u543Fkh2#GA.215@cpmsnbbsa03>
Source record: 68164

Hello all,

Anyone have plans for a radio interface for Kenwood using the MAX231?
I don't feel like paying the rediculous price Kenwood wants for their
interface.

thanks
Derf KE4ROS

ke4ros@hotmail.com

1569. Re: WHAT RADIO MODULATION USE AIRCRAFT FOR VOICE COMMUNICATION (AM or FM)?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-29 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7nqohk$6ev$1@autumn.news.rcn.net>
Source record: 68165

AM

nova wrote in message <01bdbac6$bbee75e0$8af7dbc1@www.aiva.lt>...
>
>Fellows,
>WHAT RADIO MODULATION USE AIRCRAFT FOR VOICE COMMUNICATION (AM or FM)?
>Thanks
>Nova
>

1570. Re: Heat strippable magnet wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-29 00:00:00 UTC
From: rick@area.com
Message-ID: <7nr1nd$ce3$1@vax.area.com>
Source record: 68166

In article <379E731C.7F68FAEF@snet.net>, Marty <marty-k2@snet.net> wrote:
>Michael Young wrote:
>>
>> Some time ago, there was a suggestion here to use magnet wire for
>> breadboarding, and just burn the insulation off with the iron. I bought
>One such wire is or was Belden's Beldsol which uses a combination of
>polyurethane and nylon as insulation. It wasn't necessary to strip the
>insulation if the solder temperature could reach 750F.

I got a really good deal on some magnet wire that I am using for
radials, but the insulation is not the solder-eze type. What I
do for stripping it is burn the end with a cigarette lighter. Then
the now blackened insulation comes right off with 240 sandpaper.

Rick Karlquist N6RK
rick@area.com

1571. Re: WHAT RADIO MODULATION USE AIRCRAFT FOR VOICE COMMUNICATION (AM or FM)?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-29 00:00:00 UTC
From: Gord Skiffington <skiffing@nbnet.nb.ca>
Message-ID: <37A14697.3E2E@nbnet.nb.ca>
Source record: 68167

AM on VHF....USB on HF

1572. More Power? - schematic1.jpg (0/1)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-29 00:00:00 UTC
From: riverty@riverty.com
Message-ID: <37a08a73.46945672@news.mtco.com>
Source record: 68168

I'm looking for suggestions on how I can increase the output
power of this little AM transmitter without too much work. One
suggestion would be to increase the B+ voltage, another was to reduce
the resistance of R3. I have searched the Internet and have not found
the information needed to achieve my goal. I have seen other Harley
oscillators comparable to this one that put out 5 watts. I would think
I could get 5 watts or a little less out of this circuit. I have also
not found tube data for the 12SA7 tube used in this circuit so I don't
know where my limits are.
The circuit works good and produces a nice clean signal.
Immediately after removing AC power from the circuit, the transmitter
increases in modulation greatly for about 10 seconds. Could this be
some kind of limiting on the input?
Please see the attached schematic for more info. I would
appreciate any help in this matter.

riverty@riverty.com

1573. need rs-232 radio interface plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-30 00:00:00 UTC
From: Derf <ke4ros@hotmail.com>
Message-ID: <7nqsn5ftd1@nnrp1.deja.com>
Source record: 68169

Hello,

Does anyone have plans to build a RS-232 interface for Kenwood using
the MAX-231 chip? Or have you seen the plans somewhere and can tell me
where to get them?

thanks
Derf
KE4ROS@hotmail.com

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1574. Re: 12 v.d.c. - need help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-30 00:00:00 UTC
From: "Mr. Muckle" <jdwalton@home.com>
Message-ID: <37A139A2.AD030105@home.com>
Source record: 68170

An off the shelf PWM boost converter/regulator is cheaper and requires less tinkering. Because switching frequency can be pretty high the filtering cap can be lower in value. The supply is regulated via feedback, not something that will be accomplished by just running a 555. All the parts are readily available from Digikey.

abcd1234 wrote:

> one 555 chip or the 2 transistor square wave generator
> followed by a complementary PNP-NPN buffer circuit followed by the
> 2-diode 2-cap charge pump voltage doubler using 6 amp switching diodes
> as used in computer SMPS and panasonic HFS 1000 UF 35 V LOW ESR caps shoudl
> give you
>
> around (Vin + Vin -2) volts
>
> and the laptops are usually designed to work around 18 -2 0 volts anyway.
>
> >> Any/All suggestions appreciated,
>

1575. Hi

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-30 00:00:00 UTC
From: manixbonsi@aol.com
Message-ID: <19990730005709.24258.00002210@ngol02.aol.com>
Source record: 68171

Hi all,

Does anyone have a desing for an antenna tuner and also an antenna changer.

Thanks in advance,

Paul

1576. Re: linear amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-30 00:00:00 UTC
From: Philip de Cadenet <BigMobile@g4zow.freeserve.co.uk>
Message-ID: <BFqRzmAeRWo3EwlF@g4zow.freeserve.co.uk>
Source record: 68172

Michael,
>> > I do admire the technical spunk. I feel there are few hams that given
>> > all the money in the world could not pin even a 10kw bird slug hard over
>> > - they'd just go to Ted Henry and ask him to build'em one instead!
<snip>
>> Phil OM,
>> I love your post! Technically sweet, even if illegal. And here I
>> thought that a lowly pair of 813's was high-power mobile, har. How many
>> hams have built even just a 2KW mobile rig?
>> Here's to technical spunk!
<snip>
>There was a time when there were regular articles about high power mobile
>operation. People would put a lot of effort into modifying their cars to
>handle to needed current, and there'd be a lot about suitable antennas
>(and sometimes some rather odd-looking mobile antennas).
>
>And I've seen in forty year old magazines articles by about designs by Jo
>Emmet or Jo Jennings (the memory is garbled) describing high power
>amplifiers designed for mobile operation. I can picture one that ran in
>CQ that was really nice and small, and fed the whip directly.

You must be going back to circa 1959/1960. This was, at the time the
Rolls Royce, or should I say Caddilac of mobile amp's?

I have one of those amp's. It's called a Yuba 1kw. It's liquid cooled
with a 4CX300A in the output. Has a beauty of a miniature Jennings vac
variable capacitor in the final tuning.

The HT is generated via a seriously early design of solid state inverter
running approximately 2kv out.

Coverage is 6-60MHz. One's 102" whip screws in the top.

I imagine the reason it could not tune down on the low bands was not
just the lack of plug-in tank coils but the potential corona problems!

This is my current problem on 160m at the UK full legal 400w, even with
a big capacity hat to help calm things down.
>Such articles stand out because they were addressing the problems of
>mobile use, rather than trying to figure out how to put that kilowatt amp
>from home in the car.
Quite right to. I've spent more time and money installing a state of the
art /M PSU than I did building Lee Martin's 1200w Skywalker amp kit.

(((73)))

Phil G4ZOW

1577. Re: linear amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-30 00:00:00 UTC
From: Philip de Cadenet <BigMobile@g4zow.freeserve.co.uk>
Message-ID: <LFITTqAWYWo3EwFZ@g4zow.freeserve.co.uk>
Source record: 68173

Gentlemen,

I forgot. If you'd like a look at my Yuba 1kw, liquid cooled mobile baby drive to:

http://www.pixhost.com/pixz/0606/phil1.jpg

:-)

Phil G4ZOW
I collect /M HF amplifiers.

1578. Re: linear amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-30 00:00:00 UTC
From: Philip de Cadenet <BigMobile@g4zow.freeserve.co.uk>
Message-ID: <w18dfvAFiWo3EwAD@g4zow.freeserve.co.uk>
Source record: 68174

Ed,
>I remember in a 1957 CQ that a Ham had 4-48V aircraft generators under the
>hood,. Then in the trunk, he had a bank of aircraft Dynamotors to feed a bank
>of tubes, thru the tuner circut, to a whip.... Talk about "Ham Ingenuity"....
>All that for a KW...
>
>I just have a bank of 16 SRF 2062's or a bank of 8 2SC 2879's.... Does good for
>me.
How do the SRF's compare with those Toshiba's which are, AFAIK the
highest output, 30MHz, 12V device currently available?

What do you use for output filtering?

I have several brand new and boxed Metron's that have never seen the
light of day that I'd like to convert to 2879's and add the then needed
fan hood.

Regarding generators.

There's a fella on one of the Hawaian islands that carries a submarine
generator in the back of his truck to power his step up transformers,
and this is 1999, ouch!

Personally, I think the way to go in future, should one wish to build
themselves a nice amp for the mobile, would be to consider going the 48V
FET route in class E and go to:

http://www.electrodyne.com

for your 48V alternator.

(((73)))

Phil G4ZOW

1579. Re: ZN414

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-30 00:00:00 UTC
From: Vincent Coppola <vinyc@snet.net>
Message-ID: <37A1A972.D7A@snet.net>
Source record: 68175

Robert A. Mueller, Ph.D. wrote:
>
> I've been trying to find a source for the ZN414 (or equivalent unit) to
> use in a TRF circuit. Could someone please help me out? I have been
> unsucessful to date. TIA.
>
I thought that I saw them at OCEAN STATE ELECTRONICS, IN R.I. but I
don't see them now. Anyway here is their phone 1-800-866-6626
Regards,
Vince Coppola
N1VC

> -Bob Mueller
> Robert A. Mueller, Ph.D.
> Medical College of Wisconsin
> Milwaukee, WI 53226
> bmueller@mcw.edu

--
VIN'S Project Page
http://www.qsl.net/n1vc/

1580. WTB: Compactron Sockets

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-30 00:00:00 UTC
From: Franz Hamberger <hitchhiker@alpha-centauri.net>
Message-ID: <7nscq7clk1@news07.btx.dtag.de>
Source record: 68176

Hi Homebrewers

Need a few (1 ore more) compactron sockets (12-pin)
for experimenting with some 6C10 and 6Q11 I've got.
Chassis mount types would be great, PCB ones are ok.
Eventually will trade with European tubes
(NOS and tested used ones, Telefunken, Siemens, Valvo,
RFT, Tesla, Tungsram, Brimar, Russians).

Thanks for looking-up.

Franz

--
Franz Hamberger, DL7AVF, Berlin, Germany
dl7avf@qsl.net
http://www.qsl.net/dl7avf
For informations on tube data visit my webpage:
The Electron Tubes and Valves - Charts
http://www.ginko.de/user/franz.hamberger

1581. Re: WHAT RADIO MODULATION USE AIRCRAFT FOR VOICE COMMUNICATION (AM or FM)?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-30 00:00:00 UTC
From: w4pqwhs@aol.com
Message-ID: <19990730115146.07070.00003983@ng-fy1.aol.com>
Source record: 68177

AM always AM

1582. 76P57 or 76P60?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-30 00:00:00 UTC
From: Eamon Skelton <nospam@oceanfree.net>
Message-ID: <7nsn7fjpf1@fu-berlin.de>
Source record: 68178

Has anybody got datasheets or information about:

Motorola I.C. 76P57

or

Toshiba I.C. 76P60

I have several of these chips, stripped from old
mobile phones. I think that they may be UHF
prescalers.

Many Thanks. Ed. EI9GQ

--
Eamon 'Ed' Skelton EI9GQ
Cork, Ireland.

My e-mail address really is:
nospam@oceanfree.net

Home brew radio page
http://www.qsl.net/ei9gq

1583. Schematic Wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-30 00:00:00 UTC
From: Mark N Dumont <mark@ciainc.com>
Message-ID: <Kwlo3.915$t15.24288@typ12.nn.bcandid.com>
Source record: 68179

Wanted a Schematic fir a RF Concepts 2 meter Amp Model#RFC 2-317 30 watts in 170 watts out.

Need a Schematic or any info on this AMP for repair... Purchased at flee market..

Thanks

Mark

1584. Re: WHAT RADIO MODULATION USE AIRCRAFT FOR VOICE COMMUNICATION (AM or FM)?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-30 00:00:00 UTC
From: Jim <jdport@xoommail.com>
Message-ID: <7nsst2$19t@chronicle.concentric.net>
Source record: 68180

AM on "VHF" aircraft channels
FM on UHF (300+ MHZ) aircraft channels
Jim W5AOX

"nova" <nova@kaunas.aiva.lt> wrote:
>
>
> Fellows,
> WHAT RADIO MODULATION USE AIRCRAFT FOR VOICE COMMUNICATION (AM or FM)?
> Thanks
> Nova
>

1585. Re: 12 v.d.c. - need help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-30 00:00:00 UTC
From: abcd1234 <abcd1234@ix.netcom.com>
Message-ID: <7nt23c$e12$1@news1.exit109.com>
Source record: 68181

Regulated supply is not needed here, and 555 + transistors will be more fun
plus being more scalable(client-server terms) and reliable.

Agree with you regarding cap size, but 1000Uf/35V caps generally have a
higher surge current rating and lower ESR.

Mr. Muckle wrote in message <37A139A2.AD030105@home.com>...
>An off the shelf PWM boost converter/regulator is cheaper and requires less
>tinkering. Because switching frequency can be pretty high the filtering cap
can
>be lower in value. The supply is regulated via feedback, not something
that
>will be accomplished by just running a 555. All the parts are readily
available
>from Digikey.
>
>abcd1234 wrote:
>
>> one 555 chip or the 2 transistor square wave generator
>> followed by a complementary PNP-NPN buffer circuit followed by the
>> 2-diode 2-cap charge pump voltage doubler using 6 amp switching diodes
>> as used in computer SMPS and panasonic HFS 1000 UF 35 V LOW ESR caps
shoudl
>> give you
>>
>> around (Vin + Vin -2) volts
>>
>> and the laptops are usually designed to work around 18 -2 0 volts anyway.
>>
>> >> Any/All suggestions appreciated,
>>
>

1586. Re: Compactron Sockets

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-30 00:00:00 UTC
From: abcd1234 <abcd1234@ix.netcom.com>
Message-ID: <7nt1thdin1@news1.exit109.com>
Source record: 68182

AES at www.tubesandmore.com has them

Q: Is it possible to use pins taken frpm DB25 computer connectors to be used
for this purpose for socketing the compactrons , if the thing is mounted on
a PCB???

I myself am wondering about compactron sockets, dont want to buy one
compactron socket for $2.50 or so.

Franz Hamberger wrote in message <7nscq7clk1@news07.btx.dtag.de>...
>Hi Homebrewers
>
>Need a few (1 ore more) compactron sockets (12-pin)
>for experimenting with some 6C10 and 6Q11 I've got.
>Chassis mount types would be great, PCB ones are ok.
>Eventually will trade with European tubes
>(NOS and tested used ones, Telefunken, Siemens, Valvo,
>RFT, Tesla, Tungsram, Brimar, Russians).
>
>Thanks for looking-up.
>
>Franz
>
>--
>Franz Hamberger, DL7AVF, Berlin, Germany
>dl7avf@qsl.net
>http://www.qsl.net/dl7avf
>For informations on tube data visit my webpage:
>The Electron Tubes and Valves - Charts
>http://www.ginko.de/user/franz.hamberger
>
>
>
>
>

1587. Re: ARRL's QRP Book?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-30 00:00:00 UTC
From: Franz Hamberger <hitchhiker@alpha-centauri.net>
Message-ID: <7nt2ni$g04$3@news07.btx.dtag.de>
Source record: 68183

Hi Don,

you wrote in message <37A0A8D0.5345@ixpres.com>...

[snipped comments about ARRL books]

> The question is, what is important to YOUR kind of operating? A
> homebrew direct conversion phasing receiver (like Rick Campbell's R2)
> can have excellent performance, exceeding that of many factory
> transceivers, at a tiny fraction of the cost. This is the route I
have
> taken; it is the Fun Road, HI.

It seems to me, this receiver is the one I'm looking for too.
Can you tell me more about it? Is there information on the web?

Thanks & 73

Franz DL7AVF

--
Franz Hamberger, DL7AVF, Berlin, Germany
dl7avf@qsl.net
http://www.qsl.net/dl7avf

1588. Re: linear amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-30 00:00:00 UTC
From: goldreged@aol.comJUNKBLOK
Message-ID: <19990730172437.09210.00004262@ng-cc1.aol.com>
Source record: 68184

me.
How do the SRF's compare with those Toshiba's which are, AFAIK the
highest output, 30MHz, 12V device currently available?

*** The SRF 2072's are a specific part made for RF Parts Co. Basicly the top of
the line MRF 455. I'm thinking of using it for 6 Meters.***

What do you use for output filtering?

*** I need to build a LARGE cavity filter for 6 Meters. (Any Ideas?) ***

I have several brand new and boxed Metron's that have never seen the
light of day that I'd like to convert to 2879's and add the then needed
fan hood.

*** 2SC 2879's are a Hardy & Powerful transistor !!! Might need more turns on
the transformers, though.... 4 or maybe 5 (5 only in extreme cases on the
input w/ a smaller guage).***

Regarding generators.

There's a fella on one of the Hawaian islands that carries a submarine
generator in the back of his truck to power his step up transformers,
and this is 1999, ouch!

Personally, I think the way to go in future, should one wish to build
themselves a nice amp for the mobile, would be to consider going the 48V
FET route in class E

*** Yeah.... I have some medical amps that have 8 50 V 150W transistors up to
90 Mhz. Just got the power supply capable to 3500 W (Heat dissipation, ya
know?) Again, I need filtering for 6 Meters at a conservitive rating of 2KW,
so's everything can loaf along... Anyone have plans for a BIG 6 Meter filter?
I'd like to play w/ some a them 600 W Mosfets..... He He ***
Ed G.
(Please Remove "JUNKBLOK" to E-mail.
Unless it's a Flame.)
Check This Site !!!
http://www.charityweb.net/Safehaven

1589. Re: UN to Tax Internet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-30 00:00:00 UTC
From: "Mr. Muckle" <jdwalton@home.com>
Message-ID: <37A25623.527915A5@home.com>
Source record: 68185

Great - incremental one-worldism reaching into your and my pocket!!! Just what we need: to be told what to do by a bunch of third world wonders and Eurotechnocrats in Brussels or Oxford who oversee a pan-European recession that has lasted the past ten years. These are the same folks who figured that the French could solve their unemployment problem by cutting the workweek from 40 to 35 hours while keeping wages the same.

Take a look at your phone bill - what are the taxes relative to the telco charges? If you're happy with that, examine your gas, electric and water bills! What percent of the "at the pump" cost for gassing up goes away in taxes? Should we discuss the fact that federal receipts are at the highest percentage of GDP since WW-II?

If you want to pay the tax, fine, go ahead and pay it. I say give the money back to the folks who earned it!

William Ricker wrote:

> > Read the agency's own press release about it at
> > <http://www.undp.org/hdro/E3.html>
>
> (1) Note that the report there does not say a penney per email, but one
> percent of that
>
> "The Report suggests a "bit tax" on data sent through the Internet.
> A tax of one US cent on every 100 lengthy e-mails [electronic
> messages] would generate well over $70 billion a year."
>
> That's $0.0001 per message -- if our messages really our our 2-cents
> worth, that's half of one percent :-) . Even the most prolific of
> us could afford this. It might mean mailing lists would have to
> have microcash subscription fees, or convert to newsgroup format so
> recipients were taxed on receipt.
>
> This would be a global solution to SPAM though -- evastion of the email
> tax would be a major crime, but emailing to 6million addresses would be
> expensive if they didn't evade.
>
> (2) A development agency report discussing a worthwhile but expensive
> goal (global minimal connectivity) suggesting a viable and reasonably
> painless funding mechanism to demonstrate affordability is not quite
> the same thing a a proposal for a tax. Connecting the rest of the
> world to the world wide web is wasteful? One of the better sounding
> proposals of out of the U.N., I'd think. Far better than digging
> arsenic laced wells in Bangladesh.

>
> If you look closely, this in reallity would be a bandwidth utilization
> tax, much like you already have in your phone bills to help fund
> minimal phone service for rural folks and urban poor so 911 is
> everywhere.
>
> --
> Bill Ricker N1VUX wdr@world.std.com "The freedom of the press belongs
> http://world.std.com/~wdr to those who own one."--A.J.Liebling

1590. Re: WHAT RADIO MODULATION USE AIRCRAFT FOR VOICE COMMUNICATION (AM or FM)?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-30 00:00:00 UTC
From: Gord Skiffington <skiffing@nbnet.nb.ca>
Message-ID: <37A26A27.4A4F@nbnet.nb.ca>
Source record: 68186

I've been a commercial r/o for only 20 years and a good part of that was in aeronautical service....never knew there was any FM used....300+ Mhz you mentioned...only thing that comes to mind is the 234 Mhz to low 300 Mhz used by the Military....and thats all AM ....just a curious fella I am LOL. USB on HF for sure....there used to be some AM there (I remember Northwest being one of the last) but I think even thats mostly (??) phased out.

73 - Gord VE1AJF (yep..also a ham)

1591. Re: More Power? - schematic1.jpg (0/1)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-30 00:00:00 UTC
From: Gord Skiffington <skiffing@nbnet.nb.ca>
Message-ID: <37A26D6E.28@nbnet.nb.ca>
Source record: 68187

Howdy Ty....first of all NEAT lil schematic...I'm assuming its broadcast band (??). I'm no engineer, just a tinkerin fool but from a copy of GE Essential Characteristics, the 12SA7 was mainly meant to be a low power tube (pentagrid converter main use). There was 2 versions (according to this manual) the 12SA7 in a metal enclosure (mostly this is the one I've seen) which has a rated maximum plate voltage of 250 vdc at 3.5 mA....not even a watt input power. The glass envelope version 12SA7GT was (if I read the chart correctly) only rated at 100 vdc plate at 3.3 mA or 1/3 watt....So if you are on the slim side of all of this (glass tube using the low B+) yessss it is possible to get a little more power out....the plate resistance Rp is high for both versions though 1meg for the metal envelope and 500k for the glass. The main thrust of all of this though is what you're trying to accomplish......remember that a change of power output of 2 or 3db is a barely perceptible change at the receive end....I'd concentrate on your antenna....if it is indeed a BCST band rig then it'll be hopelessly short typically....lengthening will always help. Having said that be careful heheh....I was "steered" into ham radio as a youngster for transmitting about 4 miles on a 2 transistor AM rig....bit of an antenna etc heheh.

Keep on Tinkering!!

Gord Skiffington VE1AJF

1592. Re: TM -741 turn on problem solved

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-30 00:00:00 UTC
From: Ben Wallace <bwallace@sd.cts.com>
Message-ID: <7ntqd6$p7m$1@nusku.cts.com>
Source record: 68188
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Kudos to Clif Holland and AVVid -- and to Tim KB1MM for sharing.

Tim <tvendt@kear.tds.net> wrote in message
news:_Rso3.80$Zh6.37068@ratbert.tds.net...
> Thanks to Clif Holland, KA5IPF, owner of AVVid, a Kenwood and Icom repair
> facility, I was able to repair the Tm-741... I appreciate all your help..
> all the things that most people suggested I had already tried, but only a
> experienced Kenwood tech would have known that the battery inside the body
> of the radio (not the display) will leak over time and actually eat away
> several runs going directly under it that go ultimately to the processor.
> After he suggested looking there, I did and sure enough, one of the runs,
> for about 1-2 mm, had disappeared!! I jumpered it with a piece of #38 wire
> and voila, it worked. Clif could've done what Kenwood told me to do and
that
> was to send it in for repair and he would've made some money off me but he
> shared his knowledge with me and it saved me $$$. I guess this is what
drew
> me to Ham Radio almost 20 years ago and it's nice to see that there are
> still alot of Hams out there willing to help out when needed. Thanks again
> Clif!!!
> BTW here is Clif's e-mail address. Send along some business his way.. I
know
> I will when I have a problem I can't fix
>
> www. avvid.com
>
> 73 es tnx all Tim KB1MM
>
>

1593. Trade Motorola HT for 10m crystal

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-30 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <7nr8fb$lc9$1@news.hawaii.edu>
Source record: 68189
Cross-posted to: rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Trade Motorola Expo HT, in as-is condition, for a 10m crystal cut for the low end of the band. Will be plugged into an old CB rig modified for CW work.

Jeff KH6O

1594. Re: ZN414

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-31 00:00:00 UTC
From: Murray Kelly <mkelly@powerup.com.au>
Message-ID: <37A1C66C.A6E@powerup.com.au>
Source record: 68190

Robert A. Mueller, Ph.D. wrote:
>
> I've been trying to find a source for the ZN414 (or equivalent unit) to
> use in a TRF circuit. Could someone please help me out? I have been
> unsucessful to date. TIA.
>
> -Bob Mueller
> Robert A. Mueller, Ph.D.
> Medical College of Wisconsin
> Milwaukee, WI 53226
> bmueller@mcw.edu
Try the

YS414 and MK484 - but check the pinouts
--
****
* Murray Kelly vk4aok mkelly@powerup.com.au *
* 29 Molonga Ter. / Graceville/ QLD. 4075/ Australia *
* ph/fax Intl+ 61 7 3379 3307 *
****

1595. AM/FM detector IC needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-31 00:00:00 UTC
From: dr.dongle@juno.com
Message-ID: <7ntlcjdhs1@nnrp1.deja.com>
Source record: 68191

I am looking for a combined AM and FM detector IC for a probject. I though I had found one, the National LM1211 but a search of Nationals site dosent turn it up so I presume that they have droped it. Does any one have a suggestion for an alternate? Thanks dr.d

--
Kiss Technologys
The more complicated the plumbing
the easer it is to stop up the pipes M. Scott

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1596. TM -741 turn on problem solved

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-31 00:00:00 UTC
From: Tim <tvendt@kear.tds.net>
Message-ID: <_Rso3.80$Zh6.37068@ratbert.tds.net>
Source record: 68192
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Thanks to Clif Holland, KA5IPF, owner of AVVid, a Kenwood and Icom repair facility, I was able to repair the Tm-741... I appreciate all your help.. all the things that most people suggested I had already tried, but only a experienced Kenwood tech would have known that the battery inside the body of the radio (not the display) will leak over time and actually eat away several runs going directly under it that go ultimately to the processor. After he suggested looking there, I did and sure enough, one of the runs, for about 1-2 mm, had disappeared!! I jumpered it with a piece of #38 wire and voila, it worked. Clif could've done what Kenwood told me to do and that was to send it in for repair and he would've made some money off me but he shared his knowledge with me and it saved me $$$. I guess this is what drew me to Ham Radio almost 20 years ago and it's nice to see that there are still alot of Hams out there willing to help out when needed. Thanks again Clif!!!
BTW here is Clif's e-mail address. Send along some business his way.. I know I will when I have a problem I can't fix

www. avvid.com

73 es tnx all Tim KB1MM

1597. Re: KPFA hostile takeover/Save Pacifica

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-31 00:00:00 UTC
From: Will White <wcw@uswest.net>
Message-ID: <37A2D749.D96081D@uswest.net>
Source record: 68193
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.amateur.policy

c.c.tqbssz@KPFAXhosti.killspam.us.com wrote:
>
> OK, so no corporate funding, no CPB, no NEA. So just where are the $$$
> needed to fund the operation supposed to come from?
>
> Stephen

From the same place Pacifica has found their support for over 30 years: from foundations, local progressive business people, and from individual listeners' contributions. This is still possoible to do in Pacifica's markets, especially in New York, where their signal reaches close to 30 million. It amazes me that KPFA and WBAI have stayed on the air as long as they have with the consistently high quality of programming they air (with the exception of a few off-beat shows, like those two fools who sat at the mic at WBAI in the late 70's, just swearing and speaking with as foul a mouth as they could devise, and nothing else; testing the limits, I suppose, and maybe some value in that, but hard to listen too).

WBAI in particular has been instrumental in changing the prudish laws that have or had restricted content, language, and certain points of view. You didn't see ABC out there risking their FCC licenses for free expression over the air, now did you, though ABC more than others have benefitted from those battles, and that network likes to portray itself as being in the vanguard. Shows like "NYPD Blue" would never have aired in our lifetimes without people like those behind Pacifica standing up to real, governmental censorship.

I grew up on WBAI, and indirectly that station led me first to SWL and later to become a ham, as it was (and is) the only FM or AM broadcast station I heard back then that spoke a different truth than the mass-produced consent-machines of the networks. WBAI led me to realize the power of *radio* in particular as a medium of thought and social change. That remains my belief, i.e. that radio is ultimately more valuable and powerful than TV in getting the word out. To the extent that people listen to news and analysis on radio, it induces serious thought and engenders action much more than TV does. Everything on TV more or less seems like a fait accompli. Let us all keep an eye on this situation, and do whatever we still can to ensure Pacifica doesn't fall in line as another NPR/CPB clone. Is there anyone organizing a national opposition to this?

P.S. isn't there a *third* Pacifica station in the Austin or San Antonio, Texas area?
--
Will White, KD7BFX

to reply, please click this link mailto:wcw@uswest.net

1598. Re: KPFA hostile takeover/Save Pacifica

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-31 00:00:00 UTC
From: "Laszlo I. Morocz" <kf4pv@spammenotlmorocz.com>
Message-ID: <01bedb50$dd38b3e0$0eee1e26@p133>
Source record: 68194

My brains are a bit addled from the heatwave, so could someone please explain again just how exactly the Radio Pacifica discussion is relevant to homebrew ham radio?

Thanks & 73, Laszlo KF4PV/3

--
To reply, remove the text spammenot from the e-mail address.

1599. Re: Slightly off topic programming help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-31 00:00:00 UTC
From: xxxphilj@ecc-uky.campuscwix.net
Message-ID: <7nutqq$le0$1@news.campuscwix.net>
Source record: 68195
Cross-posted to: btinternet.chatter.technical,rec.radio.amateur.homebrew

What an interesting idea! I'm surprised the card doesn't come
with "sound grab" software (I don't own one, but this is tempting.)

Please keep me in mind if this gets going, also.

In article <7n6d1fqjl1@neptunium.btinternet.com>,
eric.howgate@btinternet.com says...
>
>Richard
>
>Sorry I can't help with your problem - but am interested in what you're
>aiming at. I have an old Reveal FM Tuner in my PC which works
surprisingly
>well with a simple ribbon aerial. The tuner output is connected to the
SB
>(PCI) line-in, - I've wondered about recording from it (and then
converting
>to MP3) but don't know if Windows recorder would give useful results.
>
>Perhaps you'd keep me in mind when you do get your control up and
running ?
>
>Thanks
>
>Eric
>
>Richard Whitcombe <Richard.Whitcombe@BTInternet.com> wrote in message
>news:7n3b37fbm4@plutonium.btinternet.com...
>> I dont know if this question fits into this nesgroup subject but its
worth
>a
>> try....
>>
>> Im trying to write a program in VB to receive audio in from the sound
card
>> line-in and save it as a .WAV file. I want this to record audio data
from
>> my radio receivers.
>> I know to do this i need to use the WaveIn API calls and write using
the
>> RIFF format but have no idea how to do this. I cannot use MCI as i
need
>to
>> read sound levels of the incoming signal.

>> If anyone has any help, source code in VB or VC++ id appreciate it.
>>
>> Thanks
>>
>>
>> --
>> ---
>> Regards, Richard
>> Richard.Whitcombe@BTInternet.com
>> South Wales, UK
>> ICQ 1556459
>>
>>
>>
>
>

1600. 10.7 MHz Narrowband IF

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-31 00:00:00 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <pZDo3.33326$8D2.5572@news.rdc1.il.home.com>
Source record: 68196

Anyone have reccomendations for a narrowband FM demod (chip or discrete) at 10.7 MHz? I'm adding this to the back of an IC-R8500 so that I can listen in any mode, and still recover doppler output, which can only be done in narrow FM.

If possible, I'd like to be able to set the bandwidth smaller, since in the HF bands, the doppler signal will be a very small component. (due to physically small antenna array)

The goal here is to enable doppler DF on as wide a band of frequencies as possible.

(I'm also looking for a decent mobile mount for the 8500, hanging that thing from the dash is NOT an option)

--
"Failure is NOT an option! It's part of the operating system!"
Where's dave? Try http://map.aprs.net/kc6ete-9

1601. 2 meter SSB HTs???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-31 00:00:00 UTC
From: "KF4FDJ (Mike in Ft. Myers, FL)" <seven77@gate.net>
Message-ID: <37A32280.650DA847@gate.net>
Source record: 68197

Good day,

There has been a great deal of discussion on the AMSAT BB regarding putting together a small, transportable mode J (2 meter up, 70 cm down) satellite SSB rig.

There were comments made that at one time there were 2 meter SSB HTs made and used here in the states. I would like to hear from anybody with knowledge, or who might possess such a beast.

Also, are there any plans for a 5 - 10 watt 2 meter, 12V (or less) SSB transmitter floating around out there in anybody's notebook?

BTW, switchable sideband would be needed, as mode requires a LSB uplink.

I have the downlink taken care of with an ARR 70 cm preamp, and an AR-8000 all mode scanner. The hard part seems to be finding a small/reasonable uplink IF.

Thanks for your indulgence, and I would appreciate any and all comments.

73, Mike in Fort Myers, FL
--
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| . / ^ _ \ .
| |\| (o)(o) |/|
^ --- * -----------------.OOOo--oo--oOOO.------------------- *
||| | | * Mike Gilchrist - KF4FDJ ..... AMSAT Area Coordinator *
|X| | | * P.O. Box 763 .... AMSAT member #31884 *
[X]~~~|k| * Fort Myers, FL 33902 .... ARRL member #1781549 *
/ \ |f| * http://www.gate.net/~seven77 telephone 941.772.7907 *
| | |4| * kf4fdj@amsat.org .... EL96ap *
| P | |f| * I.S. Professional ..... CNA .... Computer Consultant *
| 3 |=|d| * AO10, AO27, FO20, FO29, RS13, RS15, MIR, E Layer *
| D | |j| * Bringing Oscar demos to the Lee County Schools. *
|_____|=| | *
/*X*\ | | * Black holes were created when God divided by zero. *
________|_|_____________________________Oooo._________________________
.oooO ( )
( )) /
\ ((_/
_)

1602. Re: 2 meter SSB HTs???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-31 00:00:00 UTC
From: dgf@netcom.com
Message-ID: <7nvb51$f54@dfw-ixnews14.ix.netcom.com>
Source record: 68198

In article <37A32280.650DA847@gate.net>,
KF4FDJ (Mike in Ft. Myers, FL) <kf4fdj@amsat.org> wrote:
>Good day,
>
>There has been a great deal of discussion on the AMSAT BB regarding
>putting together a small, transportable mode J (2 meter up, 70 cm down)
>satellite SSB rig.
>
>There were comments made that at one time there were 2 meter SSB HTs
>made and used here in the states. I would like to hear from anybody
>with knowledge, or who might possess such a beast.
>

Based on my searching over the years, this is the status of 2M SSB
hand-helds:

1. Santec/Belcom LS-202 - 1 watt, synthesized with VXO adjust between
5 kHz steps. Does USB/LSB and FM. Was imported to US. Out of production
in Japan They're popular on the west coast as IF for 10 GHz rigs.

2. Mizuho MX-2 - 1/4 watt, crystal controlled (two 50 kHz ranges).
Was imported to US as a knock-down (PC-assembled) kit. Out of
production in Japan. Does USB and CW. Frequency setting accuracy
is mediocre because the dial readout is half-turn for 50 kHz.
Runs off a 9V transistor radio battery or external 9V. Companion
amplifier PL-2 brings power up to 3-4 watts.

3. Mizuho MX-2F - 1 watt, does FM and USB (and maybe CW); very
few made, never imported, not in production now.

4. Nishi Musen NTS-200 - 1 watt, crystal controlled (two 50 kHz
ranges). Never imported to US. Still in production and could be
imported singly. Does USB only. Crystal is soldered in; possible
but a bit painful to change (stock it covers 144.150-144.250).
Runs off six AA cells (Alkaline only, due to six not 7 cells)
or external 9V.

All of these are from Japan, but are the only true hand-helds
I've ever heard of. The LS-202 type MIGHT work for your need;
I suspect the LSB requirement would knock out the others unless
you wanted to modify the rig and install a second BFO crystal.

Unless you really want to access the satellite while walking around,
an alternative might be an ICOM IC-202S which is bigger (about cigar
box size), does 3W USB/LSB/CW, covers four 200 kHz ranges, and can
accomodate internal battery based on C-size Alkaline or Sub-C 900

mAh NiCads.

73 Dave WB0GAZ dgf@netcom.com

1603. HOME PAGE & MORE !!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-31 00:00:00 UTC
From: Marco <hhscd@tin.it>
Message-ID: <7nvcnqljf1@nslave1.tin.it>
Source record: 68199

http://utenti.tripod.it/ita593/index.html

1604. NEED AM RECEIVER CIRCUIT SCHEME OR ANY IDEA FOR 118-136 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-31 00:00:00 UTC
From: nova <nova@kaunas.aiva.lt>
Message-ID: <01bdbb89$b4687460$87f7dbc1@www.aiva.lt>
Source record: 68200

Dear Fellows,

I need your help. I was attempt to make AM Receiver for 118-136 MHz for Voice Communications (actually necessary 120.50 MHz receiver for my handmade plane to hear tower broadcast in emergency situation when main receiver fails). But all try was failed.

I try to do receiver on TDA1220B, but it do not work well, because this IC works only on FM.

If you can please send me Receiver circuit scheme, or give me any idea or suggestion.
I'll be very thankful.

Thanks!
Nova

1605. Repair

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-31 00:00:00 UTC
From: Your Name <bpatt@worldnet.att.net>
Message-ID: <37A375F3.15D478AF@worldnet.att.net>
Source record: 68201

I am looking for a Power Transformer for a National NCL 2000 Linear. The part number is: D 51455. Please reply via:bpatt@att.net
73, Jack W9JIU

1606. Use of PC type microphones

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-31 00:00:00 UTC
From: Tim Hodges <7twh@ttc-cmc.net>
Message-ID: <37A390F8.73C264B2@ttc-cmc.net>
Source record: 68202

I would like to interface a computer style headset to my
two meter rig. Need to know about the standard pinout for the
3.5mm plug and impedance and powering the mic element. Has
anyone else played with this?

Tim KD7JZ
7twh@ttc-cmc.net

1607. Re: 2 meter SSB HTs???

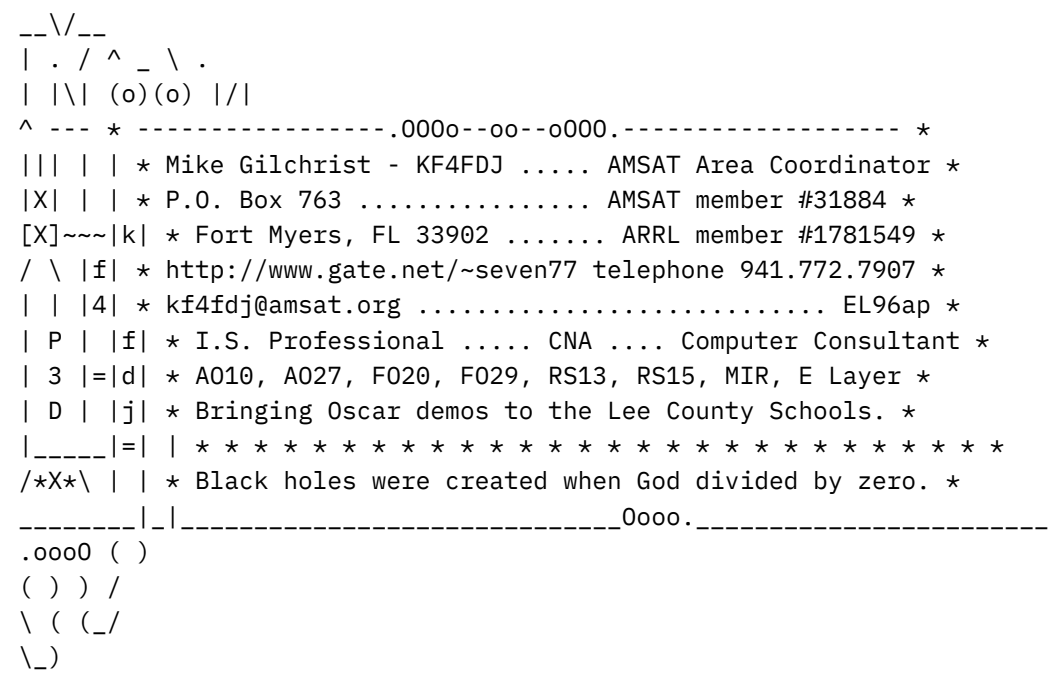
Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-31 00:00:00 UTC
From: "KF4FDJ (Mike in Ft. Myers, FL)" <seven77@gate.net>
Message-ID: <37A394DC.E17E1C6E@gate.net>
Source record: 68203

Dave,

Your input was very helpful! I thank you for taking the time to proffer such a comprehensive answer. Now, do you have an IC 202S, or a Santec/Belcom LS-202? I have all sorts of cool things to trade for one or the other!

Thanks again!

73, Mike in Fort Myers, FL



1608. Re: 2 meter SSB HTs???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-31 00:00:00 UTC
From: Lyle Koehler <lyle@mlecmn.net>
Message-ID: <37A3C480.EC80F7ED@mlecmn.net>
Source record: 68204

It's not an inexpensive solution, but the Yaesu FT-290R Mark II all-mode rig is relatively compact and is available with a battery pack attachment. It might meet your uplink requirements, although the power output without the linear amplifier module is only 2.5 watts. The current drain in receive is approximately 80 mA -- not quite as low as an FM handi-talkie but a lot better than any of the "big" rigs.
--
Lyle, K0LR

http://www.computerpro.com/~lyle

1609. Double sided pcb holes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-07-31 00:00:00 UTC
From: Wineteer Family <wz7w@inteliport.com>
Message-ID: <7nvpi2$76d$1@jaffa.itower.net>
Source record: 68205

How are the really nice pcb's with thru plated holes made? Do you have to solder dip? I've seen this done at U.S Army depot Tobyhanna's prototype shop, but I was wondering if there is a homebrew way for one-off's?

Jim

1610. Re: KPFA hostile takeover/Save Pacifica

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-01 00:00:00 UTC
From: Bob Weiss <bweiss@carroll.com>
Message-ID: <37A4B619.3D413FCA@carroll.com>
Source record: 68083
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.amateur.policy

There are actually 5 pacifica stations: WBAI-New York, WPFW-Washington, D.C. , KPFA-Berkeley, CA. KPFB-Los Angeles, and KPFT, Houston, TX.

Will White wrote:

> c.c.tqbssz@KPFAXhosti.killspam.us.com wrote:
> >
> > OK, so no corporate funding, no CPB, no NEA. So just where are the $$$
> > needed to fund the operation supposed to come from?
> >
> > Stephen
>
> From the same place Pacifica has found their support for over 30 years: from
> foundations, local progressive business people, and from individual listeners'
> contributions. This is still possoible to do in Pacifica's markets, especially
> in New York, where their signal reaches close to 30 million. It amazes me that
> KPFA and WBAI have stayed on the air as long as they have with the
> consistently high quality of programming they air (with the exception of a few
> off-beat shows, like those two fools who sat at the mic at WBAI in the late
> 70's, just swearing and speaking with as foul a mouth as they could devise,
> and nothing else; testing the limits, I suppose, and maybe some value in that,
> but hard to listen too).
>
> WBAI in particular has been instrumental in changing the prudish laws that
> have or had restricted content, language, and certain points of view. You
> didn't see ABC out there risking their FCC licenses for free expression over
> the air, now did you, though ABC more than others have benefitted from those
> battles, and that network likes to portray itself as being in the vanguard.
> Shows like "NYPD Blue" would never have aired in our lifetimes without people
> like those behind Pacifica standing up to real, governmental censorship.
>
> I grew up on WBAI, and indirectly that station led me first to SWL and later
> to become a ham, as it was (and is) the only FM or AM broadcast station I
> heard back then that spoke a different truth than the mass-produced
> consent-machines of the networks. WBAI led me to realize the power of *radio*
> in particular as a medium of thought and social change. That remains my
> belief, i.e. that radio is ultimately more valuable and powerful than TV in
> getting the word out. To the extent that people listen to news and analysis on
> radio, it induces serious thought and engenders action much more than TV does.
> Everything on TV more or less seems like a fait accompli. Let us all keep an
> eye on this situation, and do whatever we still can to ensure Pacifica doesn't
> fall in line as another NPR/CPB clone. Is there anyone organizing a national
> opposition to this?
>

> P.S. isn't there a *third* Pacifica station in the Austin or San Antonio,
> Texas area?
> --
> Will White, KD7BFX
>
> to reply, please click this link mailto:wcw@uswest.net

1611. Re: Use of PC type microphones

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-01 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <37A3E24A.D79A7E56@bellsouth.net>
Source record: 68206

Tim Hodges wrote:
> I would like to interface a computer style headset to my
> two meter rig. Need to know about the standard pinout for the
> 3.5mm plug and impedance and powering the mic element. Has
> anyone else played with this?

I use one of these with my HF rig with considerable success.

They're condensor mikes -- they require DC bias. Connect the "ring" of the 3.5mm plug to radio ground; hook the "tip" to the microphone input through a capacitor - I use 0.1uF, anything larger should work fine. (go too much lower and you'll lose low frequency response) *Also* hook the "tip" to a source of positive DC voltage through a resistor. I use a 10K-ohm resistor and a source of 8 volts, but it's not enormously critical. It's not too difficult to find capacitors and resistors small enough to stuff inside an 8-pin round microphone plug. If your rig is one of the newer ones with a RJ-45 computer LAN-type mike plug, my condolences<g>...
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

1612. Re: Use of PC type microphones

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-01 00:00:00 UTC
From: Roland Burgan <rburgan@up.net>
Message-ID: <37A3CE4C.4CE9AFE8@up.net>
Source record: 68207

Most computer mikes are condenser types, Lo-Z, with
DC power required, generally +8vdc or better, and have
rather low output. One problem often ignored until encountered,
is that the shielding of this units is minimal, if at all, and result
in RF feedback problems if the radio antenna, or power output,
is close, and above a couple of watts.

Tim Hodges wrote:

> I would like to interface a computer style headset to my
> two meter rig. Need to know about the standard pinout for the
> 3.5mm plug and impedance and powering the mic element. Has
> anyone else played with this?
>
> Tim KD7JZ
> 7twh@ttc-cmc.net

1613. Re: WTB: APC-7 to BNC/N/SMA adapters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-01 00:00:00 UTC
From: Steve Ratzlaff <sratzlaf@flash.net>
Message-ID: <37A3D230.AA88CAE5@flash.net>
Source record: 68208

In case you're not familiar with those connectors, they sell new for around $150 and up, each. I use them at work all the time on the HP network analyzers. No doubt if anyone has used ones, they are not going to be cheap!
Good luck in the search.
Steve

1614. Re: WHAT RADIO MODULATION USE AIRCRAFT FOR VOICE COMMUNICATION (AM or FM)?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-01 00:00:00 UTC
From: Roland Burgan <rburgan@up.net>
Message-ID: <37A3CF2A.D728C2E7@up.net>
Source record: 68209

SSB on HF....AM on VHF. Military UHF used to use AM (still do
for traffic with FAA/non-mission related traffic), but in the late 80's
went to C3 encrypted for 'in-house' comms.

nova wrote:

> Fellows,
> WHAT RADIO MODULATION USE AIRCRAFT FOR VOICE COMMUNICATION (AM or FM)?
> Thanks
> Nova

1615. Microwave filters: Input/output connections?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-01 00:00:00 UTC
From: Peter Bolch <nc-bolchpe@netcologne.de>
Message-ID: <7o105v$m5b$1@news.netcologne.de>
Source record: 68210

I need information where to connect the input and output to the resonator of a microwave coaxial or a capacitivly coupled line bandpass filter. I know it has to be somewhere near to the grounded end of the resonator but where exactly? Can the ideal location be calculated or has this to be done experimentally?

Peter

1616. Re: S-meters... Where do they go?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-01 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <37aa07bf.112912536@news.atl.bellsouth.net>
Source record: 68211

On Sat, 24 Jul 1999 22:39:19 -0500, "Samuel R. Edwards"
<legendarydrooler@worldnet.att.net> wrote:
>Gary Coffman wrote:
>>
>> On Tue, 13 Jul 1999 11:01:08 -0500, Rick Haub <rhaub@midwestmicro-tek.com> wrote:
>> >Okay, I'm building the Mate to the Mighty Midget from a 1966 QST
>> >magazine article. I want to add an S-meter to it and the design that I
>> >have needs to be hooked into the AGC circuit, well the MMM doesn't have
>> >an AGC. It does, however, have a 20k pot to manualy adjust the gain.
>> >Where should I hook the S-meter into?
>>
>> No AGC, no S-meter. S-meters work by monitoring the AGC voltage,
>> if you don't have AGC, then there's no AGC voltage to monitor. So
>> if you want a S-meter, you're first going to have to add AGC to the
>> receiver.
>
>LOL!!!! No AGC = No S-Meter = TOTAL BS!!!
>In case you idiots don't know u can get relative S-Meter readings from
>the audio chain. Ain't the best S-Meter in the world but it
>will probably work for the radio that he's talking about and give
>him some kind of relative reading. What he needs to do is look
>at the HW-8 mod books copy that circuit and give that a shot.
>Saying No AGC = No S-Meter is plan old dumb.

A meter on the audio chain is an audio level meter. It is not an
S meter. If can perform a somewhat similar function for SSB
or CW signals, but fails dismally for AM, FM, RTTY, etc signals
where modulation output is not proportional to signal strength.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

1617. Re: Double sided pcb holes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-01 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <37ab096e.113343674@news.atl.bellsouth.net>
Source record: 68212

On Sat, 31 Jul 1999 17:26:01 +0000, "Wineteer Family" <wz7w@inteliport.com> wrote:
>How are the really nice pcb's with thru plated holes made? Do you have to
>solder dip? I've seen this done at U.S Army depot Tobyhanna's prototype
>shop, but I was wondering if there is a homebrew way for one-off's?

As the name implies, the holes are plated after they are drilled. This
isn't something I'd recomend attempting at home since the process
is somewhat complex and a bit dangerous. The better alternative for
home construction is to use hollow copper rivets in the holes. These
are staked in with a simple hand tool. You should solder top and bottom
to assure good electrical performance. The rivets and the installation
tool are available from some of the larger supply houses.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

1618. Squelch for Grundig Satellit 700

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-01 00:00:00 UTC
From: Horst Winheim <Horst.Winheim@t-online.de>
Message-ID: <7o1691rpv1@news08.btx.dtag.de>
Source record: 68213

Hi people,

I am looking for a circuit-idea for an Squelch-function for enlarges my
Grundig Satellit 700.
A possibility were to evaluate that S-meter-signal, but I have no circuit
diagram.
Who has broader ideas or the circuit diagram from the receiver or can help?

Thank in advance
Horst Winheim

1619. Re: 2 meter SSB HTs???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-01 00:00:00 UTC
From: "KF4FDJ (Mike in Ft. Myers, FL)" <seven77@gate.net>
Message-ID: <37A43986.663459A7@gate.net>
Source record: 68214

Lyle,

Lyle Koehler wrote:
>
> It's not an inexpensive solution, but the Yaesu FT-290R Mark II all-mode
> rig is relatively compact and is available with a battery pack
> attachment. It might meet your uplink requirements, although the power
> output without the linear amplifier module is only 2.5 watts. The
> current drain in receive is approximately 80 mA -- not quite as low as
> an FM handi-talkie but a lot better than any of the "big" rigs.

I looked at that rig, and the lunch pail form factor would work for a
portable Oscar station, however, people seem to hold them near and dear
and won't let go of them for much less than new prices.

I have a very nice home Oscar station, I just want to set up a portable,
roving station to activate some rare grids for other operators. Saying
this, I want to homebrew, buy surplus as much as I can.

Thanks for your response!

73, Mike

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^ --- * -----------------.OOOo--oo--oOOO.------------------ *
||| | | * Mike Gilchrist - KF4FDJ ..... AMSAT Area Coordinator *
|X| | | * P.O. Box 763 ..... AMSAT member #31884 *
[X]~~~|k| * Fort Myers, FL 33902 ..... ARRL member #1781549 *
/ \ |f| * http://www.gate.net/~seven77 telephone 941.772.7907 *
| | |4| * kf4fdj@amsat.org ..... EL96ap *
| P | |f| * I.S. Professional ..... CNA .... Computer Consultant *
| 3 |=|d| * AO10, AO27, FO20, FO29, RS13, RS15, MIR, E Layer *
| D | |j| * Bringing Oscar demos to the Lee County Schools. *
|_____|=| | *
/*X*\ | | * Black holes were created when God divided by zero. *
________|_|_____________________________Oooo._________________________
.oooO ( )
( )) /
\ ((_/
_)

1620. Re: AM/FM detector IC needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-01 00:00:00 UTC
From: abcd1234 <abcd1234@ix.netcom.com>
Message-ID: <7o1kmpkbp1@news1.exit109.com>
Source record: 68215

la1360 from sanyo
is a combined am/fm radio IC

dr.dongle@juno.com wrote in message <7ntlcjdhs1@nnrp1.deja.com>...
> I am looking for a combined AM and FM detector IC for a probject. I though
>I had found one, the National LM1211 but a search of Nationals site dosent
>turn it up so I presume that they have droped it. Does any one have a
>suggestion for an alternate? Thanks dr.d
>
>--
>Kiss Technologys
>The more complicated the plumbing
>the easer it is to stop up the pipes M. Scott
>
>
>Sent via Deja.com http://www.deja.com/
>Share what you know. Learn what you don't.

1621. FS NIB Power Transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-01 00:00:00 UTC
From: Larry Asp <larry.asp@sympatico.ca>
Message-ID: <37A46807.3334@sympatico.ca>
Source record: 68216
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchor,rec.radio.swap,rec.radio.amateur.equipment

I have 2 new in the box Hammond Power Transformers. Both are vertical mount types. The smaller is a suitable replacement for tube amateur receivers, whereas the second would be a good replacement for small ham transmitters, such as the DX20/35/40 types.

Specs as follows

Part# 271X25 115V Primary 55va Sec. 280-0-280 50ma. Rectifier Fil 5V 2A, Sec 6.3V 2A $12.00 plus postage.

Part# 273Z25 115V Primary 95va Sec 350-0-350 110 ma. 5Volts 2amp, 6.3volts 4amps. $20.00 plus postage.

1622. Needed - Key Tension Spring

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-01 00:00:00 UTC
From: Larry Asp <larry.asp@sympatico.ca>
Message-ID: <37A46953.3FCB@sympatico.ca>
Source record: 68217
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Does anyone know a source for a morse code hand key tension spring. I have a handkey where the tension spring has weakened and should be replaced. Its a 1/2" long, and tapers with each turn.

1623. Re: Needed - Key Tension Spring

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-01 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7o1qug$8ad$1@autumn.news.rcn.net>
Source record: 68218
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

As last ditch effort, assuming the original spring is "expendable" :

Try heating it red hot with a torch, and then immediately immersing in a oil or salt water bath. That should anneal the steel and restore some of the strength.

Larry Asp wrote in message <37A46953.3FCB@sympatico.ca>...
>Does anyone know a source for a morse code hand key tension spring. I
>have a handkey where the tension spring has weakened and should be
>replaced. Its a 1/2" long, and tapers with each turn.
>

1624. Re: Needed - Key Tension Spring

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-01 00:00:00 UTC
From: Tim <ka8ddz@worldnet.att.net>
Message-ID: <37A477C8.66A0FC41@worldnet.att.net>
Source record: 68219
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Larry Asp wrote:

> Does anyone know a source for a morse code hand key tension spring. I
> have a handkey where the tension spring has weakened and should be
> replaced. Its a 1/2" long, and tapers with each turn.

Larry, this may sound silly but have you tried your local hardware store? Not the big chain stores but the smaller ones? There are several in my area that have trays of brass nuts, bolts, springs, etc. and there are several, although not exact replacements, that would fit your application nicely. I refinished an old hand key that was missing the same and used a straight spring with no taper and used epoxy to glue it to the steel base the key was mounted on.

Tim ka8ddz

1625. Re: Needed - Key Tension Spring

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-01 00:00:00 UTC
From: Jonesy <jonz@rmi.nospam.net>
Message-ID: <7o204p$c79$1@news1.rmi.net>
Source record: 68220
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

In rec.radio.amateur.equipment Tim <ka8ddz@worldnet.att.net> wrote:
> Larry Asp wrote:
>> Does anyone know a source for a morse code hand key tension spring. I
>> have a handkey where the tension spring has weakened and should be
>> replaced. Its a 1/2" long, and tapers with each turn.

> Larry, this may sound silly but have you tried your local hardware store?
> Not the big chain stores but the smaller ones? There are several in my
> area that have trays of brass nuts, bolts, springs, etc. and there are
> several, although not exact replacements, that would fit your application
> nicely.

Very good reply. I'm in a small town and both the Tru-Valu and ACE
hardware stores here have a Great Selection of such 'stuff'. Since
they want to cater to the wide spectrum of customers they have --
ranchers, boaters, homeowners, und so weiter, and the occasional weird
ham -- they have a huge set of those carboard-boxes-on-slide-out-shelves
containing selections of misc steel, brass, copper, and stainless steel
hardware. I can spend hours there -- "taking inventory" -- as I 'invent'
some new antenna or gizmo.

Several hundred years ago, before I built my current collection of
peanut butter jars filled with 'stuff', I used to take the springs
out of useless ball-point pens for projects. Tho', such a spring
as that may be too light for a CW handkey.

73
Jonesy W3DHJ

--
SK

--
Marvin L. Jones jonz<AT>rmi.net
Gunnison, Colorado
152 days to go until the Year 2000 -- So what!
518 days to go until the 3rd Millennium of the C.E.

1626. Re: linear amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-01 00:00:00 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <7o23vb$o1e@nnrp1.farm.idt.net>
Source record: 68221

Goldreged wrote in message <19990730172437.09210.00004262@ng-cc1.aol.com>...

>I'd like to play w/ some a them 600 W Mosfets..... He He ***

So you what to play with some 600 watt MOSFETS at $550 USD each? Then check
out this site for a wide band (up to 6M linear amp over 1KW) and have fun.

http://www.ibelings.com/n4ip/mrf157.html

73's,

Leland C. Scott
KC8LDO

ARRL member
NCI member

"You ask what Morse Code is good for? I'll tell you. Morse
Code is used exclusively by Electronics Based life forms to
communicate amongst themselves using advanced Organic
Digital Signal Processors, running state of the art Artificial
Intelligence Software, to perform the highly complex
transmit encryption, receive decryption and error correction
functions."

1627. Re: Double sided pcb holes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-01 00:00:00 UTC
From: Tim <ka8ddz@worldnet.att.net>
Message-ID: <37A4A680.43094D4D@worldnet.att.net>
Source record: 68222

There may be more than one method, but one that I have seen is actually inserting a small barrel in the hole, If you find a double sided board and pull a component from it sometimes the barrel will come out too. I guess mine aren't as fancy as yours, when I one-off a double sided board I just solder both sides :)

Tim ka8ddz

Wineteer Family wrote:

> How are the really nice pcb's with thru plated holes made? Do you have to
> solder dip? I've seen this done at U.S Army depot Tobyhanna's prototype
> shop, but I was wondering if there is a homebrew way for one-off's?
>
> Jim

1628. 1.2 Ghz and 6mtr for FT 736

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-01 00:00:00 UTC
From: Superham <n9apk@arrl.net>
Message-ID: <37a4a7d2@news.sisna.com>
Source record: 68223
Cross-posted to:
alt.ham-radio.marketplace,rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,alt.ham-radio.vhf-uhf

Any one have the 1.2 Ghz modules and or the 6 meters modules for the FT-736
Let me know hom much via e-mail..

Clark
N9APK@arrl.net

1629. Re: Needed - Key Tension Spring

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-01 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <37A49D02.6851@pop.removethistomailme.net>
Source record: 68224
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Larry Asp wrote:
>
> Does anyone know a source for a morse code hand key tension spring. I
> have a handkey where the tension spring has weakened and should be
> replaced. Its a 1/2" long, and tapers with each turn.

For oddball springs and bearings a bicycle repair shop can sometimes be
a good place to look. Dunno about the tapering property, though!

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

1630. homebrew SMPS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-01 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7o2cvk$a8k$1@uranium.btinternet.com>
Source record: 68225

I am considering homebrewing a simple switch mode power supply which would be used to regulate a low voltage supply of about 20v dc to provide a variable voltage supply. I have a UC3842 pulse width controller available, but would rather make something around a 555 as the pulse width modulator. I would like to hear from anyone who can suggest how I could do this in practice.

d.l.c@btinternetNOSPAM.com

1631. Re: 2 meter SSB HTs???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-01 00:00:00 UTC
From: raoul@olympus.net
Message-ID: <raoul-0108991423270001@pt194210.olympus.net>
Source record: 68226

In article <37A43986.663459A7@gate.net>, kf4fdj@amsat.org wrote:

> Lyle Koehler wrote:
> >
> > It's not an inexpensive solution, but the Yaesu FT-290R Mark II all-mode
> > rig is relatively compact and is available with a battery pack
> > attachment. It might meet your uplink requirements, although the power
> > output without the linear amplifier module is only 2.5 watts. The
> > current drain in receive is approximately 80 mA -- not quite as low as
> > an FM handi-talkie but a lot better than any of the "big" rigs.
>
> I looked at that rig, and the lunch pail form factor would work for a
> portable Oscar station, however, people seem to hold them near and dear
> and won't let go of them for much less than new prices.
>
> I have a very nice home Oscar station, I just want to set up a portable,
> roving station to activate some rare grids for other operators. Saying
> this, I want to homebrew, buy surplus as much as I can.

A couple of things I would consider to do this lo-bux...

1. Perhaps one of those Radio Shack 10 meter rigs with a transverter.
This would be small to be portable but not especially cheap. A Downeast
Microwave transverter with 20w out is $300 in a kit and $400 assembled.
The RS 28mHz IF could cost as low as $75-100.

2. MFJ is advertising an "Adventure Radio" that does 2 meter SSB with 10W
out for $285. A CW 'attachment' is something like $40 more. I'm not sure
if it actually is available yet because my local dealer has said that he
isn't able to stock any yet.

If you are willing and able to homebrew on the circuit design level, you
might get away with a cheaper setup. I'm just getting into VHF in a
serious way and am going with the HF rig/ transverter setup. I am using a
TS520 as my IF and have just a Downeast 2 meter transverter. I'm not sure
what band I will go for next but will either go for 70cm or 23cm. If I go
with the 70cm, I might also get hooked up with a sattelite setup. The
Downeast transverters are actually quite small (7"x4"x2") and by
substituting a smaller IF (perhaps a RS 10 meter rig) it would be quite
small and portable. Lash 'em all together in some sort of rack and they
would be easy to carry. Even just using the TS520, its not too bad- the
520 can run on 12V and is a superb way to run transverters- built in
connections! A bit heavy, though.

That's about all I have to offer... Take care and hope to work you on the air.

Jeff
KB7AIL CN87

--
"It's better to be shot from a cannon than squeezed from a tube,
That's why there's fast motorcycles, bubba...."
-Dr. H. S. Thompson paraphrasing Grace Slick

1632. Wanted bird 2500 Watt slug for 50MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-01 00:00:00 UTC
From: G0JJL <john@penwortham.idps.co.uk>
Message-ID: <n%2p3.9165$V21.286257@nnrp3.clara.net>
Source record: 68227

I am looking to buy a 2500 Watt 50MHz slug for a Bird 43 meter. This is an international quest!!

If you have one for sale or know of one for sale please email me at

john@penwortham.idps.co.uk

Cheers

John, G0JJL

1633. satellites

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-01 00:00:00 UTC
From: Steve Heckathorn <heck@kconline.com>
Message-ID: <37A4CF3F.8B890038@kconline.com>
Source record: 68228

Hello
Has anyone ever hearld of using 2 tv rotors from wal-mart to do satellite work with. A friend of mine saw this at a hamfest once, and has not been able to find anything on it sence.
thanks
73's de Steve N9QEX

1634. Re: Needed - Key Tension Spring

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-01 00:00:00 UTC
From: "William F. Hagen" <whagen@inreach.com>
Message-ID: <37A4D990.FDEADA43@inreach.com>
Source record: 68229
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

try taking one out of a dead ball point pen.

John Miles wrote:
>
> Larry Asp wrote:
> >
> > Does anyone know a source for a morse code hand key tension spring. I
> > have a handkey where the tension spring has weakened and should be
> > replaced. Its a 1/2" long, and tapers with each turn.
>
> For oddball springs and bearings a bicycle repair shop can sometimes be
> a good place to look. Dunno about the tapering property, though!
>
> -- jm KE5FX
>
> ----------
> Note: My E-mail address has been altered to avoid spam
> ----------

--
Please remove the word 'NOREPLY' from the email address, sorry for the
inconvenience, but it helps keep down the spam.

1635. Re: satellites

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-01 00:00:00 UTC
From: Ralph Mowery <rmowery@ibm.net>
Message-ID: <37A4D1A9.B3E02753@ibm.net>
Source record: 68230

If you can find a TV rotator that the boom will go through the rotator part, even if you have to break off a tab of metal, then you can use it for the elevation rotator. YOu just mount the rotator housing to a plate. I think the modle used was an Alliance u100. I did that for a while on a sat setup I had. You rotate the horizontal part with any standard rotator. If you want a more precise indicator, take a pot and hang a weight so that it will swing as the elevation rotator is turned. You may need to put a cover over the rotator to keep the rain out.

Steve Heckathorn wrote:
>
> Hello
> Has anyone ever hearld of using 2 tv rotors from wal-mart to do
> satellite work with. A friend of mine saw this at a hamfest once, and
> has not been able to find anything on it sence.
> thanks
> 73's de Steve N9QEX

1636. Convert 10 m radio to 15m?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-01 00:00:00 UTC
From: VE7SEZ <tkpoustie@NOSPAMbc.sympatico.ca>
Message-ID: <vN5p3.116$jO.406373@news.bctel.net>
Source record: 68231

Hello . I am seeking input or relevant articles on the topic of converting cb gear to 15 or 20 meter band. I have a Realistic HTX 100 mobile 10 meter rig that I am exploring the possibility of converting to 15/17 meters. I am seeking info on modifying or constructing band pass filters, shifting the LO,etc and any insights from those who have tried this or similar projects. Thanks to all in advance.

Tim VE7SEZ

1637. Re: Needed - Key Tension Spring

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-01 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <37acb6f7.21045474@news.atl.bellsouth.net>
Source record: 68232
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

On Sun, 1 Aug 1999 11:54:01 -0400, "CommQuart" <commquart@erols.com> wrote:

>As last ditch effort, assuming the original spring is "expendable" :
>
>Try heating it red hot with a torch, and then immediately immersing in a
>oil or salt water bath. That should anneal the steel and restore some of
>the strength.

No, that won't *anneal* the steel, which would make it soft. That will *harden* the steel, glass hard in fact. That's the *first* step in restoring its spring. Hardening is done by bringing the steel's temperature above the Curie point (a magnet won't stick to it), then quickly quenching it. A bright cherry red glow is approximately the right temperature, though the magnet test is more foolproof.

The second step is to draw the temper back so that it isn't so brittle that it will break when flexed. That's done at a much lower temperature. You want to heat it until the polished surface turns a light straw or bronze color, about 400 to 550 degrees depending on the alloy, then plunge it into cold water to keep it from turning purple (dead soft). These latter colors are oxide colors on the metal surface. The surface has to be polished to see them. They run *quick*, so you have to be quick to plunge the part into cold water at just the right time to get the desired temper.

If you were to heat the spring until the colors run purple, then let it cool *slowly*, you'd anneal it to a dead soft condition. It wouldn't be a spring then. Of course you can harden it again and try tempering it again. There's a bit of an art to doing this at home, but blacksmiths did it for centuries before the advent of carefully controlled alloys and special hardening and tempering furnaces with electronic profile controllers.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

1638. Re: 2 meter SSB HTs???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-02 00:00:00 UTC
From: ae517@FreeNet.Carleton.CA
Message-ID: <7o2odq$dqq@freenet-news.carleton.ca>
Source record: 68084

Le Grande Raoul (raoul@olympus.net) writes:
> In article <37A43986.663459A7@gate.net>, kf4fdj@amsat.org wrote:
>
> If you are willing and able to homebrew on the circuit design level, you
> might get away with a cheaper setup. I'm just getting into VHF in a
> serious way and am going with the HF rig/ transverter setup. I am using a

You could also buy R2 receiver and T2 transmitter boards from Kanga;
then you would only have to homebrew the 70cm LO (Kanga has a 2M
LO kit). Then a few MMICs followed by a 10 watt amplifier and you're
all set. With a well-stocked junk box, you might be able to get on
Mode B for around $300.
--
73 de va3rr/aa8lu
http://www.qsl.net/va3rr

1639. Re: Needed - Key Tension Spring

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-02 00:00:00 UTC
From: Tony Hwang <2810311762@home.com>
Message-ID: <37A50C2E.E3764369@home.com>
Source record: 68085
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Hi, Larry
Unless you want to keep that original everything, can't you find
something
suitable from hardware store hell box? Or how about giving it a heat
treatment? I guess you have stretched it out a few times already
to get to a point of replacing it.
73,
Tony, VE6CGX

Larry Asp wrote:
>
> Does anyone know a source for a morse code hand key tension spring. I
> have a handkey where the tension spring has weakened and should be
> replaced. Its a 1/2" long, and tapers with each turn.

1640. List of the rec.radio newsgroups

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-02 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <7o36lugfv1@news.hawaii.edu>
Source record: 68086
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

```
Archive-name: radio/personal-brief-introduction

In an effort help ensure a poster's article reaches the appropriate
audience, below is a list of the rec.radio newsgroups. In most cases,
a group's name will explain its purpose. Cross-posting should rarely
be necessary.

rec.radio.broadcasting (devoted to the broadcast industry; moderated)
rec.radio.cb
rec.radio.info (periodic informational bulletins; moderated)
rec.radio.scanner
rec.radio.shortwave
rec.radio.swap (for buying, selling, and trading; not a discussion group)

rec.radio.amateur.antenna
rec.radio.amateur.boatanchors (tube-type communications equipment)
rec.radio.amateur.digital.misc (packet, pactor and other digital modes)
rec.radio.amateur.dx (long-distance amateur communications)
rec.radio.amateur.equipment (questions, comments regarding commercially-
built amateur gear; not for buying/selling)
rec.radio.amateur.homebrew (devoted to home-building ham gear)
rec.radio.amateur.policy (issues include code, restructuring, local
restrictions in conflict with FCC R&R)
rec.radio.amateur.space (satellites, meteor scatter, EME)
rec.radio.amateur.misc (any topic not covered in the above groups)

(At least two other English language radio hierarchies exist, prefixed
with "uk" (United Kingdom), and "aus" (Australia), in place of "rec.")

Again, cross-posting should rarely be necessary. Many times, a long-
running thread results from a single cross-posted article, and its
content drifts further and further away from being "on-topic" in the
various NGs which receive each and every followup.

For more detailed information, see "Guide to the Rec.radio Newsgroups"
posted on the 15th of each month.

Jeffrey Herman, KH6O
(rec.radio.amateur working-group)
```

1641. Re: homebrew SMPS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-02 00:00:00 UTC
From: "Mr. Muckle" <jdwalton@home.com>
Message-ID: <37A5CC60.22ADB8E2@home.com>
Source record: 68087

The easiest way I can think of is to use a 556 rather than a 555 (or two 555's). One serves as the multivibrator, the other as the modulator. You can also use the CD4069 (hex inverter) to do the same thing.

If you want to "regulate", then by definition you are going to need some form of feedback to control the duty cycle of the PWM. This is why the off the shelf chips excell. Even an inexpensive chip like the LM3524 can be pressed into service quite easily. The duty cycle for these chips is adjusted by providing a variable voltage to one of the pins. I believe that if you use a 555 to drive the switching transistor you will need a transistor "totem pole" to drive the gate. This isn't necessary with the PWM chips.

It might just be easier to use an LM317 and a transistor. If you need to get down to "0" volts you can bias the "adjust" leg of the LM317 by the negative of the amount of VRef to get to "0"

David Cunningham wrote:

> I am considering homebrewing a simple switch mode power supply which would
> be used to regulate a low voltage supply of about 20v dc to provide a
> variable voltage supply. I have a UC3842 pulse width controller available,
> but would rather make something around a 555 as the pulse width modulator. I
> would like to hear from anyone who can suggest how I could do this in
> practice.
>
> d.l.c@btinternetNOSPAM.com

1642. Re: homebrew SMPS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-02 00:00:00 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <sDhp3.34047$8D2.5837@news.rdc1.il.home.com>
Source record: 68088

> > I am considering homebrewing a simple switch mode power supply which would
> > be used to regulate a low voltage supply of about 20v dc to provide a
> > variable voltage supply. I have a UC3842 pulse width controller available,
> > but would rather make something around a 555 as the pulse width modulator. I
> > would like to hear from anyone who can suggest how I could do this in
> > practice.

I'd rather not have this nice steak dinner, instead I'd like some stale catfood please?

Stick with the 384X series, they are excellent SMPS controllers. Easy to use as well.
The 384X series has undervoltage lockout, duty cycle limiting, current sensing, and an output that will drive up to 1A to control the mosfet gate.
The 555 can probably be made to do some of that, after a fashion.. but it's output will never be that stiff. So either your FET will run warm, or you get to add external transistors to drive it.

:-P

1643. Re: linear amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-02 00:00:00 UTC
From: Philip de Cadenet <BigMobile@g4zow.freeserve.co.uk>
Message-ID: <I$I8NHA3lap3EwuR@g4zow.freeserve.co.uk>
Source record: 68089

Leland,
>>I'd like to play w/ some a them 600 W Mosfets..... He He ***
>
>
>So you what to play with some 600 watt MOSFETS at $550 USD each? Then check
>out this site for a wide band (up to 6M linear amp over 1KW) and have fun.
>
>http://www.ibelings.com/n4ip/mrf157.html
>
>73's,
>
>Leland C. Scott
Alternatively, he could check out Harris' IRFP450 @

http://137.237.90.36/data/fn2331/

and get similar power from a pair of these at only a couple of dollars
each.

Phil G4ZOW

1644. Re: KPFA hostile takeover/Save Pacifica

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-02 00:00:00 UTC
From: Phil Kane <philkane>
Message-ID: <cuvyxnarpbzzynjpragrepbz.ffu7yll.pminews@nntp1.ba.best.com>
Source record: 68090
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave

On Sun, 01 Aug 1999 17:03:21 -0400, Bob Weiss wrote:

> There are actually 5 pacifica stations: WBAI-New York, WPFW-Washington, D.C. ,
> KPFA-Berkeley, CA. KPFB-Los Angeles, and KPFT, Houston, TX.

WRONG!

Six: WBAI - New York
WPFW - Washington
KPFT - Houston
KPFA - Berkeley
KPFB - Berkeley
KPFK - Los Angeles

KPFB was originally licensed as an off-channel translator to
fill in the shadow in Berkeley caused by the Oakland Hills
whereon the KPFA transmitter is located. With the advent of
on-channel boosters (which would not be feasible in that
configuration) they had to go "split programming" to some
extent because off-channel translators were no longer permitted
for "fill-in" purposes in the city-grade contour.

Why is this non-amateur-radio local Bay-Area topic being
posted here -- there is a very active discussion of this
circus in the ba.broadcasting n/g.

73 de Phil Kane - K2ASP

1645. FS: NOS/NIB 3bp1 qty 4

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-02 00:00:00 UTC
From: abcd1234 <abcd1234@ix.netcom.com>
Message-ID: <7o4hgmhrm1@news1.exit109.com>
Source record: 68091

Hello,

I have qty 4 NOS/NIB 3BP1 CRTs
for sale @ $15 each + Shipping extra

These are in original US ARMY/US NAVY JAN BOXES,
and are made in 1945 National UNION.

singhpk@exit109.com

1646. Re: Needed - Key Tension Spring

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-02 00:00:00 UTC
From: Irv Finkleman <finkirv@cadvision.com>
Message-ID: <37A5C9B3.B8B58215@cadvision.com>
Source record: 68092
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

If the key is special, it might be worthwhile picking up a used or cheap
key just for the spring

Irv VE6BP

Larry Asp wrote:

> Does anyone know a source for a morse code hand key tension spring. I
> have a handkey where the tension spring has weakened and should be
> replaced. Its a 1/2" long, and tapers with each turn.

1647. Re: homebrew SMPS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-02 00:00:00 UTC
From: abcd1234 <abcd1234@ix.netcom.com>
Message-ID: <7o4i0eiae1@news1.exit109.com>
Source record: 68093

I have been there and done that,

this is how :-

555 as sawtooth generator (from the RC cap on 555)
LM 741 as PWM driving a power switching transistor
another LM741 as error amplifier (a simple transistor can be used here
instead)
Another 741 or transistor for current limiting (if you care)

This can be used to build, BUCK, BOOST and invert flyback convertors.

This works very-very well indeed .

good home brewing.

73

David Cunningham wrote in message <7o2cvk$a8k$1@uranium.btinternet.com>...
>I am considering homebrewing a simple switch mode power supply which would
>be used to regulate a low voltage supply of about 20v dc to provide a
>variable voltage supply. I have a UC3842 pulse width controller available,
>but would rather make something around a 555 as the pulse width modulator.
I
>would like to hear from anyone who can suggest how I could do this in
>practice.
>
>d.l.c@btinternetNOSPAM.com
>
>

1648. UM3581

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-02 00:00:00 UTC
From: tinkie winkie <bullmeat@my-deja.com>
Message-ID: <7o4mnbvep1@nnrp1.deja.com>
Source record: 68094

Can anyone cross this number-UM3581? It might be a 555 but can't tell.Thanks for the help.

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1649. Re: homebrew SMPS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-02 00:00:00 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <9xkp3.34053$8D2.5885@news.rdc1.il.home.com>
Source record: 68095

> 555 as sawtooth generator (from the RC cap on 555)
> LM 741 as PWM driving a power switching transistor
> another LM741 as error amplifier (a simple transistor can be used here
> instead)
> Another 741 or transistor for current limiting (if you care)
>
> This can be used to build, BUCK, BOOST and invert flyback convertors.
>
>
> This works very-very well indeed .

And probably add a pair of transistors to bring up the gate drive, and an additional circuit for low voltage shutdown, or just use the 8 pin 384X chips, which do it all.

1650. Re: homebrew SMPS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-02 00:00:00 UTC
From: abcd1234 <abcd1234@ix.netcom.com>
Message-ID: <7o4l3akih1@news1.exit109.com>
Source record: 68096

All right,
here I go : -

It is indeed possible to make simple buck, or boost PWM regulator
(variable ferequency) with a minimal number of components
in the following 2 ways:-

1. the old BLOCKING OSCILATOR, just add a diode rectifier and filter
at the output, and add a zener diode fed back to the base of the
blocking oscilator transistor or darlington. This circuit was used
in numerous calculators (the early flourescent Display tube types with PMOS
calc chips) .
A scaled version of this also used very commonly as a flyback convertor
OFFLINE @ 120 or 240 volts AC/DC. They use a optocoupler and zener diode
for the feedback LOOP. This can handle upto about 100 watts.

2. 1 OPAMP as a comparator and 1 switching transistor as
pass transistor works very well as a switching regulator(variable frequency
again).

NOw , can you beat this stuff in SCALABILITY ann simplicity with 384X,
not to mention that you really need no special components, and also that
384X cant work OFFLINE anyway at 120 or 240 volts.

73s and happy homebrewing.

Be very careful if you go the OFFLINE route.

Dave VanHorn wrote in message
<9xkp3.34053$8D2.5885@news.rdc1.il.home.com>...
>
>> 555 as sawtooth generator (from the RC cap on 555)
>> LM 741 as PWM driving a power switching transistor
>> another LM741 as error amplifier (a simple transistor can be used here
>> instead)
>> Another 741 or transistor for current limiting (if you care)
>>
>> This can be used to build, BUCK, BOOST and invert flyback convertors.
>>
>>
>> This works very-very well indeed .
>
>
>And probably add a pair of transistors to bring up the gate drive, and an
>additional circuit for low voltage shutdown, or just use the 8 pin 384X
>chips, which do it all.

>
>
>
>

1651. Re: KPFA hostile takeover/Save Pacifica

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-02 00:00:00 UTC
From: Jonesy <jonz@rmi.nospam.net>
Message-ID: <7o4mjj$48s$1@news1.rmi.net>
Source record: 68097

Laszlo I. Morocz <kf4pv@spammenotlmorocz.com> wrote:
> My brains are a bit addled from the heatwave, so could someone please
> explain again just how exactly the Radio Pacifica discussion is relevant to
> homebrew ham radio?

'twas my question, as well.

Jonesy W3DHJ

--
Marvin L. Jones jonz<AT>rmi.net
Gunnison, Colorado
151 days to go until the Year 2000 -- So what!
517 days to go until the 3rd Millennium of the C.E.

1652. Re: beacon plans...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-02 00:00:00 UTC
From: j999w@aol.com
Message-ID: <19990802164701.26084.00006304@ng-fp1.aol.com>
Source record: 68098

Put me on the CC: list too please !

tnx.

jw
WB9UAI

1653. Re: voice recorder

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-02 00:00:00 UTC
From: j999w@aol.com
Message-ID: <19990802164927.26084.00006306@ng-fp1.aol.com>
Source record: 68099

That Radio Shack chip works pretty darn well, We use several of these for VHF contesting. Sure save's the 'ol golden throat !

jw
WB9UAI

1654. NEED MANUAL FOR YAESU FT-620B

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-02 00:00:00 UTC
From: rick <kc8dmn@accinternet.com>
Message-ID: <kOnp3.23$IM6.3509@iagnews.iagnet.net>
Source record: 68100
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.packet,rec.radio

I am looking for instruction manual and service manual for a Yaesu FT-620B.
I would like watt it is wroth.Can some one help me.

TNX 73,
Rick de K8RMR

--
E-MAIL @ kc8dmn@accinternet.com
WEB PAGE @ www.accinternet.com/~kc8dmn

1655. Re: Microwave filters: Input/output connections?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-02 00:00:00 UTC
From: hamm4fun@aol.com
Message-ID: <19990802173733.25499.00002631@ng-cd1.aol.com>
Source record: 68101

I made an interdigital filter about 5 years ago for a little over 1gig design impedance was for 50 ohms in and out. I found plans for a similar filter and just ratioed all the measurements for the new freq. with the input and output impdances the same where I tapped did not seem as important as that the input and output was tapped the same distance from the ground end.

1656. FS or Trade: QRP Equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-02 00:00:00 UTC
From: Jeff Johns <jeffj@scott.net>
Message-ID: <4294947510281019654 5NEWS2LX@news.idea-works.net>
Source record: 68102
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.swap,rec.radio.amateur.homebrew

I have the following items that I would like to sell as a package or possibly trade for some type of VHF/UHF equipment (dual band HT, mobile rig, base rig, etc.) or some type of 10 meter equipment or maybe even an older laptop:

Small Wonders Labs SW40+ 40 meter QRP CW transceiver. Has optional factory enclosure also has option Freq-Mite frequency counter. Currently set for the Novice section of 40 meters (easily changed to General & up portions of the band). Also includes a ten-turn pot that aids in tuning, but I have never gotten around to installing it as the factory pot has served me well.

NJ-QRP Club Rainbow Tuner with optional beautiful and 'bulletproof' enclosure. This is an awesome QRP tuner which tunes a longwire for 40 meter operation. It is powered by an internal battery and uses four small 'rainbow colored' LEDs to indicate SWR. You can view details of the Rainbow Tuner at http://www.njqrp.org The tuner is also easily converted to operation on other bands through a kit which I believe the NJ QRP Club is still has available. Connection to the SW40+ is made through a short piece of coax with BNC connectors on each end, which would be included. The tuner automatically turns itself on when it sense RF and run hundreds of hours on the included battery.

Depending on what is offered, either financially or in trade, I also have a Vectronics keyer that has been built into a Radio Shack plastic enclosure that conatains an internal speaker for code practice and is adjustable for about 3wpm to about 30wpm. It is powered by a 9 volt battery.

I am 99% sure that I have manuals for all the above listed items and would also provide them with the equipment.

If anyone is interested, please feel free to email me. Thanks and 73!

Jeff

---- Jeff Johns W4JEF - Reserve Patrol Captain ----
--- Jefferson County Sheriff's Department ---
--- Birmingham, Alabama USA ---
--- HP200LX & BayPac.. QRP Packet At It's Best! ---
---- Finger jeffj@scott.net for my PGP RSA Key ----

1657. Re: Oscillator phase noise

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-02 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7o5knantb1@news1.fast.net>
Source record: 68103

-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

Tony Grimwood <nobody@home.spammers> wrote in message
news:nobody-0308990854120001@romulus.mus.auckland.ac.nz...
> Hi all,
> Can anyone tell me the best way of accurately measuring phase noise
> (jitter) in a squarewave oscillator running at about 44KHz?
>
> Thanks,
> Tony Grimwood

At only 44 kHz, a good DSO (Digital Storage Oscilloscope) should be
able to make the measurement. Most have a "hold" mode which
accumulates
a programmable number of sweeps, which should allow you to make a
pretty accurate pkp-pk jitter measurement. From that you can
calculate
absolute RMS jitter, convert to degrees, and come up with an idea of
how
good/bad it is.

Some of the more capable DSOs even have built-in functions such as
an automatic pk-pk and/or RMS phase jitter measurements, FFTs,
etc.

- --

Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI
Fellow, Radio Club of America
Senior Member, IEEE
Member, ARRL
Join NCI - Hams for the 21st Century!
Help modernize ham radio and assure its future survival!
http://www.nocode.org

-----BEGIN PGP SIGNATURE-----
Version: PGP for Personal Privacy 5.5.3

iQA/AwUBN6ZV1Je+N6+q84HiEQJj6gCguWMV8kmPGd3iJFS3WDK5Er8lrX8AnRwZ
Ofld/Uu9RzTlx9Vchz+jalG8
=XOVD

```
-----END PGP SIGNATURE-----
```

1658. Antenna for Small ATV

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-02 00:00:00 UTC
From: "Buy@shootingsupplies.net" <buy@shootingsupplies.net>
Message-ID: <yUBp3.4661$gr5.598798@feed.centuryinter.net>
Source record: 68104
Cross-posted to: alt.ham-radio.marketplace,alt.ham-radio.vhf-uhf,es.rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I have a small ATV .5mW transmitter on 426.25MHz. in my R/C airplane, I have a single wire antenna. I want a better antenna. What is the best way to go?? Remember this must be small and lightweight.

Thanks,
Gundy@rdz.net

1659. Oscillator phase noise

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-03 00:00:00 UTC
From: nobody@home.spammers
Message-ID: <nobody-0308990854120001@romulus.mus.auckland.ac.nz>
Source record: 68105

Hi all,
Can anyone tell me the best way of accurately measuring phase noise
(jitter) in a squarewave oscillator running at about 44KHz?

Thanks,
Tony Grimwood

--
Tony Grimwood
Studio Geek and Smeghead
University of Auckland
School of Music

1660. Re: linear amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-03 00:00:00 UTC
From: maddog@io.com
Message-ID: <37a655f2.3659674@news.io.com>
Source record: 68106

On Mon, 2 Aug 1999 15:21:43 +0100, Philip de Cadenet
<BigMobile@g4zow.freeserve.co.uk> wrote:

>>So you what to play with some 600 watt MOSFETS at $550 USD each? Then check
>>out this site for a wide band (up to 6M linear amp over 1KW) and have fun.
>>
>>http://www.ibelings.com/n4ip/mrf157.html
>>
>>73's,
>>
>>Leland C. Scott
>Alternatively, he could check out Harris' IRFP450 @
>
>http://137.237.90.36/data/fn2331/
>
>and get similar power from a pair of these at only a couple of dollars
>each.
>
>Phil G4ZOW

hmmm... not likely, Phil. The devices you mentioned have rather high
input and output capacitances, which would certainly preclude
operation at 6 meters. Most power mosfets (of the "V" channel
variety) won't hack it as HF amplifiers. With careful selection (for
low i/o capacitances), however, you can manage to make them work up to
about 10MHz. The IRF610 is an example of one that we've seen used
this way, although not at these power levels. However, the MRF157,
mentioned by Leland, is characterized for RF service (with a pricetag
to match).

73,
monty N5FC

1661. HELP: Where do I buy HV switch to tube PA?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-03 00:00:00 UTC
From: Tommy Karlberg <tommy.karlberg@ecs.ericsson.se>
Message-ID: <37A6C1C5.3F0BA27F@ecs.ericsson.se>
Source record: 68107

Hi

I'm in the process of building a PA for 10-80m. Can anyoune give me a hint on where to buy the switch that can be used in the output filter to change band?

vy 73 de SM7PAF / Tommy

1662. Re: homebrew SMPS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-03 00:00:00 UTC
From: "Mr. Muckle" <jdwalton@home.com>
Message-ID: <37A71D40.18203BE3@home.com>
Source record: 68108

Dave -

Re my comment last night - it appears this a.m. that Texas Instruments will aquire Unitrode - and this means that Newark, Allied, etc. will probably carry Unitrode as a line extension. This is good news for amateur SMPS!

Dave VanHorn wrote:

> > 555 as sawtooth generator (from the RC cap on 555)
> > LM 741 as PWM driving a power switching transistor
> > another LM741 as error amplifier (a simple transistor can be used here
> > instead)
> > Another 741 or transistor for current limiting (if you care)
> >
> > This can be used to build, BUCK, BOOST and invert flyback convertors.
> >
> >
> > This works very-very well indeed .
>
> And probably add a pair of transistors to bring up the gate drive, and an
> additional circuit for low voltage shutdown, or just use the 8 pin 384X
> chips, which do it all.

1663. Re: Oscillator phase noise

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-03 00:00:00 UTC
From: Tom McDermott <Tom.Mcdermott@usa.alcatel.com>
Message-ID: <37A6EC03.5D33920C@usa.alcatel.com>
Source record: 68109

I'm not sure how accurate a measurement is wanted. The technique that Carl
mentions may or may not be sufficiently accurate due to trigger jitter and timebase
jitter and wander in the oscilloscope.

In the telecom standards literature, jitter and wander are defined differently.
Jitter are the phase noise components above 10 hz, while wander are those

(well) below 10 hz.

Traditionally, jitter is measured by phase-locking a reference oscillator to the
measured source. The reference oscillator has to have a very-low tracking
bandwidth, and good phase noise properties. This oscillator is then used

to demodulate the oscillator under test down to DC. The phase noise
on the source is thus converted to AF. To measure jitter, a single-pole
10 hz. high-pass filter is used to filter the output. A couple of techniques can
be used to measure the noise, but an FFT-based spectrum analyzer is one way.

For wander, it's more difficult, because a highly-stable reference oscillator
needs to be avaliable to be phase-compared to the oscillator under test.
Normally, a count of the phase drift over a long measurement time is
performed. Different measurement times provide sometimes strikingly
different answers!

-- Tom, N5EG

"Carl R. Stevenson" wrote:

>
> Tony Grimwood <nobody@home.spammers> wrote in message
> news:nobody-0308990854120001@romulus.mus.auckland.ac.nz...
> > Hi all,
> > Can anyone tell me the best way of accurately measuring phase noise
> > (jitter) in a squarewave oscillator running at about 44KHz?
> >
> > Thanks,
> > Tony Grimwood
>
> At only 44 kHz, a good DSO (Digital Storage Oscilloscope) should be

> able to make the measurement. Most have a "hold" mode which
> accumulates
> a programmable number of sweeps, which should allow you to make a
> pretty accurate pkp-pk jitter measurement. From that you can
> calculate
> absolute RMS jitter, convert to degrees, and come up with an idea of
> how
> good/bad it is.
>
> Some of the more capable DSOs even have built-in functions such as
> an automatic pk-pk and/or RMS phase jitter measurements, FFTs,
> etc.
>
> - --
>
> Carl R. Stevenson - WA6VSE

1664. Re: linear amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-03 00:00:00 UTC
From: Philip de Cadenet <BigMobile@g4zow.freeserve.co.uk>
Message-ID: <J7W8sYAMjup3EwuQ@g4zow.freeserve.co.uk>
Source record: 68110

Hi Monty,

>hmmm... not likely, Phil. The devices you mentioned have rather high
>input and output capacitances, which would certainly preclude
>operation at 6 meters. Most power mosfets (of the "V" channel
>variety) won't hack it as HF amplifiers. With careful selection (for
>low i/o capacitances), however, you can manage to make them work up to
>about 10MHz. The IRF610 is an example of one that we've seen used
>this way, although not at these power levels. However, the MRF157,
>mentioned by Leland, is characterized for RF service (with a pricetag
>to match).
>
>73,
>monty N5FC
Yes, of course you're correct. I was aware of their upper frequency
limits.

I hope you or someone reading this thread can help me with any pointers
to either of the following.

1. In May 97 QST there was published a multi-part article called 'High
Efficiency class-E Power Amplifiers', by KE6VWU, KF6GHS and KF6GHY. This
project evolved from an undergraduate student project at Caltec.
I should like to know what following month's editions of this magazine
published the remaining parts of the article?

2. In Comm's Quarterly fall 98, a similar article describing a 700w CW,
250w AM class-E PA for 160m mentions the use of a 'class-S' modulator.
I would love to try building such a modulator but all my current search
engines come up with a big ZERO this subject. Does anyone have any
references or have they done any work in this area?

Fritz Raab, W1FR one of the two publishers of this article kindly sent
me a reprint but says the publication of their modulator design is no
nearer publication now than what it was two years ago!
Shame, if you ask me.

What is a homebrewer to do?

Phil G4ZOW

1665. Re: Antenna for Small ATV

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-03 00:00:00 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <spDp3.34218$8D2.6007@news.rdc1.il.home.com>
Source record: 68111
Cross-posted to: alt.ham-radio.marketplace,alt.ham-radio.vhf-uhf,es.rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

> I have a small ATV .5mW transmitter on 426.25MHz. in my R/C airplane, I have
> a single wire antenna. I want a better antenna. What is the best way to go??
> Remember this must be small and lightweight.

A copper tape dipole could work well, but of course it's somewhat directional. If your tail is high enough, you could do a vertical dipole, which will work well unless it's right above you.

One thing to try might be a pair of dipoles, one vert, and the other horizontal, fed with half the power each. I fly rockets, so I don't get that much of a choice. :)

1666. Re: NEED MANUAL FOR YAESU FT-620B

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-03 00:00:00 UTC
From: Geehaw <oogliboo@internet.com>
Message-ID: <idEp3.1304$XB1.2350466@firenze.visi.net>
Source record: 68112
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.packet,rec.radio

Yaesu has a website: http:\\www.yaesu.com

rick <kc8dmn@accinternet.com> wrote in message
news:kOnp3.23$lM6.3509@iagnews.iagnet.net...
>
> I am looking for instruction manual and service manual for a Yaesu
FT-620B.
> I would like watt it is wroth.Can some one help me.
>
> TNX 73,
> Rick de K8RMR
>
>
> --
> E-MAIL @ kc8dmn@accinternet.com
> WEB PAGE @ www.accinternet.com/~kc8dmn
>
>

1667. Re: KPFA hostile takeover/Save Pacifica

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-03 00:00:00 UTC
From: John Mock <kd6pag@qsl-nojunk.net>
Message-ID: <87d7x46dd3.fsf@mongrel.kd6pag.ampr.org>
Source record: 68113

Why is this non-amateur-radio local Bay-Area topic being
posted here -- there is a very active discussion of this
circus in the ba.broadcasting n/g.

Perhaps because of the low signal/noise ratio on the topic on 'ba.*' and the occasional (usually off-topic) discussion of WBFM homebrewing here. Thanks for the reference to 'ba.broadcasting' and also check 'ba.politics'. Is the microbroadcasting NPRM still open? If so, does anyone have a URL for it?
-- KD6PAG

1668. Re: linear amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-03 00:00:00 UTC
From: goldreged@aol.comJUNKBLOK
Message-ID: <19990803154537.27035.00006177@ng-cb1.aol.com>
Source record: 68114

<<1. In May 97 QST there was published a multi-part article called 'High Efficiency class-E Power Amplifiers', by KE6VWU, KF6GHS and KF6GHY. This project evolved from an undergraduate student project at Caltec.
I should like to know what following month's editions of this magazine published the remaining parts of the article?
>>

http://www.systems.caltech.edu/EE/Faculty/rutledge/poweramp.html

Should help ya out on this one...

1669. Re: Oscillator phase noise

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-03 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7o7khr$6pa$1@news1.fast.net>
Source record: 68115

-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

Tom McDermott <Tom.Mcdermott@usa.alcatel.com> wrote in message
news:37A6EC03.5D33920C@usa.alcatel.com...
> I'm not sure how accurate a measurement is wanted. The technique
that
> Carl
> mentions may or may not be sufficiently accurate due to trigger
jitter
> and timebase
> jitter and wander in the oscilloscope.

Good points ... I was also not sure how accurate a measurement was
wanted/needed. I was trying to describe a way to get an idea of the
magnitude of the jitter with a simple technique using common, standard
equipment.

Agreed that there are more accurate ways to make the measurement,
but some of the beter DSOs are capable of making jitter measurements
pretty acurately, even in some cases down to the picosecond levels.
I figured that the "quick and dirty" technique might well be accurate
enough for a 44kHz square wave (a multivibrator, I assume) oscillator.

73,

- --
Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI
Fellow, Radio Club of America
Senior Member, IEEE
Member, ARRL
Join NCI - Hams for the 21st Century!
Help modernize ham radio and assure its future survival!
http://www.nocode.org

-----BEGIN PGP SIGNATURE-----
Version: PGP for Personal Privacy 5.5.3

iQA/AwUBN6dVPpe+N6+q84HiEQJ3/wCeJXzvnUSiG75IQ+KB1MZC0etsjCEAoLeS
FP7geM3G9SoEtJFkq0at7J84
=ZVSx
-----END PGP SIGNATURE-----

1670. Re: Antenna for Small ATV

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-03 00:00:00 UTC
From: Paul Breed <Paul@Rasdoc.com>
Message-ID: <37A77251.C7113C8D@Rasdoc.com>
Source record: 68116
Cross-posted to: alt.ham-radio.marketplace,alt.ham-radio.vhf-uhf,es.rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

<snip>
> One thing to try might be a pair of dipoles, one vert, and the other
> horizontal, fed with half the power each. I fly rockets, so I don't get
> that much of a choice. :)

How would one make a good home brew splitter at that freq?

Paul

1671. Re: Antenna for Small ATV

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-03 00:00:00 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <djKp3.34249$8D2.6096@news.rdc1.il.home.com>
Source record: 68117
Cross-posted to: alt.ham-radio.marketplace,alt.ham-radio.vhf-uhf,es.rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

> How would one make a good home brew splitter at that freq?

Center tapped transformer, or maybe a wilkinson combiner?

1672. Re: Antenna for Small ATV

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-03 00:00:00 UTC
From: Paul Breed <Paul@Rasdoc.com>
Message-ID: <37A77667.97ADBEDD@Rasdoc.com>
Source record: 68118
Cross-posted to: alt.ham-radio.marketplace,alt.ham-radio.vhf-uhf,es.rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

<snip>
> wilkinson combiner?

What is a wilkinson combiner?

1673. Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-03 00:00:00 UTC
From: manixbonsi@aol.com
Message-ID: <19990803192008.23717.00002830@ngol06.aol.com>
Source record: 68119

Hi all,

Anybody have any decent indoor antenna designs please?

Thanks in advance,

Paul

1674. Bearcat BC-60XLT Modifications

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-03 00:00:00 UTC
From: J COWIE <cowietexas@worldnet.att.net>
Message-ID: <7o80jklod1@bgtnsc03.worldnet.att.net>
Source record: 68120

I am interested in expanding the frequency range of my scanner. Was wondering if anyone reading this could help?

73
KD5HLM

1675. Re: linear amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-03 00:00:00 UTC
From: Philip de Cadenet <BigMobile@g4zow.freeserve.co.uk>
Message-ID: <0wFDeMABb1p3EwZX@g4zow.freeserve.co.uk>
Source record: 68121

Replied via e-mail.
><<1. In May 97 QST there was published a multi-part article called 'High
>Efficiency class-E Power Amplifiers', by KE6VWU, KF6GHS and KF6GHY. This
>project evolved from an undergraduate student project at Caltec.
>I should like to know what following month's editions of this magazine
>published the remaining parts of the article?
>>>
>
>http://www.systems.caltech.edu/EE/Faculty/rutledge/poweramp.html
>
>Should help ya out on this one...

http://www.bigradios.com - My favourite site.

1676. HAM LICENSE PLATE IMAGES SOUGHT

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-04 00:00:00 UTC
From: K2BJ <webmaster@k2bj.com>
Message-ID: <7oaorf$lld@dfw-ixnews9.ix.netcom.com>
Source record: 68034

Looking for images of ham plates, all states, any age, country. To help fill out section of my web site devoted to ham license plates. Visit:

http://www.k2bj.com/Plates.htm

'73!
K2BJ

1677. HF MOBILE OF THE MONTH UPDATED

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-04 00:00:00 UTC
From: K2BJ <webmaster@k2bj.com>
Message-ID: <7oaq5r$mpc@dfw-ixnews9.ix.netcom.com>
Source record: 68035

Visit http://www.k2bj.com

Submit shots of your setup now for the 9/99 update!

'73
Brian

1678. (none)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-04 00:00:00 UTC
From: aszopko@netspace.NET.AU
Message-ID: <01BEDE51.A1092180.aszopko@netspace.net.au>
Source record: 68122

```
subscribe ham-homebrew
```

1679. Re: HELP: Where do I buy HV switch to tube PA?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-04 00:00:00 UTC
From: Joe Leikhim <jleikhim@nettally.com>
Message-ID: <37A7C2BB.BEB4C4EB@nettally.com>
Source record: 68123

try Surplus Sales of Nebraska. They have some nice vintage ceramic switches.
Also try Fair Radio Sales in Lima Ohio.

Tommy Karlberg wrote:

> Hi
>
> I'm in the process of building a PA for 10-80m. Can anyoune give me a
> hint on where to buy the switch that can be used in the output filter to
> change band?
>
> vy 73 de SM7PAF / Tommy

--
Joe Leikhim K4SAT (EX KE4TZH)
Jleikhim@nettally.com

"tv dinner by the pool,
i'm so glad i finished school" -F.Zappa 1967

"The Revolution will NOT be televised" -Gil Scott Heron

1680. Re: Antenna for Small ATV

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-04 00:00:00 UTC
From: Joe Leikhim <jleikhim@nettally.com>
Message-ID: <37A7C3D1.F276B7C1@nettally.com>
Source record: 68124
Cross-posted to: alt.ham-radio.marketplace,alt.ham-radio.vhf-uhf,es.rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Try a 1/2 wave dipole across the wings by putting a 1/4 wave wire on each wing fed in center. You can also use copper foil as the conductor. Remember the dipole will be a shorter length than a dipole in free space. You will need to trim for lowest swr, best signal.

n
Buy@shootingsupplies.net" wrote:

> I have a small ATV .5mW transmitter on 426.25MHz. in my R/C airplane, I have
> a single wire antenna. I want a better antenna. What is the best way to go??
> Remember this must be small and lightweight.
>
> Thanks,
> Gundy@rdz.net

--
Joe Leikhim K4SAT (EX KE4TZH)
Jleikhim@nettally.com

"tv dinner by the pool,
i'm so glad i finished school" -F.Zappa 1967

"The Revolution will NOT be televised" -Gil Scott Heron

1681. Re: thanks from new antenna co uk

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-04 00:00:00 UTC
From: "larry d. clark" <buddycl@swbell.net>
Message-ID: <DC9D66C532E5B5A9.4CDDE5EFECF4A39C.045CAF71ACCF5A50@lp.airnews.net>
Source record: 68125

at least in dallas, tx the posted url is no good. dns
can't find it.

larry
kd5foy
em12

crewdson paul wrote:

> Thanks to all who helped us get our website up and running at long last.
> We are posting this message to all amateur radio newsgroups as we dont know
> which
> amateur radio newsgroup the help came from.
> All we can say is many tnx for all comments (including the negative ones).
> We hope now everything is ok. (we have no doubt you will let us know).
> If we recieve the same response in orders as we recieved in help with our
> website we
> will be very pleased.
> Please dont forget we are a new company set up by three radio hams. We have
> started in a
> little garage making antennas to a specification that all amateurs want. We
> intend to use
> the best quality materials available to us. We aim to make our antennas
> servicable
> by yourself. All antennas are hand built and tested before despatch. Small
> antennas
> will come ready built, pre tuned and ready for installation.
> If you are local to lancashire we will even deliver and fit your antenna for
> a small charge.
> O.a.p.s. and disabled who are local will recieve a very good price for
> fitting.
> Please support us and help get this company of the ground.
> Dont forget we are trying to bring a service to you the amateur that no one
> has attempted
> before. Please pop by our site,no purchase neccesary but all comments
> welcome.
> Paul M1DHD.
> http://antec.ltd.i12.com

--
Fragen Sie nicht was Ihre Kumputer tun koennen,
aber fragen Sie was Sie fur Ihre Kumputer koennen.

1682. Re: Antenna for Small ATV

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-04 00:00:00 UTC
From: "Dennis C. O'Connor" <k8do@midmich.net>
Message-ID: <37A84296.895F6700@midmich.net>
Source record: 68126
Cross-posted to: alt.ham-radio.marketplace,alt.ham-radio.vhf-uhf,es.rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In full size aircraft, we use a shallow horizontal vee dipole... It helps to fill in the dead zone off the end of a straight dipole...

Denny

Dave VanHorn wrote:

> > I have a small ATV .5mW transmitter on 426.25MHz. in my R/C airplane, I
> have
> > a single wire antenna. I want a better antenna. What is the best way to
> go??
> > Remember this must be small and lightweight.
>
> A copper tape dipole could work well, but of course it's somewhat
> directional. If your tail is high enough, you could do a vertical dipole,
> which will work well unless it's right above you.
>
> One thing to try might be a pair of dipoles, one vert, and the other
> horizontal, fed with half the power each. I fly rockets, so I don't get
> that much of a choice. :)

1683. Re: Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-04 00:00:00 UTC
From: Martin Meserve <meserve@my-deja.com>
Message-ID: <37A84B1B.2781E494@my-deja.com>
Source record: 68127

Paul Stringer wrote:
>
> Hi all,
>
> Anybody have any decent indoor antenna designs please?
>
> Thanks in advance,
>
> Paul

Here is a web site that would be worth checking out:

Harry's Homebrew Homepage
http://hem2.passagen.se/sm0vpo

Check out the section on antennas. There are several interesting
designs that might work for you.

Martin

--
Martin E. Meserve KB7EQS martin.e.meserve
Engineer, Program/Project Specialist AT
Lockheed Martin M&DS - Reconnaissance Systems lmco.com

I respond to news groups and E-Mail on my own time and therefore my
responses may not be as timely as you, or I, would like them to be. If
I seem to be ignoring you, send me another E-Mail to jog my memory.
Opinions are my own and do not reflect the opinions of my employer.

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1684. Wanted!- Your Dead or Dying Dentron MLA-2500

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-04 00:00:00 UTC
From: Pinky & The Brain <odin@webspan.net>
Message-ID: <rqgvqqd732328@corp.supernews.com>
Source record: 68128
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.homebrew,rec.radio.swap

DOES NOT MATTER if tubes (8875s) are good or not! Looking for unit to convert & retube. Minor PS troubles are acceptable as long as power transformer is OK! PLS respond with price and condition.

TNX

Steve

1685. Fireball Beacon Plans..

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-04 00:00:00 UTC
From: Doug <kf6mwa@jps.net>
Message-ID: <37A87D5B.46E9F3FA@jps.net>
Source record: 68129
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew,alt.binaries.schematics.electronics,rec.radio.shortwave

Does anyone have plans for the Fireball Beacon?
It was from 73 Amateur Radio today.
November 1990 for the Fireball Beacon
It uses a computer clock ocolator. If anyone has the plans for this
beacon or one like this one Please Email me with details...

73's de KF6MWA Doug...

1686. Re: Oscillator phase noise

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-04 00:00:00 UTC
From: William Janssen <billj@calweb.com>
Message-ID: <37A8828D.CC419B27@calweb.com>
Source record: 68130

Another way to make these jitter measurements is to compare
the signal to a delayed copy of the same signal. A computer
memory delay line chip might give enough delay. Should have
about 90 deg.. phase delay for max. sensitivity.

A stable Osc.. frequency locked to the signal is the normal
method as has already been pointed out.

Bill K7NOM

Carl R. Stevenson wrote:
>
> -----BEGIN PGP SIGNED MESSAGE-----
> Hash: SHA1
>
> Tom McDermott <Tom.Mcdermott@usa.alcatel.com> wrote in message
> news:37A6EC03.5D33920C@usa.alcatel.com...
> > I'm not sure how accurate a measurement is wanted. The technique
> that
> > > Carl
> > > mentions may or may not be sufficiently accurate due to trigger
> jitter
> > > and timebase
> > > jitter and wander in the oscilloscope.
>
> Good points ... I was also not sure how accurate a measurement was
> wanted/needed. I was trying to describe a way to get an idea of the
> magnitude of the jitter with a simple technique using common, standard
> equipment.
>
> Agreed that there are more accurate ways to make the measurement,
> but some of the beter DSOs are capable of making jitter measurements
> pretty acurately, even in some cases down to the picosecond levels.
> I figured that the "quick and dirty" technique might well be accurate
> enough for a 44kHz square wave (a multivibrator, I assume) oscillator.
>
> 73,
>
> - --
> Carl R. Stevenson - WA6VSE
> mailto:wa6vse@fast.net
> http://www.users.fast.net/~wa6vse
> NCI #1052
> Director, NCI
> Fellow, Radio Club of America

> Senior Member, IEEE
> Member, ARRL
> Join NCI - Hams for the 21st Century!
> Help modernize ham radio and assure its future survival!
> http://www.nocode.org
>
> -----BEGIN PGP SIGNATURE-----
> Version: PGP for Personal Privacy 5.5.3
>
> iQA/AwUBN6dVPpe+N6+q84HiEQJ3/wCeJXzvnUSiG75IQ+KB1MZC0etsjCEAoLeS
> FP7geM3G9SoEtJFkq0at7J84
> =ZVSx
> -----END PGP SIGNATURE-----

1687. What is SSB and CW? How works VOX?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-04 00:00:00 UTC
From: nova <nova@kaunas.aiva.lt>
Message-ID: <01bede51$23a0a380$8bf7dbc1@www.aiva.lt>
Source record: 68131

The title say all.
Thanks Nova

1688. Wanted: Midland 77-113 schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-04 00:00:00 UTC
From: info@classichits.com
Message-ID: <04089915.2950@classichits.com>
Source record: 68132

Can someone help? I need the schematics for the Midland 77-113 CB Radio.
Or the phone# to Midland.. Need to fix a problem with the CB receiver. Thanks!

mailto:carlae@goodnet.com
phone# 602-923-8004
fax# 520-441-1950

Carla Ackley, PO Box 55294, Phoenix, AZ 85078-5294

1689. Re: Oscillator phase noise

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-05 00:00:00 UTC
From: nobody@home.spammers
Message-ID: <nobody-0508991330590001@romulus.mus.auckland.ac.nz>
Source record: 68036

In article <37A6EC03.5D33920C@usa.alcatel.com>, Tom McDermott
<Tom.Mcdermott@usa.alcatel.com> wrote:

>I'm not sure how accurate a measurement is wanted. The technique that
>Carl
>mentions may or may not be sufficiently accurate due to trigger jitter
>and timebase
>jitter and wander in the oscilloscope.
>
>In the telecom standards literature, jitter and wander are defined
>differently.
>Jitter are the phase noise components above 10 hz, while wander are those
>
>(well) below 10 hz.
>
>Traditionally, jitter is measured by phase-locking a reference oscillator
>to the
>measured source. The reference oscillator has to have a very-low
>tracking
>bandwidth, and good phase noise properties. This oscillator is then used
>
>to demodulate the oscillator under test down to DC. The phase noise
>on the source is thus converted to AF. To measure jitter, a single-pole
>10 hz. high-pass filter is used to filter the output. A couple of
>techniques can
>be used to measure the noise, but an FFT-based spectrum analyzer is one
>way.
>
>For wander, it's more difficult, because a highly-stable reference
>oscillator
>needs to be avaliable to be phase-compared to the oscillator under test.
>Normally, a count of the phase drift over a long measurement time is
>performed. Different measurement times provide sometimes strikingly
>different answers!

Thanks for the info, Tom & others. I'm looking for a pretty accurate
measurement technique, as it happens. The object of my interest is the
phase noise performance of digital audio sample clock oscillators such as
are used in [pro audio] A-D and D-A convertors. The problem is that very
few of the manufacturers of professional-level digital audio equipment
actually publish the jitter specs of their gear. This is a strange state
of affairs, because clock jitter does have an impact on the quality of the
audio listened to at the end of the chain.

Thanks again,
Tony Grimwood

BTW - sorry if this thread is a bit off topic, but Amateurs came immediately to mind as just the kind of folk likely to have this level of technical knowledge. :) --... ...--

1690. Re: Compactron Sockets

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-05 00:00:00 UTC
From: wa2ise@netcom.com
Message-ID: <7ob1vi$9cr@dfw-ixnews15.ix.netcom.com>
Source record: 68037

In article <7nt1thdin1@news1.exit109.com>,
abcd1234 <abcd1234@ix.netcom.com> wrote:
>AES at www.tubesandmore.com has them
>
>Q: Is it possible to use pins taken frpm DB25 computer connectors to be used
>for this purpose for socketing the compactrons , if the thing is mounted on
>a PCB???
>
>I myself am wondering about compactron sockets, dont want to buy one
>compactron socket for $2.50 or so.
>
Any female socket pin capable of grabbing onto #18 AWG soild wire will do.
You could cannalblize 7 and 9 pin tube sockets.

1691. 5 tube radio sensitivity mods web page

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-05 00:00:00 UTC
From: wa2ise@netcom.com
Message-ID: <7ob29u$2fl@dfw-ixnews6.ix.netcom.com>
Source record: 68038
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave

http://www.geocities.com/CapeCanaveral/9178/radios/12ba7.html

Various easy and intermediate skill mods to try on tube radios, mostly
the AC/DC kind. Using higher conversion transconductance converter tubes,
higher gain IF tubes, longer ferrite loopsticks, etc.

1692. Re: Oscillator phase noise

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-05 00:00:00 UTC
From: neal hudson <neal.hudson@gte.net>
Message-ID: <khaq3.1573$OO4.45873@dfiatx1-snr1.gtei.net>
Source record: 68039

You might also mix you 10 KHz signal with its self a few times (multiply)to get the phase noise higher and within the measurement capabilities that you might have with a good scope. Phase noise increases 20 LOG (N). Neal

Tony Grimwood wrote in message ...
>In article <37A6EC03.5D33920C@usa.alcatel.com>, Tom McDermott
><Tom.Mcdermott@usa.alcatel.com> wrote:
>
>>I'm not sure how accurate a measurement is wanted. The technique that
>>Carl
>>mentions may or may not be sufficiently accurate due to trigger jitter
>>and timebase
>>jitter and wander in the oscilloscope.
>>
>>In the telecom standards literature, jitter and wander are defined
>>differently.
>>Jitter are the phase noise components above 10 hz, while wander are those
>>
>>(well) below 10 hz.
>>
>>Traditionally, jitter is measured by phase-locking a reference oscillator
>>to the
>>measured source. The reference oscillator has to have a very-low
>>tracking
>>bandwidth, and good phase noise properties. This oscillator is then used
>>
>>to demodulate the oscillator under test down to DC. The phase noise
>>on the source is thus converted to AF. To measure jitter, a single-pole
>>10 hz. high-pass filter is used to filter the output. A couple of
>>techniques can
>>be used to measure the noise, but an FFT-based spectrum analyzer is one
>>way.
>>
>>For wander, it's more difficult, because a highly-stable reference
>>oscillator
>>needs to be avaliable to be phase-compared to the oscillator under test.
>>Normally, a count of the phase drift over a long measurement time is
>>performed. Different measurement times provide sometimes strikingly
>>different answers!
>
>Thanks for the info, Tom & others. I'm looking for a pretty accurate
>measurement technique, as it happens. The object of my interest is the
>phase noise performance of digital audio sample clock oscillators such as
>are used in [pro audio] A-D and D-A convertors. The problem is that very

>few of the manufacturers of professional-level digital audio equipment
>actually publish the jitter specs of their gear. This is a strange state
>of affairs, because clock jitter does have an impact on the quality of the
>audio listened to at the end of the chain.
>
>
>Thanks again,
>Tony Grimwood
>
>BTW - sorry if this thread is a bit off topic, but Amateurs came
>immediately to mind as just the kind of folk likely to have this level of
>technical knowledge. :) --... ...--

1693. DDS VFO Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-05 00:00:00 UTC
From: henryt@perth.dialix.com.au
Message-ID: <933836326.188420@newton.dialix.com.au>
Source record: 68040

Hi All,
There was a very interesting DDS (Direct Digital Sythesiser) VFO using the Analogue Devices AD9850 in July '97 QEX. (I don't have a copy of the article, I have seen some of the PIC code on the net).

I am interested in knowing what the limitations might be in using this type of VFO up to 6m frequencies? Does phase noise become a major problem? Are there other problems using it on frequencies above 30Mhz?

Best Regards From,
Henry.

VK6HJT

1694. Re: Oscillator phase noise

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-05 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <37b53fb2.582274606@news.sci.fi>
Source record: 68041

On Thu, 05 Aug 1999 13:30:59 +1200, nobody@home.spammers (Tony Grimwood) wrote:

: Thanks for the info, Tom & others. I'm looking for a pretty accurate
: measurement technique, as it happens. The object of my interest is the
: phase noise performance of digital audio sample clock oscillators such as
: are used in [pro audio] A-D and D-A convertors.

As far as I know the actual sample clock in these systems are always generated in a crystal oscillator or VCO running at a high multiplier of the sampling frequency e.g. 256 x 44.1 kHz = 11289.6 kHz. While the phase noise would be impossible to measure at 44.1 kHz with a spectrum analyzer, it might well be measurable at this much higher frequency, since the phase noise is spread over a much larger bandwidth.

If a spectrum analyzer, the oscillator frequency could be mixed down with a clean crystal oscillator to the audio range and using the sound card and FFT, the phase noise spectrum of the oscillator can be measured. Applying corrections for the division ratio will give the phase noise at 44 kHz. In this example, the oscillator frequency could be mixed with 11288.0 kHz, folding the tone to around 1600 Hz and sampling this at 8 kHz and using 8192 point FFT, the phase noise for every (about) 1 Hz can be measured, thus the phase noise spectrum for every 4 mHz (that is millihertz) of the 44.1 kHz sample clock can be calculated. The problem is then to convert the phase noise spectrum to time jitter measurement.

Of course, this method only measures the sample clock impurity due to oscillator spectral purity, but it does not measure any extra phase noise generated by the frequency division chain.

The higher the oscillator frequency, the more the phase noise spectrum spreads out, thus making it easier to read it. It might even be possible to run the oscillator frequency through a few frequency multipliers before heterodyning it down to the audio range for FFT.

I have not done any quantitative measurements using this method, but I have used it in some qualitative assessments of oscillators running in the 60-90 Mhz range multiplied up into a 1-2 GHz range and listening to it in a good quality CW receiver. While listening at the fundamental frequency of the oscillators, they all sounded very clean by the ear, but listening to a high multiple of the oscillator frequency reveals clear tone purity differences between various oscillators and also reveals other artifacts, such as very low frequency microphonics of the oscillators.

Paul OH3LWR

1695. Amateur Radio Information Search

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-05 00:00:00 UTC
From: sabbatai_zvi@hotmail.com
Message-ID: <37a966bd.1114756@news.earthlink.net>
Source record: 68042
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap,rec.antiques.radio+phono

Search for almost any amateur radio subject on the web at:

http://www.geocities.com/CapeCanaveral/Hall/8701/hamlynx.htm

Specializing in topics related to Antique radio, Boatanchors,
Homebrewing, QRP and Contesting etc.

Items for sale at:
http://www.geocities.com/CapeCanaveral/Hall/8701/trade.htm

1696. Re: Loosen those pesky Kenwood Microphone Nuts!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-05 00:00:00 UTC
From: sabbatai_zvi@hotmail.com
Message-ID: <37a96830.1485693@news.earthlink.net>
Source record: 68043
Cross-posted to: rec.radio.swap,rec.radio.amateur.dx,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.homebrew

Speaking of Kenwood Mics, does ANYONE have any idea how to repair that stupid modular, punched on connector that Kenwood so brilliantly chose to use on the mic for the TM-261A and similar VHF rigs?

The silly punched on clear plastic connector looks like something on a throw-away telephone, but no, THEY used it on the $75.00 microphone!

Now of course after a few months of use, mine is falling apart.

Is there some tool to replace that punched on connector or does anyone have any tips on repairing it?

If I have to buy a $75-79 replacement mic for this $199 radio after 6 months I will say "NEVER AGAIN" to Kenmore!

On Thu, 29 Jul 1999 17:11:09 GMT, DontDoIt@ImNotHere.com (Neil) wrote:

>(This is provided as a public service, and NOT as a way to make
>money...)
>
>I have in my posession a tool that is positively brilliant at
>loosening/removing/tightening those annoying circular "nuts" that
>you'll find on various Kenwood rigs. Yes, you know the ones I mean,
>the ones that no amount of coaxing with the tip of a screwdriver will
>budge.
>
>Why on earth would you want to remove this nut, you ask? Well for
>most of the affected Kenwood rigs, it's the ONLY way to get to things
>like digital front panels, lithium batteries, and so on.
>
>You can see a photo of the tool at:
>
>http://www.mv.com/ipusers/innermedia/kenwood/spanner.jpg
>
>So here's the deal:
>
>1. Send me a postal money order (no cash or checks please) for the
>amount of $37.50. This covers the cost of my packaging and shipping
>the tool ($17.50), plus a refundable deposit of $20.
>
>2. I then ship the tool to you via UPS ground. If you want it faster,
>email or call me and I'll tell you the cost.
>
>3. You use the tool (totally at YOUR risk!!!) to open your radio, do

>your work, then use the tool to close it up. PLEASE DON'T BREAK OR
>ABUSE THE TOOL!
>
>4. Using the same box I sent it to you in, you send the tool back to
>me, via whatever method you choose.
>
>5. When I receive the tool back undamaged, I send you a check for $20,
>thereby refunding your deposit.
>
>Your net cost is therefore just $17.50. That's about 1/4 of what any
>Kenwood service facility will charge you, and you get to control what
>happens.
>
>PLEASE DON'T USE THIS AS AN OPPORTUNITY TO BUY THIS TOOL. I can tell
>you where to get your own, please return mine.
>
>If you want further info about any of this, just contact me as shown
>below.
>
>Thanks, and best regards all!
>
>Neil Rosenberg
>60 Plain Road
>Hollis, NH 03049
>(603) 465-2788
>NeilR@innermedia.com
>
>Disclaimer:
>
>I make absolutely NO warranty as to the applicability, performance, or
>safety involved in using the tool I send to you. If you damage your
>rig, or yourself, that is totally your responsibility. If you void
>your warranty, that's also your problem. THINK BEFORE YOU ACT!
>
>If the tool is not as I described it, if you chicken out, or if it
>doesn't fit your rig, contact me, and I'll refund your entire price
>(less my UPS cost) as soon as the tool is returned to me undamaged.
>In other words, treat me fairly, and I'll return the same.
>
>Neil, N1DMA
>

1697. Re: Loosen those pesky Kenwood Microphone Nuts!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-05 00:00:00 UTC
From: Simon Lewis <slewis@pacsat.demon.co.uk>
Message-ID: <C9YwT6AELXq3Ewny@pacsat.demon.co.uk>
Source record: 68044
Cross-posted to: rec.radio.swap,rec.radio.amateur.dx,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.homebrew

In article <37a96830.1485693@news.earthlink.net>, Elite Tubes
<sabbatai_zvi@hotmail.com> writes
>Speaking of Kenwood Mics, does ANYONE have any idea how to repair that
>stupid modular, punched on connector that Kenwood so brilliantly chose
>to use on the mic for the TM-261A and similar VHF rigs?
>
>The silly punched on clear plastic connector looks like something on a
>throw-away telephone, but no, THEY used it on the $75.00 microphone!
>
>Now of course after a few months of use, mine is falling apart.
>
>Is there some tool to replace that punched on connector or does anyone
>have any tips on repairing it?
>
>If I have to buy a $75-79 replacement mic for this $199 radio after 6
>months I will say "NEVER AGAIN" to Kenmore!

Buy a cable from a computer supplier and change the cable over!

73 Simon GM4PLM
+--+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
| Fax Service- 0870 0520972 |
+--+

1698. Need .0068uf, 5KV capacitor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-05 00:00:00 UTC
From: Bob or Chris Balonis <rmborcmb@penn.com>
Message-ID: <37A9A11E.3519@penn.com>
Source record: 68045

Hi,

If you have a ~.0068 uF, 5 KV capacitor (for use in a old Tektronix scope), or know of a source, please drop me an e-mail

Tnx, Bob (NB3W)

1699. Re: Compactron Sockets

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-05 00:00:00 UTC
From: Franz Hamberger <hitchhiker@alpha-centauri.net>
Message-ID: <7ocfq2mke1@news05.btx.dtag.de>
Source record: 68046

Robert Casey schrieb in Nachricht
<7ob1vi$9cr@dfw-ixnews15.ix.netcom.com>...
>In article <7nt1thdin1@news1.exit109.com>,
>abcd1234 <abcd1234@ix.netcom.com> wrote:
>>AES at www.tubesandmore.com has them
>>
>>Q: Is it possible to use pins taken frpm DB25 computer connectors to
be used
>>for this purpose for socketing the compactrons , if the thing is
mounted on
>>a PCB???

The problem is to achieve a flexible mounting on a PCB to avoid
mechanical tensions on the tube base, but strong enough to keep
the tube from 'wackeln' (vibrating?). Sorry, I don't remember the
right word.

>>I myself am wondering about compactron sockets, dont want to buy one
>>compactron socket for $2.50 or so.

I don't want it too, if I can avoid it.

>Any female socket pin capable of grabbing onto #18 AWG soild wire will
do.
>You could cannalblize 7 and 9 pin tube sockets.

Thanks for reminding me.

I've done that already in the past, setting up some kind of
'surface-mount' 7-pin miniature socket of suitable female
contacts, to test a crystal oscillator design using a VHF triode.

I guess I'll try it with the 12-pin version again.

Franz

--
Franz Hamberger, DL7AVF, Berlin, Germany
dl7avf@qsl.net
http://www.qsl.net/dl7avf
For informations on tube data visit my webpage:
The Electron Tubes and Valves - Charts
http://www.ginko.de/user/franz.hamberger

1700. Any ideas on a modulation transformer...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-05 00:00:00 UTC
From: imahumanradiostation@my-deja.com
Message-ID: <7ocs5k$sr8$1@nnrp1.deja.com>
Source record: 68047

I'm currently developing a solid state 5 to 15 Watt AM phone transceiver for 80M SW band and was wondering if anyone had advice for a modulation transformer. It seems that the only source for modulation transformers now days are CB's but I was looking for something a little easier to obtain.

I have heard of some folks modifying existing "audio" chokes (the large ones that look like transformers) buy adding a secondary or tapping at a certain point. Has anyone tried this before?

Any help would be great, thanks.

Joe

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1701. Making a 2m 5/8 from copper pipe?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-05 00:00:00 UTC
From: David Snyder Hale <david@isi9.mtwilson.edu>
Message-ID: <7ocqe2$1i9l$1@nntprelay.berkeley.edu>
Source record: 68048
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

I have a 51-inch piece of leftover copper water pipe,
"3/4'' Type" (which actually measures 7/8'' dia).

This seems about right for a 2m 5/8 wave antenna. Has anyone
done this with this particular material? I ask that specific
question because a) I think the diameter should affect the
length; and b) I can't quite figure out how to physically mount
it with an appropriate loading coil.

thanks,

--
Dave * N3WTK (DM04xf) * http://isi9.mtwilson.edu * n3wtk@arrl.net

1702. FA: Radio/Electronics reference books

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-05 00:00:00 UTC
From: K6SDE <k6sde@my-deja.com>
Message-ID: <37AA1842.608CB8E7@my-deja.com>
Source record: 68049

Two Radio/Electronics reference books in near mint condition:

Terman, Electronic and Radio Engineering, 4th Edition

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=142593010

Henney, Radio Engineering Handbook, 5th Edition

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=142596974

1703. Re: Oscillator phase noise

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-05 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <37AA2AFC.25E3715E@corecomm.net>
Source record: 68050

Paul Keinanen wrote:
> I have not done any quantitative measurements using this method, but I
> have used it in some qualitative assessments of oscillators running in
> the 60-90 Mhz range multiplied up into a 1-2 GHz range and listening
> to it in a good quality CW receiver. While listening at the
> fundamental frequency of the oscillators, they all sounded very clean
> by the ear, but listening to a high multiple of the oscillator
> frequency reveals clear tone purity differences between various
> oscillators and also reveals other artifacts, such as very low
> frequency microphonics of the oscillators.

Sounds as though you'd need to use some non-digital method of multiplication,
like the old harmonic-resonant amplifier types in old VHF gear.

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

1704. Re: Loosen those pesky Kenwood Microphone Nuts!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-05 00:00:00 UTC
From: TLNixon@revealed.net
Message-ID: <37aa1c81.72200856@news.revealed.net>
Source record: 68051
Cross-posted to: rec.radio.swap,rec.radio.amateur.dx,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.homebrew

Take the mic cable and all to a computer cabling outfit, a 2 way radio shop, or anyone who installs telephone equipment and ask them to please crimp on a new connector.

Terry-WB0VQP

On Thu, 05 Aug 1999 21:21:09 GMT, no.junk.mail@thank.you (Walt Davidson) wrote:

>On Thu, 05 Aug 1999 10:34:55 GMT, sabbatai_zvi@hotmail.com (Elite
>Tubes) wrote:
>
>>Is there some tool to replace that punched on connector or does anyone
>>have any tips on repairing it?
>
>There is a special tool. However, it's probably cheaper and easier
>just to buy a replacement cable, complete with plug, from a Radio
>Shack or computer store.
>
>>If I have to buy a $75-79 replacement mic for this $199 radio after 6
>>months I will say "NEVER AGAIN" to Kenmore!
>
>Kenmore?
>
>BTW, there is no escape ... Icom use a similar plug on their IC706
>mic!
>
>73 de G3NYY
>
>--
>Walt Davidson Email: walt@ surf-zone.co.uk

1705. Re: Amateur Radio Information Search

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-05 00:00:00 UTC
From: Phil Nelson <nospam.philnelson@antiqueradio.org>
Message-ID: <rqkbm5cekur68@corp.supernews.com>
Source record: 68052
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap,rec.antiques.radio+phono

Thanks for listing Phil's Old Radios in the antique radio section, but your link is out of date. The correct URL is:

http://antiqueradio.org/index.html

Cheers.

Phil
philnelson@antiqueradio.org

1706. Re: Loosen those pesky Kenwood Microphone Nuts!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-05 00:00:00 UTC
From: SixGunz <six@gunz.com>
Message-ID: <37aa3225.0@news.sac.bfp.net>
Source record: 68053
Cross-posted to: rec.radio.swap,rec.radio.amateur.dx,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.homebrew

Those pesky plugs are the industry standard in the commercial radio business and have rarely been a problem -
If it is an RJ11 - 6 pin conductor you can buy a 6 pin crimper for about 20 -30 bucks (buy a nice one) and you can get the plastic pieces fir about 2 cents each.
You make note of the wire sequence (1-6) and cut the old one off - insert the line into the stripper into the deisgnated stripper - measures length - and strip - insert the wires into the plastic plug - crimp it and you have a new plug-

I would never want to go back to the old mic plugs - they take way too long when broken - i can recrimp a new plug in under a minute -
if they are an 8 pin plug - get an 8 pin crimper - most mics are standard at 6 pins

Elite Tubes <sabbatai_zvi@hotmail.com> wrote in message news:37a96830.1485693@news.earthlink.net...
> Speaking of Kenwood Mics, does ANYONE have any idea how to repair that
> stupid modular, punched on connector that Kenwood so brilliantly chose
> to use on the mic for the TM-261A and similar VHF rigs?
>
> The silly punched on clear plastic connector looks like something on a
> throw-away telephone, but no, THEY used it on the $75.00 microphone!
>
> Now of course after a few months of use, mine is falling apart.
>
> Is there some tool to replace that punched on connector or does anyone
> have any tips on repairing it?
>
> If I have to buy a $75-79 replacement mic for this $199 radio after 6
> months I will say "NEVER AGAIN" to Kenmore!
>
>
> On Thu, 29 Jul 1999 17:11:09 GMT, DontDoIt@ImNotHere.com (Neil) wrote:
>
> >(This is provided as a public service, and NOT as a way to make
> >money...)
> >
> >I have in my posession a tool that is positively brilliant at
> >loosening/removing/tightening those annoying circular "nuts" that
> >you'll find on various Kenwood rigs. Yes, you know the ones I mean,
> >the ones that no amount of coaxing with the tip of a screwdriver will
> >budge.

> >
> >Why on earth would you want to remove this nut, you ask? Well for
> >most of the affected Kenwood rigs, it's the ONLY way to get to things
> >like digital front panels, lithium batteries, and so on.
> >
> >You can see a photo of the tool at:
> >
> >http://www.mv.com/ipusers/innermedia/kenwood/spanner.jpg
> >
> >So here's the deal:
> >
> >1. Send me a postal money order (no cash or checks please) for the
> >amount of $37.50. This covers the cost of my packaging and shipping
> >the tool ($17.50), plus a refundable deposit of $20.
> >
> >2. I then ship the tool to you via UPS ground. If you want it faster,
> >email or call me and I'll tell you the cost.
> >
> >3. You use the tool (totally at YOUR risk!!!) to open your radio, do
> >your work, then use the tool to close it up. PLEASE DON'T BREAK OR
> >ABUSE THE TOOL!
> >
> >4. Using the same box I sent it to you in, you send the tool back to
> >me, via whatever method you choose.
> >
> >5. When I receive the tool back undamaged, I send you a check for $20,
> >thereby refunding your deposit.
> >
> >Your net cost is therefore just $17.50. That's about 1/4 of what any
> >Kenwood service facility will charge you, and you get to control what
> >happens.
> >
> >PLEASE DON'T USE THIS AS AN OPPORTUNITY TO BUY THIS TOOL. I can tell
> >you where to get your own, please return mine.
> >
> >If you want further info about any of this, just contact me as shown
> >below.
> >
> >Thanks, and best regards all!
> >
> >Neil Rosenberg
> >60 Plain Road
> >Hollis, NH 03049
> >(603) 465-2788
> >NeilR@innermedia.com
> >
> >Disclaimer:
> >
> >I make absolutely NO warranty as to the applicability, performance, or
> >safety involved in using the tool I send to you. If you damage your

> >rig, or yourself, that is totally your responsibility. If you void
> >your warranty, that's also your problem. THINK BEFORE YOU ACT!
> >
> >If the tool is not as I described it, if you chicken out, or if it
> >doesn't fit your rig, contact me, and I'll refund your entire price
> >(less my UPS cost) as soon as the tool is returned to me undamaged.
> >In other words, treat me fairly, and I'll return the same.
> >
> >Neil, N1DMA
> >
>
>

1707. Re: Any ideas on a modulation transformer...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-05 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.SOL.4.10.9908052206430.3486-100000@Ocean.CAM.ORG>
Source record: 68054

On Thu, 5 Aug 1999 imahumanradiostation@my-deja.com wrote:

> I'm currently developing a solid state 5 to 15 Watt AM phone transceiver for
> 80M SW band and was wondering if anyone had advice for a modulation
> transformer. It seems that the only source for modulation transformers now
> days are CB's but I was looking for something a little easier to obtain.
>
If you can accept the low power, a modulation transformer from a CB set
may be the easiest to come by. Occasionally, I do see CB sets at garage
sales (and selling for five dollars or so) and a few years ago I found two
in a neighbors garbage. I've even seen some at hamfests. And I imagine
other locations might see more CB useage, and thus more items for sale.
If you have to spend five or ten dollars ona CB set that you can get
locally, it may be cheaper and easier than tracking one down by mail.

Rick LIttlefield, in his 6 meter AM transceiver in the Winter 1998 issue
of Communications Quarterly (and a similar rig for 2 meters an issue or
two later), used a modulation transformer from a CB set. I recall Peter
Bertini asking about such transformers before the article appeared, and I
assume it was chosen because they were easier to come by than some generic
use moudlation transformer.
>
>
> I have heard of some folks modifying existing "audio" chokes (the large ones
> that look like transformers) buy adding a secondary or tapping at a certain
> point. Has anyone tried this before?
>
People have used power transformers in years gone by. I don't recall the
requirements. I do remember someone suggesting 400 cycle power
transformers, because they would be better for speech transmission and
they were cheap.

In an issue of Ham Radio from 1969 or 1970, someone suggested (based on a
commercial circuit he'd seen) modulating a regulator to modulate a
transmitter. A followup letter or two was shocked by the inefficiency,
but if you're using it at home, it is a means of using semiconductors
(which are readily available) to replace the iron (which is harder to find
these days).

>
> Any help would be great, thanks.
>
> Joe
>
Since you refer to 80 meters as a "SW band" rather than a ham band, I

figure I'd better mention the need to be licensed, just in case.

Michael VE2BVW

1708. Re: Fireball Beacon Plans..

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-05 00:00:00 UTC
From: The One and Only! <mitch96@pobox.com>
Message-ID: <37AA54E2.26B181A0@pobox.com>
Source record: 68055
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

Doug wrote:
>
> Does anyone have plans for the Fireball Beacon?

try the nj qrp club. they kitted the fireball.
http://www.njqrp.org/index.html

73, mitch ww4ml
lost in the eithers again..

1709. Re: NEED MANUAL FOR YAESU FT-620B

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-05 00:00:00 UTC
From: k5cf <k5cf@clnk.com>
Message-ID: <rqkm0k55kur25@corp.supernews.com>
Source record: 68056
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.packet,rec.radio

Try www.w7fg.com k5cf
Geehaw <oogliboo@internet.com> wrote in message
news:idEp3.1304$XB1.2350466@firenze.visi.net...
> Yaesu has a website: http:\\www.yaesu.com
>
> rick <kc8dmn@accinternet.com> wrote in message
> news:kOnp3.23$lM6.3509@iagnews.iagnet.net...
> >
> > I am looking for instruction manual and service manual for a Yaesu
> FT-620B.
> > I would like watt it is wroth.Can some one help me.
> >
> > TNX 73,
> > Rick de K8RMR
> >
> >
> > --
> > E-MAIL @ kc8dmn@accinternet.com
> > WEB PAGE @ www.accinternet.com/~kc8dmn
> >
> >
>
>

1710. June 97 QST article ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-05 00:00:00 UTC
From: Philip de Cadenet <BigMobile@g4zow.freeserve.co.uk>
Message-ID: <u1oVPLA4Agq3Ewzy@g4zow.freeserve.co.uk>
Source record: 68057

Would anyone in the US happen to have this edition available to hand?

I'm looking for a copy of the concluding part of an article called: High Efficiency Class-E Power Amplifier.

I'll gladly cover cost to purchase copy alternatively a copy via e-mail would be most appreciated.

Mny tnx

Phil G4ZOW
http://www.bigradios.com - My favourite site.

1711. Re: Oscillator phase noise

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-06 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <37be3c09.646873565@news.sci.fi>
Source record: 68058

On Thu, 05 Aug 1999 19:23:24 -0500, "Clifton T. Sharp Jr."
<clifto@corecomm.net> wrote:

: Paul Keinanen wrote:

<comparing oscillator spectral purity by listening at the high
multiplier of the oscillator>

: Sounds as though you'd need to use some non-digital method of multiplication,
: like the old harmonic-resonant amplifier types in old VHF gear.

The MAR-x series MMICs are usable well above 1 GHz by overdriving them
and using resonators between each stage to pick out the wanted
harmonic before feeding it into the next stage.

Paul OH3LWR

1712. Re: Any ideas on a modulation transformer...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-06 00:00:00 UTC
From: imahumanradiostation@my-deja.com
Message-ID: <7odn7t$f8h$1@nnrp1.deja.com>
Source record: 68059

Thanks for the info Michael. I'm starting to think that the CB mod xfmr should be the way to go. I just need to locate a supplier. :(

> Since you refer to 80 meters as a "SW band" rather than a ham band, I
> figure I'd better mention the need to be licensed, just in case.

My my, aren't we a picky bunch? ;)

> Michael VE2BVW

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1713. Need : Tokyo HL1K Connector ...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-06 00:00:00 UTC
From: awn <samuel.morse@nomail.cpod.fr>
Message-ID: <01bedfd6$b1c00760$1b8127d4@f6awn.cpod.fr>
Source record: 68060

Hello !

Where can I find a connector for a TOKYO HY-POWER HL1K Power Amplifier
?
(if possible in E.C. ...)

(connection for relay & ALC, looking as an old connector for batteries,
3 pins)

Thanks in advance,

73,
Francis
F6AWN

1714. Re: Any ideas on a modulation transformer...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-06 00:00:00 UTC
From: Robert Mansfield <bmansfieREMOVETHIS@interaccess.com>
Message-ID: <rql7nt4fkur26@corp.supernews.com>
Source record: 68061

I have not tried this but a way to trade circuit complexity for efficiency
and iron
may be to modulate a switching regulator. the problem is that the output
filter
for the power supply will have to be rather fancy in order to pass the audio
but not have any switching components that will cause spurs.
--
Bob Mansfield "Facts do not cease to exist
Freelance Engineer because they are ignored"
WA8USR Aldous Huxley
s/v Shadow Dancer This is to fix some spamers wagon uce@ftc.gov
enforcement@sec.gov

Michael Black <blackm00@CAM.ORG> wrote in message
news:Pine.SOL.4.10.9908052206430.3486-100000@Ocean.CAM.ORG...
>
>
> On Thu, 5 Aug 1999 imahumanradiostation@my-deja.com wrote:
>
> > I'm currently developing a solid state 5 to 15 Watt AM phone transceiver
for
> > 80M SW band and was wondering if anyone had advice for a modulation
> > transformer. It seems that the only source for modulation transformers
now
> > days are CB's but I was looking for something a little easier to obtain.
> >
> If you can accept the low power, a modulation transformer from a CB set
> may be the easiest to come by. <SNIP>
> In an issue of Ham Radio from 1969 or 1970, someone suggested (based on a
> commercial circuit he'd seen) modulating a regulator to modulate a
> transmitter. A followup letter or two was shocked by the inefficiency,
> but if you're using it at home, it is a means of using semiconductors
> (which are readily available) to replace the iron (which is harder to find
> these days).
>
> >
> > Any help would be great, thanks.
> >
> > Joe
> >
> Since you refer to 80 meters as a "SW band" rather than a ham band, I
> figure I'd better mention the need to be licensed, just in case.
>
> Michael VE2BVW

>
>

1715. Re: June 97 QST article ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-06 00:00:00 UTC
From: knox_k_NOBS@nemaine.com
Message-ID: <37aabdc2.2175985@news.nemaine.com>
Source record: 68062

On Thu, 5 Aug 1999 22:20:56 +0100, Philip de Cadenet
<BigMobile@g4zow.freeserve.co.uk> wrote:

>Would anyone in the US happen to have this edition available to hand?
>
>I'm looking for a copy of the concluding part of an article called: High
>Efficiency Class-E Power Amplifier.
>
>I'll gladly cover cost to purchase copy alternatively a copy via e-mail
>would be most appreciated.
>
>Mny tnx
>
>Phil G4ZOW
>http://www.bigradios.com - My favourite site.

Hi Phil.

I have that document (including the first part from the May issue)
available as a Microsoft Word 97 document, complete with all graphics,
if you have the capability to read such a document. If you're
interested, my ICQ # is 22964426 if that's an option for file
transfer. Alternatively, I could email it to you if your ISP allows
attachments. I can be reached by email at:

knox_k@nemaine,com

Hope this can be of help to you!

Ken

1716. Re: June 97 QST article ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-06 00:00:00 UTC
From: Philip de Cadenet <BigMobile@g4zow.freeserve.co.uk>
Message-ID: <3o+DoWAhetq3EwhL@g4zow.freeserve.co.uk>
Source record: 68063

Answered via e-mail.
>I have that document (including the first part from the May issue)
>available as a Microsoft Word 97 document, complete with all graphics,
>if you have the capability to read such a document. If you're
>interested, my ICQ # is 22964426 if that's an option for file
>transfer. Alternatively, I could email it to you if your ISP allows
>attachments. I can be reached by email at:
>
>knox_k@nemaine,com
>
>Hope this can be of help to you!
>
>Ken

http://www.bigradios.com - My favourite site.

1717. HELP : Mods for FT2600 ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-06 00:00:00 UTC
From: Brian <brian_messman@yahoo.com>
Message-ID: <mBFq3.67$d05.7904@typhoon01.swbell.net>
Source record: 68064

This seems to bee the most elusive item to come by (except the 6 foot blonde in the flesh) out there. Anyone have the MARS / CAP mods available for this radio? I've tried all the usual stuff, nogo. Any help would be greatly appreciated....

-brian

1718. CALLING ALL REGEN GURUS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-06 00:00:00 UTC
From: Paul <pmartin@bright.net>
Message-ID: <37AB28A6.F9412CEA@bright.net>
Source record: 68065

An elmer of mine (long since a silent key) , whom I greatly respected, once told me it was no big deal to build a regen receiver that was sensitive enough to work with a two ft. aerial and selective enough to slice off the sidebands of a signal. I was thinking about him recently and thought it might be fun to get away from all the modern gadgetry and go back to basics and build such a regen for swl. I'd rather use FETs than tubes and I want the ultimate selectivity. The usual circuits I've run across don't seem capable of my goals so I'm asking for your experiences and tricks you've come up with to build your ultimate regen. Any and all suggestions appreciated. 73 all.

1719. Help MARS-CAP mod for Yaesu FT-530

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-06 00:00:00 UTC
From: Geehaw <mdmiller@nospam.sybercom.net>
Message-ID: <igGq3.246$X42.604417@firenze.visi.net>
Source record: 68066

Anyone got the MARS CAP mod for a Yaesu FT-530 HT Dual Bander

1720. Re: CALLING ALL REGEN GURUS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-06 00:00:00 UTC
From: troglodite@aol.com
Message-ID: <19990806152755.18406.00006289@ng-cp1.aol.com>
Source record: 68067

> An elmer of mine (long since a silent key) , whom I greatly
>respected, once told me it was no big deal to build a regen receiver
>that was sensitive enough to work with a two ft. aerial and selective
>enough to slice off the sidebands of a signal. I was thinking about him
>recently and thought it might be fun to get away from all the modern
>gadgetry and go back to basics and build such a regen for swl. I'd
>rather use FETs than tubes and I want the ultimate selectivity. The
>usual circuits I've run across don't seem capable of my goals so I'm
>asking for your experiences and tricks you've come up with to build your
>ultimate regen. Any and all suggestions appreciated. 73 all.

With all respect to your Elmer, if that were always and strictly true, why wouldn't we all be using regens?

Truth be known, the "simple" regen receiver is a lot trickier than it looks, and it seems like no two work alike, even if built with identical parts by the same person. I remember building the vacuum tube versions out of the Radio Amateurs Handbooks of the 50's, and some were hot, others were not. The FET design in the later handbooks likewise gives similar results. You just have to futz with 'em, and nobody knows exactly why. (Though there are no shortage of theories.) You hit the nail on the head though, when you said you'd like to have some fun experimenting. It IS fun. Just do it for the fun of it, and be happy with whatever performance you can get by judicious tweaking.

Doug Moore KB9TMY

1721. Re: CALLING ALL REGEN GURUS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-06 00:00:00 UTC
From: Mike Lucas W5CHR <lucascom@email.msn.com>
Message-ID: <OFLY34E4#GA.491@cpmsnbbsa02>
Source record: 68068

Paul wrote in message <37AB28A6.F9412CEA@bright.net>...
>and go back to basics and build such a regen for swl. I'd
>rather use FETs than tubes and I want the ultimate selectivity. The
>usual circuits I've run across don't seem capable of my goals so I'm
>asking for your experiences and tricks you've come up with to build your
>ultimate regen. Any and all suggestions appreciated. 73 all.
>
Paul: AFAIK, the best designs for regens (and some neat superregens)
are covered really well by Charles Kitchin of Analog Devices. I have in
front of me the fall '94 issue of Communications Quarterly, where Charles
has a 13 page article on the superregen receiver. He had an earlier article
on straight regens, but my copy of that is lost somewhere near the bottom
layer of papers in my radio room/library/aluminum tubing collection.I
believe that he had one in the last few years in QST, but my archival system
is on the fritz....hope this helps. Good luck with the project. Please keep
us on the hombrew NG posted on your progress.

Mike Lucas W5CHR
Memphis, Tenn

1722. Re: CALLING ALL REGEN GURUS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-06 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37AB4DAF.D992D106@teleport.com>
Source record: 68069

I don't want to throw water on a desire to experiment and learn. But one thing you should consider is that regenerative receivers are notorious for radiating as well as receiving. What might have been tolerable in your Elmer's day might not be acceptable in today's intensely-used RF environment. You should consider including an RF stage to isolate the oscillating detector from the antenna and, if possible, measure the emissions to make sure they comply with current regulations.

Roy Lewallen, W7EL

Troglodite wrote:
>
> > An elmer of mine (long since a silent key) , whom I greatly
> >respected, once told me it was no big deal to build a regen receiver
> >that was sensitive enough to work with a two ft. aerial and selective
> >enough to slice off the sidebands of a signal. I was thinking about him
> >recently and thought it might be fun to get away from all the modern
> >gadgetry and go back to basics and build such a regen for swl. I'd
> >rather use FETs than tubes and I want the ultimate selectivity. The
> >usual circuits I've run across don't seem capable of my goals so I'm
> >asking for your experiences and tricks you've come up with to build your
> >ultimate regen. Any and all suggestions appreciated. 73 all.
>
> With all respect to your Elmer, if that were always and strictly true, why
> wouldn't we all be using regens?
>
> Truth be known, the "simple" regen receiver is a lot trickier than it looks,
> and it seems like no two work alike, even if built with identical parts by the
> same person. I remember building the vacuum tube versions out of the Radio
> Amateurs Handbooks of the 50's, and some were hot, others were not. The FET
> design in the later handbooks likewise gives similar results. You just have to
> futz with 'em, and nobody knows exactly why. (Though there are no shortage of
> theories.) You hit the nail on the head though, when you said you'd like to
> have some fun experimenting. It IS fun. Just do it for the fun of it, and be
> happy with whatever performance you can get by judicious tweaking.
>
> Doug Moore KB9TMY

1723. NEW WEB PAGES

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-06 00:00:00 UTC
From: dsimp@tbsa.com.au
Message-ID: <37ab54e0.1915040@news.bigpond.com>
Source record: 68070

VK3NDS Amateur Radio Web Site now has NEW PAGES for users.
The site is also now FULLY SEARCHABLE.

URL IS: http://www.tbsa.com.au/~dsimp/

The new pages are:

Astronomy; Amateur Television; Antique Radios; Antennas; Band Plans;
CW; Home Brew; Propagation; QRP; Radio Clubs Listing; Radio Mods;
Six Metres+++.

The other services remain including Hams Home Page Listing, DX'ers
Page, Contesting, SWL/Scanner/Monitoring Page, Ham Software & Ham
Study, plus hundreds of radio related links.

1724. Re: CALLING ALL REGEN GURUS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-06 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7ofmmm$1em$1@autumn.news.rcn.net>
Source record: 68071

We've been running "The Boy's First Receiver" project in Popular
Communications
Magazine for the past few months. Uses a single 1H4, 1G4 or type 30 or 199
triode.
Coils cover from BCB thru about 12 MHz. Set runs on three 9 volt batteries
and a D
cell(s). Regens are a lot more fun when using glow bottles!

At high regeneration levels the set acts similarly to a "Q multiplier";
advancing the
regen does give some increased selectivity, but certainly no where's near
enough
for SSB reception.

Peter

> Paul: AFAIK, the best designs for regens (and some neat superregens)
>are covered really well by Charles Kitchin of Analog Devices. I have in
>front of me the fall '94 issue of Communications Quarterly, where Charles
>has a 13 page article on the superregen receiver.

1725. RE: Any ideas on a modulation transformer...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-06 00:00:00 UTC
From: "El Tio [J]" <MGore@cvmail.cl>
Message-ID: <3RMq3.39$g51.706@maule>
Source record: 68072

>===== Original Message From imahumanradiostation@my-deja.com =====
>I'm currently developing a solid state 5 to 15 Watt AM phone transceiver for
>80M SW band and was wondering if anyone had advice for a modulation
>transformer. It seems that the only source for modulation transformers now
>days are CB's but I was looking for something a little easier to obtain.
>
>
>
>I have heard of some folks modifying existing "audio" chokes (the large ones
>that look like transformers) buy adding a secondary or tapping at a certain
>point. Has anyone tried this before?
>
>
>
>Any help would be great, thanks.
>
>Joe
>
>
>Sent via Deja.com http://www.deja.com/
>Share what you know. Learn what you don't.
it revises these

http://www.intio.or.jp/jf10zl/impam.htm
http://members.xoom.com/mediumwave/circuits/modulators.html

73
Schematics are wellcome(qrp)
mgore@cvmail.cl

1726. RE: Any ideas on a modulation transformer...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-06 00:00:00 UTC
From: "El Tio [J]" <MGore@cvmail.cl>
Message-ID: <IRMq3.40$g51.706@maule>
Source record: 68073

>===== Original Message From imahumanradiostation@my-deja.com =====
>I'm currently developing a solid state 5 to 15 Watt AM phone transceiver for
>80M SW band and was wondering if anyone had advice for a modulation
>transformer. It seems that the only source for modulation transformers now
>days are CB's but I was looking for something a little easier to obtain.
>
>
>
>I have heard of some folks modifying existing "audio" chokes (the large ones
>that look like transformers) buy adding a secondary or tapping at a certain
>point. Has anyone tried this before?
>
>
>
>Any help would be great, thanks.
>
>Joe
>
>
>Sent via Deja.com http://www.deja.com/
>Share what you know. Learn what you don't.

1727. Re: What is SSB and CW? How works VOX?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-06 00:00:00 UTC
From: Will White <wcw@uswest.net>
Message-ID: <37ABAC56.9CB6B0AB@uswest.net>
Source record: 68074

Nova,

SSB stands for Single Side Band. It is a method of transmitting AM, or amplitude modulated, radio signals. AM signals are made up of a carrier frequency, and two side bands. The human voice, or computer data information, is contained in both side bands. You need only one side band to receive all the information, so the carrier and other side band are removed at the transmitter, amplified, and transmitted. This is a much more efficient use of power, and that is why SSB is used, to increase signal strength at greater distances using the same amount of watts.

CW stands for continuous wave. It is the traditional way radio amateurs refer to morse code communication of the radio. It works very simply, but just turning the carrier signal on and off, forming "dihs" and "dahs".

VOX means "voice operated transmission." It is a system of keying a voice transmitter's microphone using sound energy, instead of having to manually press the transmit switch each time you wish to speak.

For more information, try the following web links:

http://www.ac6v.com
http://itre.ncsu.edu/radio/

Also, look for your local amateur radio club. They would be happy to help you understand these things.
--
Will White, KD7BFX

to reply, please click this link mailto:wcw@uswest.net

1728. Video TX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-07 00:00:00 UTC
From: Justin Fielding <justinfielding@hotmail.com>
Message-ID: <7oiddblad1@plutonium.btinternet.com>
Source record: 67984

Does anyone have plans (on the net or otherwise) for a video TX and RX Or even better which could be recieved on a normal pocket TV (uk frequencies) to be used with Pinhole CCD camera as a bug?

I would really appreciate it as the commercial ones cost a bomb and are way too much for just messing about with!

1729. Re: Any ideas on a modulation transformer...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-07 00:00:00 UTC
From: Eamon Skelton <nospam@oceanfree.net>
Message-ID: <7oiejdoap1@fu-berlin.de>
Source record: 67985

El Tio [J] <MGore@cvmail.cl> wrote in message news:3RMq3.39$g51.706@maule...
> >===== Original Message From imahumanradiostation@my-deja.com =====
> >I'm currently developing a solid state 5 to 15 Watt AM phone transceiver
for
> >80M SW band and was wondering if anyone had advice for a modulation
> >transformer. It seems that the only source for modulation transformers
now
> >days are CB's but I was looking for something a little easier to obtain.
<snip>

You could use a power transistor in series with the power
supply to the PA. This method is often used in multi-mode
CB rigs.

73, Ed. EI9GQ.

--
Eamon 'Ed' Skelton EI9GQ
Cork, Ireland.

My e-mail address really is:
nospam@oceanfree.net

Home brew radio page
http://www.qsl.net/ei9gq

1730. Re: Need schematic for Super Drive Cathode 4cx250

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-07 00:00:00 UTC
From: Eric Schumacher <e.schumacher@worldnet.att.net>
Message-ID: <37ACC82E.E07E3A8C@worldnet.att.net>
Source record: 67986

FS 2 mtr KW Home Brew 4X250 Plumber's delight Two Meter KW amplifier, Eimac tubes and sockets. Power supply is very heavy duty 115/230 VAC input. Output switched 1850 thru 3600 VDC in four steps @ 700 ma. Choke input, solid state, metered. Screen supply, bias, etc. Workmanship is strictly functional, best considered as a complete kit of first rate parts. 11 1/2 rack panel. Local pickup in Los Angeles only. $200.
WB6KCN

Blue Star Ranch wrote:
>
> Trying to build HF Amp with 4cx250 in super driven cathode configuration.
> Does anyone out there have a schematic? Also need power Xfmer 2200 volts.
>
> Thanks

1731. WTB: SYM-1, HAL, OSI...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-07 00:00:00 UTC
From: Alan <alan.diaz@snet.net>
Message-ID: <7oiitp$96g@news1.snet.net>
Source record: 67987
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.swap,rec.radio.swap

I'm putting together a collection of older single board computers such as
the following units from the late 70's:

KIM-1
SYM-1
AIM-65
EBKA Familiarizor
HAL MCEM-8080
MicroDaSys MD-690a
OSI Challenger 400
OSI Model 500
AMT 2650
Sphere One-Card Computer
Microcomputer Associates Jolt
Martin Research

...or whatever you might have similar that is now serving as a mouse house.

You can email me at chipsndips@snet.net

1732. Re: What is SSB and CW? How works VOX?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-07 00:00:00 UTC
From: Jim Reicher <jreicher@tfs.net>
Message-ID: <01bee08e$92124000$04d2928b@default>
Source record: 68075

SSB is Single Side Band. CW means Continuous Wave. It is the method by which Morse Code is usually used in radio.

nova <nova@kaunas.aiva.lt> wrote in article <01bede51$23a0a380$8bf7dbc1@www.aiva.lt>...
> The title say all.
> Thanks Nova
>

1733. Adventures of Scanner Dweeb Comic Strip

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-07 00:00:00 UTC
From: scanshack@aol.communicate
Message-ID: <19990807090131.06056.00005169@ng-cl1.aol.com>
Source record: 68076

If you haven't seen him you might want to take
a peek. The Adventures of Scanner Dweeb is a comic
strip which makes an attempt to tickle your
funny bone. It is about the mis-adventures
of an average guy and his day to day dealings
centered around his scanning hobby.
This series is updated with a new comic strip
every Mon, Wed & Friday.
Enjoy !

http://members.aol.com/scanshack/sdweeb.htm

Visit The SCAN SHACK
A FREE scanner information web page.
Frequency restoration mods with illustrations,
virtual down conversion info, Adventures
of Scanner Dweeb comic & more at:

http://members.aol.com/scanshack

Happy Scanning !

1734. Re: Any ideas on a modulation transformer...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-07 00:00:00 UTC
From: Richard Hosking <richardh@iinet.net.au>
Message-ID: <01bee0d4$86064900$c2473bcb@default>
Source record: 68077

--
Richard Hosking
VK6BRO
http://www.iinet.net.au/~richardh/VK6BRO.htm
richardhzap@iinet.net.au

Delete "zap" for address
QRP/Amateur Radio/Microcontrollers

El Tio [J] <MGore@cvmail.cl> wrote in article <3RMq3.39$g51.706@maule>...
> >===== Original Message From imahumanradiostation@my-deja.com =====
> >I'm currently developing a solid state 5 to 15 Watt AM phone transceiver
for
> >80M SW band and was wondering if anyone had advice for a modulation
> >transformer.

I am interested in doing this also. I have seen designs using a PWM (Pulse Width Modulated) system. This would use switch mode FETs and would not need a tranformer. A filter would be needed in the supply to the final to remove the PWM subcarrier (at about ?100KHz) You could use a switch mode FET for the RF amp also at 80M. Anyone done this?

Richard

1735. Hamtronics Rxrs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-07 00:00:00 UTC
From: dave <OMG@dumbasses.com>
Message-ID: <7ohn6u$av9$1@holly.prod.itd.earthlink.net>
Source record: 68078

Hey all...
Just a quickie....Interfacing Hamtronics Synthesized Rxr's to Microcontrollers....has it been done...of so, what Microcontroller used? (I would prefer the PIC series if possible...)
Thanks in advance,
73's de KD4RGX

--
"No Matter where you go...there you are..."

1736. Re: Any ideas on a modulation transformer...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-07 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7ohphvghu1@autumn.news.rcn.net>
Source record: 68079

If carrier power is secondary, simply modulate the class C final and driver
stage
using the 1/2 VCC output from a mono audio hifi amplifier IC as the source
of collector
voltage.

Peter

El Tio [J] wrote in message <3RMq3.39$g51.706@maule>...
>===== Original Message From imahumanradiostation@my-deja.com =====
>I'm currently developing a solid state 5 to 15 Watt AM phone transceiver
for
>80M SW band and was wondering if anyone had advice for a modulation
>transformer. It seems that the only source for modulation transformers now
>days are CB's but I was looking for something a little easier to obtain.
>
>
>
>I have heard of some folks modifying existing "audio" chokes (the large
ones
>that look like transformers) buy adding a secondary or tapping at a certain
>point. Has anyone tried this before?
>
>
>
>Any help would be great, thanks.
>
>Joe
>
>
>Sent via Deja.com http://www.deja.com/
>Share what you know. Learn what you don't.
it revises these

http://www.intio.or.jp/jf10zl/impam.htm
http://members.xoom.com/mediumwave/circuits/modulators.html

73
Schematics are wellcome(qrp)
mgore@cvmail.cl

1737. Re: Hamtronics Rxrs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-07 00:00:00 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <tr0r3.36863$8D2.6744@news.rdc1.il.home.com>
Source record: 68080

> Just a quickie....Interfacing Hamtronics Synthesized Rxr's to
> Microcontrollers....has it been done...of so, what Microcontroller used?
(I
> would prefer the PIC series if possible...)
> Thanks in advance,
> 73's de KD4RGX

This should be trivial, just use port output pins to replace the
dipswitches.
I'm planning on doing this in the near future, but with an AVR processor
(join the dark side luke.. feel the power)

You will want to keep the micro from radiating junk into the receiver, so
series resistors will help, and proper layout around the micro, but it
should be pretty easy.

1738. NL-575A Rectifier Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-07 00:00:00 UTC
From: KB8UMD <jrperego@alpha.delta.edu>
Message-ID: <7oi4tn$tq0@alpha.delta.edu>
Source record: 68081
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

National Electronics NL-575A
I have 6 NOS National Electronics NL-575A rectifier tubes. In original boxes and wrapping. Anybody have a need for these? Trade or sell. Make offer.

1739. Re: homebrew SMPS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-07 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7oi5iprah1@neptunium.btinternet.com>
Source record: 68082

Mr. Muckle wrote in message <37A5CC60.22ADB8E2@home.com>...
>The easiest way I can think of is to use a 556 rather than a 555 (or two
>555's). One serves as the multivibrator, the other as the modulator. You
can
>also use the CD4069 (hex inverter) to do the same thing.
>
>If you want to "regulate", then by definition you are going to need some
form of
>feedback to control the duty cycle of the PWM. This is why the off the
shelf
>chips excell. Even an inexpensive chip like the LM3524 can be pressed into
>service quite easily. The duty cycle for these chips is adjusted by
providing a
>variable voltage to one of the pins. I believe that if you use a 555 to
drive
>the switching transistor you will need a transistor "totem pole" to drive
the
>gate. This isn't necessary with the PWM chips.
>
>It might just be easier to use an LM317 and a transistor. If you need to
get
>down to "0" volts you can bias the "adjust" leg of the LM317 by the
negative of
>the amount of VRef to get to "0"
>
I do want to stick with 555's rather than using an off the shelf chip, the
additional complexity does not put me off. I am looking for a practical
circuit schematic for a pulse width controller using the 555, hopefully some
system which gives an output whose pulse width is inversely proportional to
some input control voltage. I will then use an op amp to sense the output
voltage and perhaps current to control the duty cycle.
I agree, it would be simpler to use a linear regulator such as an LM317 and
pass transistors, but I don't like the idea of rows of red hot 2N3055's
wasting watts of power.

Thanks for your help and time.

1740. FARFest Sep 26 (G'burg hamfest relocated to Bowie, MD)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-08 00:00:00 UTC
From: "E. Allen Brown" <Al_Brown@ix.netcom.com>
Message-ID: <7oii1c$fam@dfw-ixnews17.ix.netcom.com>
Source record: 67988

FOUNDATION FOR AMATEUR RADIO
c/o Al Brown
8645 TOWER DRIVE
LAUREL, MD 20723-1244

-- For immediate release --

F.A.R.FEST '99 AT NEW LOCATION

The Foundation for Amateur Radio (FAR) will sponsor the 42nd annual F.A.R.Fest amateur radio hamfest on Sunday, September 26, 1999, at Prince George's Stadium 1/4 mile south of the junction of US-50 on US-301 in Bowie, Maryland between Washington, DC and Annapolis, Maryland.

This is a new location for F.A.R.Fest, with a paved area that accommodates over 700 tailgaters. Vendors and other sellers will be able to set up under the canopy of the stadium concourse. General admission tickets into F.A.R.Fest '99 are $5.00 at the gate; $10.00 for tailgating, which requires the purchase of general admission. Vendors and other exhibitors should contact Marry Morris, N4TCI at amateur_radio@hotmail.com, or at 703-971-3905 for more information.

The Special Events station W3PRL-AM will be on display.

Talk-in frequencies are 146.520 MHz and 147.105(+) MHz.

To get to F.A.R.Fest '99:

From points North:
Take I-95 south to the Baltimore Beltway (I-695) to Exit 4 (I-97 South) toward Annapolis. On I-97 South, take Exit 7 (Route 3 South - Bowie/Odenton). Take Route 3 for approximately 11 miles. After passing under the Route 50 overpass, proceed to second traffic light and turn left into Stadium Drive. NOTE: Route 3 changes to Route 301 after you pass under Route 50.

From points South:
Take I-95 North to Exit 104 (Route 301 North). Take 301 North past Upper Marlboro. Go through the traffic light at the Route 197 intersection (Rip's Country Inn will be on the right). At the next traffic light, turn right into Stadium Drive.

From points East:
Take Route 50 West to Exit 13A (Route 301 South). At the second traffic light, turn left into Stadium Drive.

From points West:
From I-70 East, follow directions coming from points North.

From Washington, D.C. or the Capital Beltway:
From D.C., take New York Avenue to Route 50 East, or the Capital Beltway, Exit 19A (Route 50 East). Take Route 50 to Exit 11 (Route 197). Go South on Route 197 for approximately 1.5 miles to Route 301. Turn left onto Route 301 and remain in the right lane. Turn right at first traffic light into Stadium Drive.

For general information on F.A.R.Fest '99, see the webpage at URL:

http://www.amateurradio-far.org/

or contact Al Brown, KZ3AB, at &#65533;amateur_radio@hotmail.com,&#65533; or at 301-490-3188.

F.A.R.FEST '99

THE ONLY PLACE TO BE SEPTEMBER 26

--30--

1741. Re: Loosen those pesky Kenwood Microphone Nuts!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-08 00:00:00 UTC
From: W9FL <w9fl@arrl.net>
Message-ID: <7oip80$7u4@newsops.execpc.com>
Source record: 67989
Cross-posted to: rec.radio.swap,rec.radio.amateur.dx,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.homebrew

sabbatai_zvi@hotmail.com (Elite Tubes) wrote:
>Speaking of Kenwood Mics, does ANYONE have any idea how to repair that
>stupid modular, punched on connector that Kenwood so brilliantly chose
>to use on the mic for the TM-261A and similar VHF rigs?
>
>The silly punched on clear plastic connector looks like something on a
>throw-away telephone, but no, THEY used it on the $75.00 microphone!
>
>Now of course after a few months of use, mine is falling apart.
>
>Is there some tool to replace that punched on connector or does anyone
>have any tips on repairing it?
>
>If I have to buy a $75-79 replacement mic for this $199 radio after 6
>months I will say "NEVER AGAIN" to Kenmore!
>
>

I might be mistaken, but I thought Radio Shack sells a crimp on tool for those.

Tom

1742. Re: CALLING ALL REGEN GURUS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-08 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.SOL.4.10.9908072310050.2756-100000@Ocean.CAM.ORG>
Source record: 67990

On Fri, 6 Aug 1999, Mike Lucas W5CHR wrote:

>
> Paul wrote in message <37AB28A6.F9412CEA@bright.net>...
> >and go back to basics and build such a regen for swl. I'd
> >rather use FETs than tubes and I want the ultimate selectivity. The
> >usual circuits I've run across don't seem capable of my goals so I'm
> >asking for your experiences and tricks you've come up with to build your
> >ultimate regen. Any and all suggestions appreciated. 73 all.
> >
> Paul: AFAIK, the best designs for regens (and some neat superregens)
> are covered really well by Charles Kitchin of Analog Devices. I have in
> front of me the fall '94 issue of Communications Quarterly, where Charles
> has a 13 page article on the superregen receiver. He had an earlier article
> on straight regens, but my copy of that is lost somewhere near the bottom
> layer of papers in my radio room/library/aluminum tubing collection.I
> believe that he had one in the last few years in QST, but my archival system
> is on the fritz....hope this helps. Good luck with the project. Please keep
> us on the hombrew NG posted on your progress.
>
> Mike Lucas W5CHR
> Memphis, Tenn
>
There's nothing like having a good memory, one that can remember articles
from years ago, but not having the magazines organized enough to easily
find the article when you need it.

I don't have the superregen article, have the regen one, and have no
idea where I've put it. But Communications Quarterly is fairly good about
printing an accumulative index from time to time, and I could find one of
those. The Fall 1994 issue had the superregen article by Charles Kitchin.
The regen article was in the Fall 1995 issue.

Communications Quarterly sells back issues. I don't have the information
handy.

Eventually, I plan to buy the issue with the superregen article
(distribution of CommQuart here in Montreal has been sporadic over the
years, though it seems to be reliable now at one place where I buy
magazines). I'm curious whether it's just a review of the design, or if
he adds to the art.

The regen article does cover the history of the design, and some
traditional circuits. But he also shows some solid-state versions that do
advance the circuit further. Someone who is interested in regenerative
receivers would do well to get the article. Over the years there have

been plenty of articles about the receiver, but there hasn't been much about the theory since the early days, with most articles being construction articles which are either a duplicate of someone elses project, or a slight variation for who knows what reasons.

Charles Kitchin also had an article in Electronics Now (or maybe it was before the name change, in which case it was Radio Electronics) similar to the one in CommQuart. I can't remember the date though, but it might be around 94 or 95.

He also had an article in QST a few years back, and I can't find that either, for a regen receiver using a crystal, for reception of W1AW.

When transistors, and then a bit later FET's, hit the hobbyist circles, there were plenty of regen receivers described in the magazines. It was a real hodge-podge, with some trying to do straight translations of tube circuits. Sometimes they said they worked fine, other times they said there were problems. Sometimes people tried to take the basic premise, and put them in terms better suited for the new devices. Some of them look intriguing, though I never tried them. Then direct conversion receivers came along, and the regen articles stopped.

I think there is still room to play with regen receivers. Not so much because the world needs a better regenerative detector, but in understanding it you learn some very basic ideas, and in trying to improve it, you have a chance for exploration.

Regens were popular when parts were expensive. Nowadays, active components are downright cheap. Is the best regen receiver as simple as possible, or can it be improved by adding devices or even stages? Do you build a really good oscillator, putting into it all you would for a good vfo? Does regulatiion help? Someobdy mentioned an RF amplifier for the sake of keeping the oscillation from reaching the antenna, but it would also isolate the antenna from the tricky regen stage.

In recent years, there have been attempts at trying these things. Charles Kitchin gives some ideas, though his are still fairly simple. There was aregen receiver in Popular Electronics in the past decade, that had an active antenna and a regulator and some other fancy schemes. Again, I don't have the date or the issue handy. There was an article in 73 a few years back that used an MC1496 in a regen receiver. the description didn't really explain it, and I finally traced out the circuit to find that it seemd more a novelty than really making use of the 1496.

There was a time when regeneration was common in receivers, in the form of the Q-mulitplier. You don't see those talked about very often, though due to a new local station, I'm tempted to try a Q-multiplier on the car radio that I use for medium wave listening, to see if it will knock down the local so I can still listen to WBZ in Boston. When the 7360 and 9MHz crystal filters were popular, one idea that made a wave for a time was a front-end Q-multiplier, to beef up a simple front-end. That too has gone out of view.

And let's not forget that at one time one scheme was a regen (or in some cases superregen) detector following a converter of some kind. A superhet, but with a regen detector. It too has potential, and it's not a lot different from the times when "direct conversion receivers" were made mulit-band by putting a converter ahead of it.

Michael VE2BVW

1743. Re: CALLING ALL REGEN GURUS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-08 00:00:00 UTC
From: n2cqr@erols.com
Message-ID: <37ad857c.165265754@news.erols.com>
Source record: 67991

I think it is probably easier to get a superhet working right, but some of the recent articles about the regens really caught my eye. Especially the articles in the G-QRP club magazine SPRAT.

I started tinkering around yesterday with a Doug DeMaw regen circuit. Just an MPF102 FET and an op amp. I never had much luck with it before, but yesterday I decided to see if it could turn it into something useful.

Most of the circuit was built ugly style on a small perf board. I tacked the perf board, the variable caps (bandset and band spread) and the two pots onto a piece of 1/4 inch plywood. Used some of those tubular nut starters from Radio Shack as shaft extenders for the controls (to minimmize hand effect). Finally (not wanting to ruin my hearing by doing this blooper tinkering with earphones on) I attached a discarded computer speaker to the op amp output.

I had a lot of fun. My tuned circuit seemed to go from about 6 mhz up to about 13.8 Mhz. (I had a general coverage rx on the bench and would just put the detector into regeneration and tune around for the signal to determine where the regen rx was tuning). DeMaw's circuit had a 1 K pot for regeneation control. I found this made it kind of tough to find the precise "just below oscillation" point, so I put a 25 ohm pot in series -- this now serves as a regeneration fine tuning."

Radio Japan, RCI, the BBC all sound great!

At first I thought that this rx would be useful only for SWL stuff, but last night I put it on 40 CW and found that (as the SPRAT writers have been indicating) these little receivers have real communcation potential.

"RX HR MPF102 OM!" "TX 2N2222" That would certainly have them scratching their heads!

73 de Bill N2CQR
http://www.erols.com/wmeara

1744. IMP Packet Modem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-08 00:00:00 UTC
From: Robert Watson <rmwatson01@earthlink.net>
Message-ID: <37AD5C3B.1127375@earthlink.net>
Source record: 67992

I need to know if anybody could provide me with information regarding an article several years ago in QST pertinent to building what was called the IMP, which was a tnc that could fit in a DB-25 shell.

The month and year would be great, but if there is something further online, that would be better.

Thanks much,

Robert/WA7SON
rmwatson01@earthlink.net

1745. Visit My Morsecode Page Please !

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-08 00:00:00 UTC
From: John <John@morsecode.freeserve.co.uk>
Message-ID: <7ojqnvask1@news7.svr.pol.co.uk>
Source record: 67993
Cross-posted to:
alt.ham-radio.mods,alt.ham-radio.morse,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,uk.radio.amateur

Please have a look at http://www.morsecode.freeserve.co.uk

Thank you. From John.

1746. 2mtr to 6mtr conversion circuit diag req

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-08 00:00:00 UTC
From: Ian <Ian@zambula.demon.co.uk>
Message-ID: <tAP5DGAytYr3EwZU@zambula.demon.co.uk>
Source record: 67994

Please, can any one provide me with a circuit diagram to convert
a 2meter rig to working 6meters? My colleague, G0JWJ wants to
build one using modern components, he only has diagrams using
old technology. Incidentally he is the Chairman of the Hereford
Amateur Radio Society, England.

Thank you for your help
--
Ian G4WTF

1747. Panel Meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-08 00:00:00 UTC
From: "Danny (ko6oy) OR Linda (ad6lt)" <ko6oy@jetlink.net>
Message-ID: <37AD92D5.8E228002@jetlink.net>
Source record: 67995

I have alot of these meters , Order all you need
All are Brand New, Never Used
Take your pick, three different ones to pick from
0 thru 12 amps .... or .... 0 thru 20 amps ... or .... 0 thru 40 amps
Size is approx 2 3/8" tall by 2 3/8" wide
These meters are great for that home brew project !!
$7.50 each .... shipped price to lower 48
See these meters at.........
http://www.jetlink.net/~ko6oy/meters.html
ALSO... The SMRA Ham Radio Swap Page Has Moved to..
http://www.jetlink.net/~ko6oy/swapage4.htm
ko6oy@jetlink.net

1748. Re: Visit My Morsecode Page Please !

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-08 00:00:00 UTC
From: "Al, N2NKB"
Message-ID: <7okcue$ov0$1@bgtnsc03.worldnet.att.net>
Source record: 67996
Cross-posted to:
alt.ham-radio.mods,alt.ham-radio.morse,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,uk.radio.amateur

Very nice section on Vibroplex keys.
Al

John wrote in message <7ojqnvask1@news7.svr.pol.co.uk>...
>Please have a look at http://www.morsecode.freeserve.co.uk
>
>Thank you. From John.
>
>
>

1749. Re: lower cost RF design software ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-08 00:00:00 UTC
From: jim@rst-engr.com
Message-ID: <37adb906.65795412@news.gv.net>
Source record: 67997

reberhardt@nospam.org (Russell Eberhardt)
shared these priceless pearls of wisdom:

->On Wed, 07 Jul 1999 21:51:10 GMT, emr01@ms19.hinet.net (Oliver Huang)
->wrote:

->Have a look at ARRL Radio Designer, available from ARRL for about
->$150. It is a cut down version of SuperCompact.

The program is OK. The support sucks. The damned thing requires a certain level video card, a certain level operating system, and will jam HARD any computer that isn't exactly to it's liking.

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

1750. Re: lower cost RF design software ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-08 00:00:00 UTC
From: jim@rst-engr.com
Message-ID: <37aeb96d.65898932@news.gv.net>
Source record: 67998

ke4zv@bellsouth.net (Gary Coffman)
shared these priceless pearls of wisdom:

->On Tue, 20 Jul 1999 02:42:33 GMT, jim@rst-engr.com (Jim Weir) wrote:
->>reberhardt@nospam.org (Russell Eberhardt)
->>shared these priceless pearls of wisdom:

->That's pretty harsh. It is only a linear small signal modeling program,
->so it isn't much good for modeling PAs, mixers, or oscillators, but
->it is useful for analyzing filters, matching networks, small signal amps,
->etc. I wouldn't call RD trash, just horribly horribly limited compared
->to something like Design Lab.

Gary --

Harsh so be it. When I buy a program I sort of expect it to run on most
plain-vanilla systems. RD requires a certain level video card, a certain level
OS, and anything else jams the system.

ARRL's answer? Oh, sure, we know about those problems. Just send it back and
we'll give you your money back. That's bullshit.

Ever try to send something back through a government bureaucracy? I just said
to hell with it, some taxpayer spent $150 for trash, and I'm honestly sorry
about that.

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

1751. Re: ARRL Simulation software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-08 00:00:00 UTC
From: jim@rst-engr.com
Message-ID: <37afba60.66141212@news.gv.net>
Source record: 67999

n7ws@arrl.net (Wes Stewart)
shared these priceless pearls of wisdom:

->On Tue, 20 Jul 1999 02:44:41 GMT, jim@rst-engr.com (Jim Weir) wrote:
->
->>"Alex" <aturner@netunlimited.net>
->>shared these priceless pearls of wisdom:

->And, Jim. Are you a software competitor? I know I've seen your byline in the
->trade journals, just don't remember what you were writing about.

Nope. In this incarnation I'm either an RF circuit design engineer by day or a RF circuit design college professor by night. Neither set of systems will work with this little bozo of a program. Sorry, I don't mind trying a demo and finding the bugs. When they make you buy it with known limitations and don't publish the limitations, I get pissy.

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

1752. UC3842 or TL494 as pulse width controller

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-08 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7okhgnqra1@plutonium.btinternet.com>
Source record: 68000

Can anyone provide a circuit diagram for a pulse width controller using either of the above chips for use in a homebrew SMPS? I assume that these devices can provide output pulses whose width can be controlled by an external control voltage.

D.L.C@btinternet.com

1753. linear amli. mod

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-08 00:00:00 UTC
From: iz7ath@usa.NET
Message-ID: <19990808193554.29529.qmail@nwcst292.netaddress.usa.net>
Source record: 68001

Hello,
I want to modify a CB linear amplifier for HF bands (160 - 10 mt);
it uses 3 X EL509 (the first tube is a pre-ampl.,i think from 5-10 watts to
50-100 watt then applied to the last 2); I will use 3x EL519 instead of
EL509;
My questions are:
1) can I use the same transformer and power supply for the 3 x EL509,
this time,all in parallel ? (I think yes !);
2) The original HV schematic has a secondary 700 volt A.C.,then applied to
a full-wave bridge,giving about 1000 volt D.C.(unloaded);
in same home-made linear ampl. i saw 4x EL519 with 1410 volt D.C. in the
plate (max value) or often 1200 volt:
may I use a voltage dubler instead of full-wave bridge to have about
1400 volt (unloaded,so something less with load) ? may I use this
voltage
with the EL519 ? and the Plate current will be enough ? (i think not,
infact with a doubler we have V x 2 but at the same time I / 2 !)
3) the original schematic has a negative voltage supply for grid while I
will use grounded grid schematic (with a zener for bias:it's simple !)
what's the different between these 2 way ? (especially for the power
output ?)
4) How many watts can i expect from 3 EL519 with the voltage up specified
(1000 V dc unloaded and 6,3 V ac) ? (I think about 300 watts in the
middle band).
I hope someone will be so kind to help me;
if someone have interest in it,I can send photo and info time to time while
working on it.
73 de iz7ath ,tal ; E-mail to iz7ath@usa.net or iz7ath@qsl.net
---

Get free e-mail and a permanent address at http://www.netaddress.com/?N=1

1754. Re: Loosen those pesky Kenwood Microphone Nuts!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-08 00:00:00 UTC
From: johnmb@TAKETHESECAPSOUTmindspring.com
Message-ID: <37afe767.14467432@news.mindspring.com>
Source record: 68002
Cross-posted to: rec.radio.swap,rec.radio.amateur.dx,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.homebrew

>sabbatai_zvi@hotmail.com (Elite Tubes) wrote:
>>Speaking of Kenwood Mics, does ANYONE have any idea how to repair that
>>stupid modular, punched on connector that Kenwood so brilliantly chose
>>to use on the mic for the TM-261A and similar VHF rigs?

Get a crimp tool and put another on. A properly done connection
of this sort is one of the MOST reliable ones you can use.

Thats precisely why you DO see them on telephones.
John

1755. Re: CALLING ALL REGEN GURUS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-08 00:00:00 UTC
From: abcd1234 <abcd1234@ix.netcom.com>
Message-ID: <7oksv7$bf3$1@news1.exit109.com>
Source record: 68003

Your elmer is right,

The 6SN7GT tube or the 12SNGT tube
or the 12AU7 tube is the best bet, it even works
well at 12-24 volts on the plate.
I built a regen using this tube and it is very-very good,
Please use a choke load (primary of a small 110v-6 volt transformer)
for the first detector, and a throttle cap to control the regen , use a
22Meg+22pf grid leak, and lightly couple the antenna and you are all set.

Low voltage tube circuit at 12-24 volts is a lot of fun , inexpensive
and more sensitive than a corresponding circuit using FETs.

If you want a circuit, I can provide it,
another place to look for a discussion of regens is the
ThePorch GLowbugs newsgroup archives.

have lots of fun.
'

Paul wrote in message <37AB28A6.F9412CEA@bright.net>...
> An elmer of mine (long since a silent key) , whom I greatly
>respected, once told me it was no big deal to build a regen receiver
>that was sensitive enough to work with a two ft. aerial and selective
>enough to slice off the sidebands of a signal. I was thinking about him
>recently and thought it might be fun to get away from all the modern
>gadgetry and go back to basics and build such a regen for swl. I'd
>rather use FETs than tubes and I want the ultimate selectivity. The
>usual circuits I've run across don't seem capable of my goals so I'm
>asking for your experiences and tricks you've come up with to build your
>ultimate regen. Any and all suggestions appreciated. 73 all.
>

1756. Re: linear amli. mod

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-08 00:00:00 UTC
From: abcd1234 <abcd1234@ix.netcom.com>
Message-ID: <7oktdp$bf7$1@news1.exit109.com>
Source record: 68004

1400 VOLTS on EL519,

MAY GOD BLESS those EL519s

why cant you just stick with 1000 volts on plate,
even that will be found to be excessive with the current tube quality.

If you really want 1400 volts on plate
, please use the 4x150 or other equivalents
that are available cheap surplus.

1757. Re: S-meters... Where do they go?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-08 00:00:00 UTC
From: la8ak@online.no
Message-ID: <3794fc64.368687947@news.online.no>
Source record: 68005

On Tue, 20 Jul 1999 16:28:39 GMT, spam@nospam.com (Spammer) wrote:

>Not quite true.....
>If one would hook up a log-amp at a suitable stage in the IF, it would
>indicate the signal strenght. No need to have a Automatic Gain Control
>feedback loop is there??
>Just a thought.....
>
I hooked MC3356 to first IF (after ssb filter) of my FT-902, had to
disable AGC from RF amp (only RF-gain control). Measured 70dB range
(over 1uV), and so far no signal has peaked the meter. Couldn't use
lower threshold because of some unwanted spurious signal to the log
detector. Using the transceiver for measuring purposes, the RF gain
adds some 35dB decrease of signal level. IF stages has AGC as original

Believe I scanned the circuit to gif file if somebody is interested
It is important to use a gain-adjustable input stage (40673) and some
DC level shifting stage, but I did not find a good fast attack and
slow decay meter circuit for MC3356P. It has only LARGE time constant

73
Jan-Martin LA8AK

>Cheers
>
>On Wed, 14 Jul 1999 19:45:23 GMT, ke4zv@bellsouth.net (Gary Coffman)
>wrote:
>
>>On Tue, 13 Jul 1999 11:01:08 -0500, Rick Haub <rhaub@midwestmicro-tek.com> wrote:
>>>Okay, I'm building the Mate to the Mighty Midget from a 1966 QST
>>>magazine article. I want to add an S-meter to it and the design that I
>>>have needs to be hooked into the AGC circuit, well the MMM doesn't have
>>>an AGC. It does, however, have a 20k pot to manualy adjust the gain.
>>>Where should I hook the S-meter into?
>>
>>No AGC, no S-meter. S-meters work by monitoring the AGC voltage,
>>if you don't have AGC, then there's no AGC voltage to monitor. So
>>if you want a S-meter, you're first going to have to add AGC to the
>>receiver.
>>
>>Gary
>>Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
>>534 Shannon Way | We break it |
>>Lawrenceville, GA | Guaranteed |
>

1758. ar-124np

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-08 00:00:00 UTC
From: larya@home.com
Message-ID: <37ae1952.39847116@news>
Source record: 68006

Does anyone have the schematics, etc, for the battery charger
ar-124np?
Larry ve3fxq

1759. Pager Foxhunt... is it possible?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-08 00:00:00 UTC
From: Brian <schousek@geocities.com>
Message-ID: <7old47hr1@jair.pressenter.com>
Source record: 68007
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hello all...

Given a model number and telephone number is it possible to track down a pager using any sort of detection method? We have a kidnapped young lady in the area and one fact in the case is that she probably has her pager with her. The suspect is behind bars, but she has been missing for 10 weeks now.

The official Motorola response was 'impossible' but I'm wondering if it's more like 'very difficult so next to impossible.' I don't know the pager protocols... is there a transmitter in the thing or just a receiver? I Don't have a pager, so don't even know if 10 weeks is well beyond expected battery life.

Any help in answering the question would be appreciated.

Brian
KB9TBB

1760. Re: $$$BIG MONEY$$$

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-08 00:00:00 UTC
From: BIGDOLLAZ <bigmoney@getpaid.com>
Message-ID: <rqsge1fpkur49@corp.supernews.com>
Source record: 68008

http://www.angelfire.com/on2/money4nothing/index.html

Try it and see. Its free and you could use the money for your next big tower!!! Sign-up! Its free...

1761. Re: $$$BIG MONEY$$$

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-08 00:00:00 UTC
From: BIGDOLLAZ <bigmoney@getpaid.com>
Message-ID: <rqsggmbpkur39@corp.supernews.com>
Source record: 68009

http://www.angelfire.com/on2/money4nothing/index.html

Try it and see. Its free and you could use the money for your next big restoration project!!! Sign-up! Its free...

1762. Re: Pager Foxhunt... is it possible?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-08 00:00:00 UTC
From: Ralph Mowery <rmowery@ibm.net>
Message-ID: <37AE361C.C32B2229@ibm.net>
Source record: 68010
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

More like almost impossiable. The battery life is not that long in
most pagers. The pager probably does have a local oscillator that
you can probably hear at a few feet to maybe 50 feet at a wild guess
for the range. All you have go to do is get that close.

Brian wrote:
>
> Hello all...
>
> Given a model number and telephone number is it possible to track down a
> pager using any sort of detection method? We have a kidnapped young lady in
> the area and one fact in the case is that she probably has her pager with
> her. The suspect is behind bars, but she has been missing for 10 weeks now.
>
> The official Motorola response was 'impossible' but I'm wondering if it's
> more like 'very difficult so next to impossible.' I don't know the pager
> protocols... is there a transmitter in the thing or just a receiver? I Don't
> have a pager, so don't even know if 10 weeks is well beyond expected battery
> life.
>
> Any help in answering the question would be appreciated.
>
> Brian
> KB9TBB

1763. Help finding article about gel-cell charger

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-08 00:00:00 UTC
From: Tim Hodges <7twh@ttc-cmc.net>
Message-ID: <37AE4B0E.71CC9D9C@ttc-cmc.net>
Source record: 68011

Hello all..
I am looking for an article that I am sure I saw recently in QST describing construction of a smart charger for gel-cell batteries. This particular unit could simultaneously trickle charge 3 batteries, and the author had used a wall-wart type power supply to power the thing.
I have used the search at www.arrl.org, but can't locate the article. If you remember this article, and can help me find it, would you drop me a note.

73,
KD7JZ Tim
7twh@ttc-cmc.net

1764. Re: ARRL Simulation software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-08 00:00:00 UTC
From: larryc@northwest.com
Message-ID: <37AE5D26.2DBE@northwest.com>
Source record: 68012

quit bitching and buy what you need. you're pissy because you want it
all for free.

>
> Nope. In this incarnation I'm either an RF circuit design engineer by day or a
> RF circuit design college professor by night. Neither set of systems will work
> with this little bozo of a program. Sorry, I don't mind trying a demo and
> finding the bugs. When they make you buy it with known limitations and don't
> publish the limitations, I get pissy.
>
> Jim
> Jim Weir, VP Eng. RST Eng. WX6RST
> A&P, CFI, and other good alphabet s

1765. Re: UC3842 or TL494 as pulse width controller

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-09 00:00:00 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <Pgpr3.37601$8D2.6961@news.rdc1.il.home.com>
Source record: 68013

> Can anyone provide a circuit diagram for a pulse width controller using
> either of the above chips for use in a homebrew SMPS? I assume that these
> devices can provide output pulses whose width can be controlled by an
> external control voltage.

The cherry databook for the CS384X series (same chips) has excellent
examples.

1766. Manual- B&K Dynascan mod 1801 Freq. Counter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-09 00:00:00 UTC
From: TLNixon@revealed.net
Message-ID: <37ae43d2.29053681@news.revealed.net>
Source record: 68014

I am in need of documentation including schematics, pictorals and
parts list for the above unit. I have one that is displaying exactly
HALF of the frequcny it reads. e.g. reading 14 mHz as 7 mhz.

Terry-WB0VQP

1767. Re: lower cost RF design software ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-09 00:00:00 UTC
From: maddog@io.com
Message-ID: <37ae5e1b.773800@news.io.com>
Source record: 68015

On Sun, 08 Aug 1999 17:10:34 GMT, jim@rst-engr.com (Jim Weir) wrote:

>[snip]
>ARRL's answer? Oh, sure, we know about those problems. Just send it back and
>we'll give you your money back. That's bullshit.
>Ever try to send something back through a government bureaucracy? I just said
>to hell with it, some taxpayer spent $150 for trash, and I'm honestly sorry
>about that.

Jim,

I'm a little confused... are you under the impression ARRL is a
government agency? or government subsidized?

monty N5FC

1768. Re: lower cost RF design software ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-09 00:00:00 UTC
From: n7ws@arrl.net
Message-ID: <37aed68f.45375746@news.azstarnet.com>
Source record: 68016

On Mon, 09 Aug 1999 04:52:59 GMT, maddog@io.com wrote:

>On Sun, 08 Aug 1999 17:10:34 GMT, jim@rst-engr.com (Jim Weir) wrote:
>
>>[snip]
>>ARRL's answer? Oh, sure, we know about those problems. Just send it back and
>>we'll give you your money back. That's bullshit.
>>Ever try to send something back through a government bureaucracy? I just said
>>to hell with it, some taxpayer spent $150 for trash, and I'm honestly sorry
>>about that.
>
>Jim,
>
>I'm a little confused... are you under the impression ARRL is a
>government agency? or government subsidized?
>
>monty N5FC

Monty,

I probably should let Jim speak for himself, but I believe his point is that he bought it using government money. I can understand this because I bought both a personal copy, with my money, and a copy for work using company money.

If I was to try and send back the company copy, the cost of the paperwork would exceed the $150 cost of the program.

Jim and I differ on the usefulness of the program, but agree on the lousy support.

Wes N7WS
>
>

1769. Re: 2mtr to 6mtr conversion circuit diag req

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-09 00:00:00 UTC
From: een8ld@electeng.leeds.ac.uk
Message-ID: <1999Aug9.171554.23983@leeds.ac.uk>
Source record: 68017

In article <tAP5DGAytYr3EwZU@zambula.demon.co.uk>,
Ian <Ian@zambula.demon.co.uk> wrote:
>Please, can any one provide me with a circuit diagram to convert
>a 2meter rig to working 6meters? My colleague, G0JWJ wants to
>build one using modern components, he only has diagrams using
>old technology. Incidentally he is the Chairman of the Hereford
>Amateur Radio Society, England.
>
>Thank you for your help

I think UKW Berichte (VHF Communications) had some circuits for this, by Wolfgang Scheider DJ8ES, back in 1995 or so. I'll have a look this week for 'em.

On a slightly different note, surely if he is the 'Chairman of the Hertford ARS' then he should be able to deisgn a resonable transverter. Just use an SBL1, 94MHz xtal oscillator, FET preamp and some filtering and PIN diode switching, with MMICs for low power TX amplification (make sure some good filters are used in-between stages).

73 de M1CCO

Laurens de Bruijn

1770. Re: DDS VFO Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-09 00:00:00 UTC
From: een8ld@electeng.leeds.ac.uk
Message-ID: <1999Aug9.172416.24713@leeds.ac.uk>
Source record: 68018

In article <933836326.188420@newton.dialix.com.au>,
henryt@perth.dialix.com.au (Henry Titchen) wrote:
>Hi All,
>There was a very interesting DDS (Direct Digital Sythesiser) VFO using the
>Analogue Devices AD9850 in July '97 QEX. (I don't have a copy of the
>article, I have seen some of the PIC code on the net).
>
>I am interested in knowing what the limitations might be in using this
>type of VFO up to 6m frequencies? Does phase noise become a major
>problem? Are there other problems using it on frequencies above 30Mhz?
>
>Best Regards From,
>Henry.
>
>VK6HJT
>

I was thinking of the same question. Are any kits of components made/ are there any 'clean' PCB layouts avail. on the net. I think AD is bringing out a pin-compatible chip with 300MHz clk (max), which would be cool.

I think that you have to watch out for aliases, and use the highest possible clock rate. If you look at the data sheet then the 2nd order components Fclk-Fout might be troublesome, as Fclk max is only 125MHz. I was thinking of using this chip as a VFO for a D-C, image rejecting transceiver (with ADSP21xx backend).

I would expect phase noise to be constant, or nearly so over the entire freq. range. As mentioned above, spurs may come closer to the wanted signal as the freq. is increased.

73 de M1CC0
Laurens

1771. Re: DDS VFO Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-09 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <37AF25FA.3997@ixpres.com>
Source record: 68019

Henry Titchen wrote:
>
> Hi All,
> There was a very interesting DDS (Direct Digital Sythesiser) VFO using the
> Analogue Devices AD9850 in July '97 QEX. (I don't have a copy of the
> article, I have seen some of the PIC code on the net).
>
> I am interested in knowing what the limitations might be in using this
> type of VFO up to 6m frequencies? Does phase noise become a major
> problem? Are there other problems using it on frequencies above 30Mhz?
>
> Best Regards From,
> Henry.
>
> VK6HJT

Henry OM,

Analog Devices will be introducing a new DDS chip, the AD9854. It has
300 MHz clock, 24x internal PLL multiplier (allows 15 MHz crystal), and
has both I and Q DDS generators, with 0.1% max phase error. It also has
programmable rise and fall time keying (excellent for CW!), and
single-pin FSK input (with programmable freq change rate rise and fall
times). This chip should make an excellent DDS LO source for a DC
phasing receiver, useful up to perhaps 100 MHz or so. It also has
12-bit DACs, with 80 dB SFDR. It is in an SMT package only. Do a
search on analog devices' web site for more info.
See http://products.analog.com/products/info.asp?product=AD9854

73,
Don, W6JL

1772. Re: Loosen those pesky Kenwood Microphone Nuts!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-09 00:00:00 UTC
From: Matthew Williamson <sales@texastowers.com>
Message-ID: <T%Fr3.229$xx3.1258@news.flash.net>
Source record: 68020
Cross-posted to: rec.radio.swap,rec.radio.amateur.dx,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.homebrew

You'll need a crimp tool that will handle 8 conductor RJ-45 plugs. These are the same ones used on Ethernet patch cords and ISDN modems. The Radio Shack crimp tool will only do 4 conductor RJ-11 plugs (unless they've changed it recently).

We've had MUCH better luck with the modular plugs than we ever did with the round ones, though you'd never believe it by looking at one.

Good luck,

-Matthew Williamson, N5VQT
Texas Towers http://www.texastowers.com
800-272-3467

In article <37afe767.14467432@news.mindspring.com>,
johnmb@TAKETHESECAPSOUTmindspring.com (john) wrote:

>
>>sabbatai_zvi@hotmail.com (Elite Tubes) wrote:
>>>Speaking of Kenwood Mics, does ANYONE have any idea how to repair that
>>>stupid modular, punched on connector that Kenwood so brilliantly chose
>>>to use on the mic for the TM-261A and similar VHF rigs?
>
> Get a crimp tool and put another on. A properly done connection
> of this sort is one of the MOST reliable ones you can use.
>
> Thats precisely why you DO see them on telephones.
> John

1773. FS:4CX1500B

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-09 00:00:00 UTC
From: dennis <kb7wfv@earthlink.net>
Message-ID: <7onfm7mde1@holly.prod.itd.earthlink.net>
Source record: 68021
Cross-posted to: alt.ham-radio.marketplace,alt.radio.cb.skip,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.cb,rec.radio.swap,uk.rec.radio.cb

FOR SALE 4CX1500B TUBES PULL EX CON $125.00 EA

WILL TEST GOOD I HAVE 14 OF THEM

KB7WFV

1774. saw tooth oscillator circuit wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-09 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7oniv6$4oh$1@plutonium.btinternet.com>
Source record: 68022

I am looking for a circuit to generate a sawtooth waveform at about 30kHz, using discrete components rather than an IC. Let me know if you have a schematic: D.L.C@btinternet.com

1775. Re: DDS VFO Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-09 00:00:00 UTC
From: "Joseph A. Consugar" <joesugar@erols.com>
Message-ID: <37AF58B4.6B8A4304@erols.com>
Source record: 68023

Electeng network user wrote:
>
> In article <933836326.188420@newton.dialix.com.au>,
> henryt@perth.dialix.com.au (Henry Titchen) wrote:
> >Hi All,
> >There was a very interesting DDS (Direct Digital Sythesiser) VFO using the
> >Analogue Devices AD9850 in July '97 QEX. (I don't have a copy of the
> >article, I have seen some of the PIC code on the net).
> >
> >I am interested in knowing what the limitations might be in using this
> >type of VFO up to 6m frequencies? Does phase noise become a major
> >problem? Are there other problems using it on frequencies above 30Mhz?
> >
>
> I was thinking of the same question. Are any kits of components made/ are
> there any 'clean' PCB layouts avail. on the net. I think AD is bringing out a
> pin-compatible chip with 300MHz clk (max), which would be cool.
>
> I think that you have to watch out for aliases, and use the highest possible
> clock rate. If you look at the data sheet then the 2nd order components
> Fclk-Fout might be troublesome, as Fclk max is only 125MHz. I was thinking of
> using this chip as a VFO for a D-C, image rejecting transceiver (with ADSP21xx
> backend).
>

A few years ago I saw an article that discussed using a DDS chip around
50 MHz.
What the author did was, rather than low pass filtering to eliminate
aliases,
he bandpass filtered to get the 50 MHz alias he did want. The circuit
he
had used a 40 MHz clock. The only problem I could see with the idea was
you would have to watch out for any other spurs that might fall within
the
passband of the bandpass filter. Also, you have reduced power output
compared
to operation below the clock frequency.

Joseph
KC3XM

1776. Re: lower cost RF design software ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-09 00:00:00 UTC
From: "Charles H. Reichert" <kd9jq@imaxx.net>
Message-ID: <37AF5DCA.B8F8015A@imaxx.net>
Source record: 68024

I have a Preamp Program, Phase Lock Loop Design for
2nd, 3rd Order Loops, and a Triode Tube Amplifier Program
on my Web Page....Free!

Chuck KD9JQ

http://www.imaxx.net/~kd9jq

Jim Weir wrote:
>
> reberhardt@nospam.org (Russell Eberhardt)
> shared these priceless pearls of wisdom:
>
> ->On Wed, 07 Jul 1999 21:51:10 GMT, emr01@ms19.hinet.net (Oliver Huang)
> ->wrote:
>
> ->Have a look at ARRL Radio Designer, available from ARRL for about
> ->$150. It is a cut down version of SuperCompact.
>
> The program is OK. The support sucks. The damned thing requires a certain
> level video card, a certain level operating system, and will jam HARD any
> computer that isn't exactly to it's liking.
>
> Jim
> Jim Weir, VP Eng. RST Eng. WX6RST
> A&P, CFI, and other good alphabet soup

1777. Homebrew Transverter for 33CM thoughts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-09 00:00:00 UTC
From: Joe Leikhim <jleikhim@nettally.com>
Message-ID: <37AF9232.AEF6F71E@nettally.com>
Source record: 68025

I am considering building a homebrew transverter for 33CM as I have access to some commercial parts in and around that range. What would be the consequences of using a low IF (28 MHz or 27 MHz, Radio Shack SSB)? I am concerned about images from cellular and SMR bands. Would a high side or low side injection be best? I would prefer low side to keep the SSB polarity matching that of the rig.

--
Joe Leikhim K4SAT (EX KE4TZH)
Jleikhim@nettally.com

"tv dinner by the pool,
i'm so glad i finished school" -F.Zappa 1967

"The Revolution will NOT be televised" -Gil Scott Heron

1778. Re: Who sells Fair-Rite Parts in Small Quantities?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-09 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37AFA800.EEED5E36@teleport.com>
Source record: 68026

The ferrite cores sold by Amidon Associates are mostly from Fair-Rite,
and they sell in small quantity. Their web site is www.bytemark.com.

Roy Lewallen, W7EL

Luke Enriquez wrote:
>
> Hi People,
>
> Does anyone know of a company that stocks Fair-Rite parts in
> small quantities. Name/Contact details would be appreciated.
>
> Regards,
> Luke
> VK3EM
> ------------------------------
> Luke Enriquez (VK3EM) Trio Communications 2000 Pty. Ltd.
> Electronics Design Engineer. 41 Aster Ave.
> B.Eng (Comms) Hon. Carrum Downs, Victoria. 3201
> 03-9775-0505 (BH) Australia
> 0414-679-432 (Mob) http://www.trio.com.au

1779. Re: 2mtr to 6mtr conversion circuit diag req

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-09 00:00:00 UTC
From: "William F. Hagen" <whagen@inreach.com>
Message-ID: <37AFA8C4.B50AC01@inreach.com>
Source record: 68027

there is a circuit and discussion in the book called 'QRP Power' from
the ARRL

Electeng network user wrote:
>
> In article <tAP5DGAytYr3EwZU@zambula.demon.co.uk>,
> Ian <Ian@zambula.demon.co.uk> wrote:
> >Please, can any one provide me with a circuit diagram to convert
> >a 2meter rig to working 6meters? My colleague, G0JWJ wants to
> >build one using modern components, he only has diagrams using
> >old technology. Incidentally he is the Chairman of the Hereford
> >Amateur Radio Society, England.
> >
> >Thank you for your help
>
> I think UKW Berichte (VHF Communications) had some circuits for this, by
> Wolfgang Scheider DJ8ES, back in 1995 or so. I'll have a look this week for
> 'em.
>
> On a slightly different note, surely if he is the 'Chairman of the Hertford
> ARS' then he should be able to deisgn a resonable transverter. Just use an
> SBL1, 94MHz xtal oscillator, FET preamp and some filtering and PIN diode
> switching, with MMICs for low power TX amplification (make sure some good
> filters are used in-between stages).
>
> 73 de M1CCO
>
> Laurens de Bruijn

--
Please remove the word 'NOREPLY' from the email address, sorry for the
inconvenience, but it helps keep down the spam.

1780. RS-Component Tester-22-330

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-10 00:00:00 UTC
From: af389@lafn.ORG
Message-ID: <37B03172.7862BB46@lafn.org>
Source record: 67935

Hi,

Did anyone reading this digest buy one of these
Transistor, diode scr, etc testers from Radio Shack?

Very handy unit when it works.
With fresh hot Duracell batteries,
my tester has stopped working, gives totally wrong answers.
Allows me to instal 2N2222 parts with reversed Emitter and Collector
leads.

My owners manual is lost in my shop.
Can someone please read manual and tell me how long is the warranty?

I no longer can receive the HAM_Homebrew Digest via email.
Sorry, I cannot see your replies that way.

PLEASE replies to me DIRECTLY as well as group.
Please hurry, my warranty, if 90 days, is running out.

Thanks for any help, 73, W6MIK
--
David Shalita (Dave)
af389@lafn.org
Van Nuys, CA

1781. Re: Hamtronics Rxrs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-10 00:00:00 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <ttWr3.17$ok3.18@news.rdc1.il.home.com>
Source record: 67936

dave <OMG@dumbasses.com> wrote in message
news:8lPr3.119$bz.12226@newsread2.news.earthlink.net...
> dave,
> thanks for the tip....I'll give that a shot and see what's what....I
> understand the part about isolation...that'll be handled by mounting the
> controller inside a separate sheilded enclosure and using a db9 w/feed
> through capacitors (these have the caps built in..I know that's over
> kill..but I want this puppy to last and work turn key...)

Don't forget the series R. Adding caps alone to the control lines just
means more hi freq noise when they transition! The R would go close to the
uP.

I've also got a package of code that will get you started easily. Let me
know if you want it.

> AVR? interesting...I'll check the Newark or Allied catalogs to see what
> those creatures cost..

Go to www.atmel.com and pick up their development kit for $50. It's cheap,
and has everything you need.

1782. Re: Who sells Fair-Rite Parts in Small Quantities?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-10 00:00:00 UTC
From: imahumanradiostation@my-deja.com
Message-ID: <7opfmheoc1@nnrp1.deja.com>
Source record: 67937

Try www.mouser.com

They have a few items, prob not what your looking for, but it's worth a try.

Joe

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1783. FT990 Tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-10 00:00:00 UTC
From: "F. Sell" <sell@gei-aachen.de>
Message-ID: <37B04882.F8DD3E87@gei-aachen.de>
Source record: 67938

Hi,

is it possible to use the tuner in receiving path too??
Who did the changes? How are the results? and what I have to do?
I've got no manual.

Any help would be welcome
(perhaps a schematic via e-mail??)

73 DL7UJO
--

Gruss F. Sell

mailto:fsell@xpile.de

1784. Re: Homebrew Transverter for 33CM thoughts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-10 00:00:00 UTC
From: jimcob@my-deja.com
Message-ID: <7opvkqriv1@nnrp1.deja.com>
Source record: 67939

In article <37AF9232.AEF6F71E@nettally.com>,
Joe Leikhim <jleikhim@nettally.com> wrote:
> I am considering building a homebrew transverter for 33CM as I have
> access to some commercial parts in and around that range. What would
be
> the consequences of using a low IF (28 MHz or 27 MHz, Radio Shack
SSB)?
> I am concerned about images from cellular and SMR bands. Would a high
> side or low side injection be best? I would prefer low side to keep
the
> SSB polarity matching that of the rig.
>
> --
> Joe Leikhim K4SAT (EX KE4TZH)
> Jleikhim@nettally.com
>
> "tv dinner by the pool,
> i'm so glad i finished school" -F.Zappa 1967
>
> "The Revolution will NOT be televised" -Gil Scott Heron
>
>
I'll outline my experiences with a similar setup and hopefully it'll be
of some help. I ran a DownEastMicrowave transverter using an HR-2510
for the IF, low side injection, with a 25 watt amplifier chain. My
application wasn't SSB, but was for a remote base input and I was using
the setup mobile in Southern California. The biggest problem I ran into
was receiver desense from all of the many very strong signals from the
commercial transmitters both above and below the 900 Mhz band. I was
using the low part of the 33cm band, in the 902.x Mhz region. I think
the pagers in the 928-930 Mhz region were the worst offenders though the
cellular band was bad too. Assuming you're in a major metropolitan
area, the only way to combat this is to put some big-time filtering on
the front end of the receiver, which in my case meant bandpass cavities.
This also takes care of any image problems that may come up, and I had
some of those too. Don't worry about a couple of Db loss through a the
cavities because once you get rid of the garbage, you can always add a
GasFet preamp to make up for some of the loss. When you're in a crowded
RF environment, I'll take a higher noise figure with better filtering
any day of the week. Now if you're out in the sticks its a different
story....
73,
Jim N6PA

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1785. Re: Pulling hair out over Clipperton-L

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-10 00:00:00 UTC
From: jack leishman <k8xx@gtii.com>
Message-ID: <37B08523.8497EE29@gtii.com>
Source record: 67940
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

You didn't say if you had the input tuning card with relays. I've had a clipperton L for years without parasitics. I have a brand new 4-1000a I'll trade you for it. I also have a 4-1000 on tghe air...the clipperton is my back-up amp. Good luck! Jack k8xx

Tim wrote:

> Greetings.... I am wondering if there is anyone out there that is familiar
> (intimately??) with a Clipperton-L and problems with parasitics etc etc
> etc... I have tried to read some of the threads on the users groups that
> have to do with this problem and ones like it but they keep going off on so
> many tangents that it's hard to keep track of what is trying to be said.
> Everyone has their own opinions as to what causes parasitics and how to
> remedy them... My problem is that back several years ago my bandswitch
> zorched due to what I think was a parasitic. I rebuilt it, installed it
> after replacing all four suppressors on the tubes (two were
> cracked...another indicator). During the time it took me to remove the
> switch and then repair/replace it (two years) I lost the notes I had taken
> that showed where all the connecting wires went to on the switch from the
> various tap points on the tank coils . I was able to figure out where they
> went using the schematics (actually about 95% sure). Now I only get output
> on 160 mtrs. One thing that I think is telling me that I am still dealing
> with parasitics is that as I sweep the tuning and loading controls through
> their range without drive, I see the plate current meter peak. Also I'm not
> sure if I'm also dealing with bad output tubes. If I seem to be getting good
> power out on 160, wouldn't that tell me that my tubes are good??? or do they
> lose something even going up to the next band (75mtrs), Should I just junk
> this amp and spend my time and money on another amp. I guess I just feel
> like I'm spinning my wheels at this point. Can this amp be made to work
> reliably and well without spending hundreds of dollars. Heck for that kind
> of money I'm almost halfway to a used AL 80 or L4-b. At least they seem to
> have a decent track record... Or, I have 99% of the parts to build a 4-1000
> rig... A project I've put off for years but maybe with winter coming, it's
> not starting to look that bad..... and I can heat my house with it!!!!
> Any Help would be appreciated.....
> 73 Tim KB1MM

--
If I am buying or selling something, the following information will be helpful:
My address is Jack Leishman, Spectrum Radio Service, 1551 Hammond Rd. E.,
Traverse City, MI 49686.
My email address is k8xx@gtii.com
My homepage is http://www.traverse.net/members/k8xx/
If you need to talk by telephone, please email me for the number.

Thank-you! Jack K8XX

1786. Re: Help: 23cms preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-10 00:00:00 UTC
From: Joe Leikhim <jleikhim@nettally.com>
Message-ID: <37B08C48.29C6E696@nettally.com>
Source record: 67941

Downeast Microwave has some kits. I built one for L-band sattelite
monitoring and it works fine.

barry.padgett@virgin.net wrote:

> Hi all can anyone help?.Im looking for a circuit diagram for
> 23cms atv preamp using a single or double gasfets from
> LNBs ,can some kind chap point me to a site ,or email
> me a diagram , many thanks ,,Barry (G4VWT)

--
Joe Leikhim K4SAT (EX KE4TZH)
Jleikhim@nettally.com

"tv dinner by the pool,
i'm so glad i finished school" -F.Zappa 1967

"The Revolution will NOT be televised" -Gil Scott Heron

1787. Re: Homebrew Transverter for 33CM thoughts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-10 00:00:00 UTC
From: Joe Leikhim <jleikhim@nettally.com>
Message-ID: <37B08BDF.3C9BB487@nettally.com>
Source record: 67942

You are right about those pagers, I will have to verify that my front end filtering can deal with those.

jimcob@my-deja.com wrote:

> I(snip)

> I think
> the pagers in the 928-930 Mhz region were the worst offenders though the
> cellular band was bad too. (SNIP)--

Joe Leikhim K4SAT (EX KE4TZH)
Jleikhim@nettally.com

"tv dinner by the pool,
i'm so glad i finished school" -F.Zappa 1967

"The Revolution will NOT be televised" -Gil Scott Heron

1788. Re: saw tooth oscillator circuit wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-10 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <37B092B4.6E76@pop.valley.net>
Source record: 67943

David Cunningham wrote:
>
> I am looking for a circuit to generate a sawtooth waveform at about 30kHz,
> using discrete components rather than an IC. Let me know if you have a
> schematic: D.L.C@btinternet.com

Hello--

If you don't need a highly linear sawtooth waveform, you can use
either a neon lamp or a unijunction to build a minimum-component-count
oscillator. Try searching on these topics, or locate an older edition
of a GE transistor manual.
73,
Brad AA1Ip

1789. Re: saw tooth oscillator circuit wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-10 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7oq9mpjh1@plutonium.btinternet.com>
Source record: 67944

>If you don't need a highly linear sawtooth waveform, you can use
>either a neon lamp or a unijunction to build a minimum-component-count
>oscillator. Try searching on these topics, or locate an older edition
>of a GE transistor manual.
>73,
>Brad AA1Ip

Good suggestion Brad. Perhaps this would also work with a zener diode and
lower supply voltage?

1790. Misc older ham books and publications FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-10 00:00:00 UTC
From: Ken Simpson <W8EK@usa.net>
Message-ID: <Q62s3.841$gz4.59270@monger.newsread.com>
Source record: 67945

For sale - Ameco, Tab, Sams, Callbooks, and other older books:

Allied Radio - Dictionary of Electronic Terms - 8th edition -
January 1969 - like new condition - $ 15

Allied Radio Electronics Data Handbook - 5th edition - Oct 1968
also in like new condition $ 12

Amateur Radio - Theory and Practice by Shrader - 1982 $ 7

Ameco Amateur Radio Theory Course - 1974
comprehensive book, good for all class licenses $ 6

Ameco Amateur Radio Novice Class Theory Course - 1977 - $ 5

Ameco Complete Technician Radio Amateur FCC Test Manual 1990 $ 4

Ameco Advanced Class Radio Amateur License Guide - 1981 - $ 3

Tab - Oscar: The Ham Radio Satellites, by K4TWJ - first edition,
first printing, 1979 hardbound $ 8

Tab - Amateur Radio General Class License Study - 2nd Edition - 1975
$ 4

Tab - Amateur Radio Advanced Class License Study - 2nd Edition - 1975
$ 4

Sams - General Class Amateur License Study Guide by W0XI
1979 - first edition - first printing - $ 5

Sams Handbook of Electronic Tables and Formulas - 3rd edition
1968 - hardbound - $ 15

W5YI Part 97 FCC rules and regulations - Jan 1993 $ 3

73 magazine General Class License Study Guide - 1978 - $ 4

Radio Amateur Callbooks For Sale:

1988 North American $ 10

1991 North American $ 10

The above are "like new," They have been opened up, but that is
about it.

1990 North American $ 5

1990 International $ 5

1990 Supplement (includes both US and DX) $ 2

1992 North American $ 5

1992 International $ 5

These have been used. They show some use, but are not "beat up" or damaged.

Prices do not include shipping from Florida.
All books are in good condition.

E-mail to W8EK@fdt.net

Thanks.

73,

Ken, W8EK

Ken Simpson
E-Mail to W8EK@fdt.net
Voice Phone (352) 732-8400

1791. Re: homebrew SMPS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-10 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@bellsouth.net>
Message-ID: <qx2s3.4549$Cl2.29297@news4.mia>
Source record: 67946

David Cunningham wrote in message <7o2cvk$a8k$1@uranium.btinternet.com>...
>I am considering homebrewing a simple switch mode power supply which would
>be used to regulate a low voltage supply of about 20v dc to provide a
>variable voltage supply. I have a UC3842 pulse width controller available,
>but would rather make something around a 555 as the pulse width modulator.
I
>would like to hear from anyone who can suggest how I could do this in
>practice.

I recommend you go to www.national.com and look for their "simple
switchers".
They are low cost, they work, and they have lots of good applications notes
and design guides.

Bert

1792. Re: Homebrew Transverter for 33CM thoughts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-10 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7oqen0nqq1@news1.fast.net>
Source record: 67947

-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

Joe Leikhim <jleikhim@nettally.com> wrote in message
news:37AF9232.AEF6F71E@nettally.com...
> I am considering building a homebrew transverter for 33CM as I have
> access to some commercial parts in and around that range. What would
be
> the consequences of using a low IF (28 MHz or 27 MHz, Radio Shack
SSB)?

A higher 1st IF would be better. Since the band is 26 MHz wide,
it will be nearly impossible to avoid either the cellular band (on the
low side) or the pager band (just above 928) ...

> I am concerned about images from cellular and SMR bands. Would a
high
> side or low side injection be best? I would prefer low side to keep
the
> SSB polarity matching that of the rig.

If you have to use a 10m or 11m radio as an IF, you'd probably
be better with low side injection. The power levels from the cellular
base stations are generally not as high as the 900 MHz pagers just
above the top of the 902-928 band . Some of them are running a LOT of
power.
The cellular folks only run what they need to cover the cell so that
they can maximize frequency reuse. The pager folks really blast
it out, seeking to maximize coverage and in-building penetration.

Again, however, (for best performance) a higher "IF" would be
better. A 2m all-mode rig would be reasonable, for example, since
you could get good image rejection with low loss ceramic coaxial
filters with the image ~292 MHz below. Your main concern then
would be to get a good system noise figure without overloading
the 2m rig's front end and creating intermod problems for yourself.
You may even find that the best solution would be to have say,
12-16 dB of good low noise, high IP3 gain in the receive LNA,
followed by a 2nd image filter, followed by an attenuator to
prevent overload of the 2m rig. (You'll need to know the noise
figure and IP3 of the "IF" radio to do the cascade calculations
for noise figure and IP3 to make those decisions.)

A higher IF will also help you adequately suppress images on
transmit ... the cellular and pager folks would not appreciate
interference on "their" channels ... they can be very protective

if they're getting clobbered.

Good luck & 73,

- --
Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI
Fellow, Radio Club of America
Senior Member, IEEE
Member, ARRL
Join NCI - Hams for the 21st Century!
Help modernize ham radio and assure its future survival!
http://www.nocode.org

-----BEGIN PGP SIGNATURE-----
Version: PGP for Personal Privacy 5.5.3

iQA/AwUBN7C4hJe+N6+q84HiEQKy3QCgi4m8L8HW/aFH2pSpyBMT67bMaIcAoPFO
uWHETBbHFcPAqZTvddOWsBzY
=oWZE
-----END PGP SIGNATURE-----

1793. Re: Homebrew Transverter for 33CM thoughts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-10 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7oqfgu$o3k$1@news1.fast.net>
Source record: 67948

-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

<jimcob@my-deja.com> wrote in message
news:7opvkqriv1@nnrp1.deja.com...
> >
> I'll outline my experiences with a similar setup and hopefully it'll
be
> of some help. I ran a DownEastMicrowave transverter using an
HR-2510
> for the IF, low side injection, with a 25 watt amplifier chain. My
> application wasn't SSB, but was for a remote base input and I was
using
> the setup mobile in Southern California. The biggest problem I ran
into
> was receiver desense from all of the many very strong signals from
the
> commercial transmitters both above and below the 900 Mhz band. I
was
> using the low part of the 33cm band, in the 902.x Mhz region. I
think
> the pagers in the 928-930 Mhz region were the worst offenders though
the
> cellular band was bad too. Assuming you're in a major metropolitan
> area, the only way to combat this is to put some big-time filtering
on
> the front end of the receiver, which in my case meant bandpass
cavities.
> This also takes care of any image problems that may come up, and I
had
> some of those too. Don't worry about a couple of Db loss through a
the
> cavities because once you get rid of the garbage, you can always add
a
> GasFet preamp to make up for some of the loss.

Sorry, but once you have those "couple of dB" of loss in front of
your low-noise amp, there is NO way to "make it up" ... if you
have a LNA with a 2 dB noise figure (easy to get at 900 MHz,
even better is possible with GaAs FETs) and you add 2 dB of
loss in front of it (feedline, filters, whatever) you have AT BEST
a 4 dB system noise figure. NO amount of gain will make it
better, ever.

The solution is to have as little passive loss as possible before
your LNA.

As far as desense and intermod are concerned, you have to have
adequate dynamic range (IP3) through the entire cascade, at least
until your main selectivity kicks in and rejects all but the desired
signal, otherwise you're screwed in that department, too. Once
the signals have seen the non-linearity and mixed, no amount of
filtering can eliminate the (now on-channel) intermod products.

Another thing to watch for is "reciprocal mixing." If your LO
has poor phase noise performance, strong signals nearby
(where "nearby" can be quite a few MHz if the phase noise
"skirts" on your LO are bad) will pick up the phase noise
from your noisy LO and (even though the strong carrier is "far
away:) the phase noise extending out from those "blockers"
(and raised up to xx dB below the blocker at some offset) can be
potent enough to "mask" weak desired signals in that noise,
reducing the effective sensitivity of your receiver.

> When you're in a crowded
> RF environment, I'll take a higher noise figure with better
filtering
> any day of the week. Now if you're out in the sticks its a
different
> story....

Personally, I prefer the lowest possible noise figure and the
highest possible IP3, no matter where I am :-)

- --
Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI
Fellow, Radio Club of America
Senior Member, IEEE
Member, ARRL
Join NCI - Hams for the 21st Century!
Help modernize ham radio and assure its future survival!
http://www.nocode.org

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9KrdsdZIlpDLztNHS457zUW+
=ISWq
-----END PGP SIGNATURE-----

1794. WTB 1\Mitrex 19pin plug

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-10 00:00:00 UTC
From: "Dennis A. Homerick" <w8nw@richnet.net>
Message-ID: <37B0D974.EE56122E@richnet.net>
Source record: 67949

Thanks for reading this message. I'm in the process of making a uhf repeater using two
Mitrex radios. Need a couple 19 pin control head plugs. Don't need the control heads.

Thanks
Dennis, w8nw

1795. Re: saw tooth oscillator circuit wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-10 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37B0EF9C.6A1DF243@teleport.com>
Source record: 67950

I don't think this would work with a zener. It requires a
negative-resistance region in the active device. In a neon bulb, this
results from the fact that the turn-on voltage is greater than the
extinguishing voltage, and the oscillation occurs between these points.
Actually, I think some zeners may have a very small negative-resistance
region, because of the ability of some to generate very wideband noise
at some current levels. But if it is a stable region and you tried to
make use of it, you'd at best have an oscillation amplitude at the
microvolt level. A tunnel diode would work, but again at a very low
amplitude level. And they're hard to come by these days.

Roy Lewallen, W7EL

David Cunningham wrote:
>
> >If you don't need a highly linear sawtooth waveform, you can use
> >either a neon lamp or a unijunction to build a minimum-component-count
> >oscillator. Try searching on these topics, or locate an older edition
> >of a GE transistor manual.
> >73,
> >Brad AA1Ip
>
> Good suggestion Brad. Perhaps this would also work with a zener diode and
> lower supply voltage?

1796. Pulling hair out over Clipperton-L

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-10 00:00:00 UTC
From: Tim <tvendt@kear.tds.net>
Message-ID: <3vKr3.62$R_6.30930@ratbert.tds.net>
Source record: 68028
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Greetings.... I am wondering if there is anyone out there that is familiar (intimately??) with a Clipperton-L and problems with parasitics etc etc etc... I have tried to read some of the threads on the users groups that have to do with this problem and ones like it but they keep going off on so many tangents that it's hard to keep track of what is trying to be said. Everyone has their own opinions as to what causes parasitics and how to remedy them... My problem is that back several years ago my bandswitch zorched due to what I think was a parasitic. I rebuilt it, installed it after replacing all four suppressors on the tubes (two were cracked...another indicator). During the time it took me to remove the switch and then repair/replace it (two years) I lost the notes I had taken that showed where all the connecting wires went to on the switch from the various tap points on the tank coils . I was able to figure out where they went using the schematics (actually about 95% sure). Now I only get output on 160 mtrs. One thing that I think is telling me that I am still dealing with parasitics is that as I sweep the tuning and loading controls through their range without drive, I see the plate current meter peak. Also I'm not sure if I'm also dealing with bad output tubes. If I seem to be getting good power out on 160, wouldn't that tell me that my tubes are good??? or do they lose something even going up to the next band (75mtrs), Should I just junk this amp and spend my time and money on another amp. I guess I just feel like I'm spinning my wheels at this point. Can this amp be made to work reliably and well without spending hundreds of dollars. Heck for that kind of money I'm almost halfway to a used AL 80 or L4-b. At least they seem to have a decent track record... Or, I have 99% of the parts to build a 4-1000 rig... A project I've put off for years but maybe with winter coming, it's not starting to look that bad..... and I can heat my house with it!!!!
Any Help would be appreciated.....
73 Tim KB1MM

1797. Who sells Fair-Rite Parts in Small Quantities?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-10 00:00:00 UTC
From: luke@trio.COM.AU
Message-ID: <199908100316.UAA20475@mailbox3.ucsd.edu>
Source record: 68029

Hi People,

Does anyone know of a company that stocks Fair-Rite parts in
small quantities. Name/Contact details would be appreciated.

Regards,
Luke
VK3EM

Luke Enriquez (VK3EM) Trio Communications 2000 Pty. Ltd.
Electronics Design Engineer. 41 Aster Ave.
B.Eng (Comms) Hon. Carrum Downs, Victoria. 3201
03-9775-0505 (BH) Australia
0414-679-432 (Mob) http://www.trio.com.au

1798. Re: Hamtronics Rxrs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-10 00:00:00 UTC
From: dave <OMG@dumbasses.com>
Message-ID: <8lPr3.119$bz.12226@newsread2.news.earthlink.net>
Source record: 68030

dave,
thanks for the tip....I'll give that a shot and see what's what....I understand the part about isolation...that'll be handled by mounting the controller inside a separate sheilded enclosure and using a db9 w/feed through capacitors (these have the caps built in..I know that's over kill..but I want this puppy to last and work turn key...)
AVR? interesting...I'll check the Newark or Allied catalogs to see what those creatures cost...(you know ham operators...trying to make sow's ear's into all mode multiband rigs for pennies...)
As far as the "Dark side...yep...it'll be a hoot"...don't forget the Jack Daniels...
dave

--
"No Matter where you go...there you are..."

1799. Re: DDS VFO Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-10 00:00:00 UTC
From: Tibor Bece <tbece@netspace.net.au>
Message-ID: <37B0C51A.6B3B@netspace.net.au>
Source record: 68031

Hi all,

I have a few very nice professional PCB's left over for the AD9850/51. It is only for the DDS IC, I do not believe in LO's too near to the CPU :) The design has a proper ground-plane, 5V regulator +EMI filters on board, silk-screen and plated through holes, line conditioning for the serial signals, 9th order output LPF. All components are SMD, 0805, except for the 5V regulator and the XO. The XO can be DIP8 or DIP14. PCB Size ~1.1in x 1.4in. Email me for details if anyone is interested.

SFDR from the AD9850 is excellent, from a 125MHz XO one does not see much above -70dBc (as usual, 'bad frequencies' are low N/M ratios to the xtal). The AD9851 internal 'x6' is very useful, for instance running the DDS from a lower frequency TCXO module. The spectral purity in this mode is excellent, perhaps a touch worse than in the 'clean' 175MHz XO mode, but probably much better than people generally realise.

Thanks Analog Devices!

Tibor
tbece@netspace.net.au

Electeng network user wrote:
> I was thinking of the same question. Are any kits of components made/ are
> there any 'clean' PCB layouts avail. on the net. I think AD is bringing out a
> pin-compatible chip with 300MHz clk (max), which would be cool.
>
> I think that you have to watch out for aliases, and use the highest possible
> clock rate. If you look at the data sheet then the 2nd order components
> Fclk-Fout might be troublesome, as Fclk max is only 125MHz. I was thinking of
> using this chip as a VFO for a D-C, image rejecting transceiver (with ADSP21xx
> backend).
>
> I would expect phase noise to be constant, or nearly so over the entire freq.
> range. As mentioned above, spurs may come closer to the wanted signal as the
> freq. is increased.
>
> 73 de M1CC0
> Laurens

1800. Help: 23cms preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-10 00:00:00 UTC
From: barry.padgett@virgin.net
Message-ID: <37affb22.3689285@news.virgin.net>
Source record: 68032

Hi all can anyone help?.Im looking for a circuit diagram for
23cms atv preamp using a single or double gasfets from
LNBs ,can some kind chap point me to a site ,or email
me a diagram , many thanks ,,Barry (G4VWT)

1801. TCM3105

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-10 00:00:00 UTC
From: Matthew Bilston <mbilston@hotkey.net.au>
Message-ID: <BaUr3.21$4v3.1264@vic.nntp.telstra.net>
Source record: 68033

Does anybody know where to get a TCM 3105 Chip in Australia? I need it to build a baycom modem!

1802. Re: UC3842 or TL494 as pulse width controller

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-11 00:00:00 UTC
From: trA namroN <Art6N9@yahoo.com>
Message-ID: <01bee396$57408bc0$LocalHost@living-room>
Source record: 67951

I'm sure the manufacturer would be able to help you. Unitrode has an
excellent tutorial that holds your hand through the design process and has
torroid part nos, etc.
It seems that every analog chip maker has new chips for controlling them.
They can be talked out of samples and have schematics to get you started.
David Cunningham <D.L.C@btinternet.com> wrote in article
<7okhgnqra1@plutonium.btinternet.com>...
> Can anyone provide a circuit diagram for a pulse width controller using
> either of the above chips for use in a homebrew SMPS? I assume that these
> devices can provide output pulses whose width can be controlled by an
> external control voltage.
>
> D.L.C@btinternet.com
>
>
>
>

1803. Radio Parts on Ebay

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-11 00:00:00 UTC
From: Greg <n5knd@flash.net>
Message-ID: <G15s3.608$M7.6744@news.flash.net>
Source record: 67952

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=144661782

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=144655372

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=144588491

1804. Vernier dials for receivers etc.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-11 00:00:00 UTC
From: sabbatai_zvi@hotmail.com
Message-ID: <37b0ec61.7594638@news.earthlink.net>
Source record: 67953

Is anyone building receivers these days? I know several guys who like to build old regen style radios, and others who repair older tube-type receivers. The last regen I built was a tube receiver with an FET front end that worked quite well.

Does anyone have any use for some Bourns locking knobs for pots? Or Vernier reduction drives (Jackson Brothers) 5.6:1

I doubt if anyone other than homebrewers has any use for these items.

Some fellows have told me that the Jackson Brothers reduction drive is used on Swan rigs among others. Can anyone confirm this?

1805. Still more nearly free stuff in Oradell, NJ

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-11 00:00:00 UTC
From: wa2ise@netcom.com
Message-ID: <7oqrqs$p0e@dfw-ixnews17.ix.netcom.com>
Source record: 67954
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Still have stuff to almost give away. Here in Oradell NJ, exit 165
off the Garden State Parkway. Then head 2 miles east. Call me
at 201-261-4066 so I can be around to expect you, and give you the
exact address.

HP VTVM model 400D
General radio frequency meter and discriminiter 1142A
Eico audio signal genmerator model 377
Eico VTVM model 232
Ballantine labs "sensitive inverter"
Link radio corp frequency meter model 2051b
2 boxes of microvave waveguides
PRD klystron power supply model 809a
Bell and Howell schools vom

And some more stuff, including speakers and horns.

Perfer pickup but if you're willing to spring for "Mailboxes Etc"
rates, will ship, buyer pays it.

All stuff as is, probably works but I don't have time to test,
figure on restoring it. Everything is complete and in good shape,
no rust.

1806. Re: saw tooth oscillator circuit wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-11 00:00:00 UTC
From: Paul Breed <Paul@Rasdoc.com>
Message-ID: <37B108E0.A5A0FC0B@Rasdoc.com>
Source record: 67955

How about using an SCR or Triac?

Paul

1807. Re: saw tooth oscillator circuit wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-11 00:00:00 UTC
From: M.R.Loudon@massey.ac.nz
Message-ID: <TW6s3.1164$q.34185@news.clear.net.nz>
Source record: 67956

In article <7oq9mpjh1@plutonium.btinternet.com>, D.L.C@btinternet.com says...
>
sawtooth oscillator = current source + cap + comparator + discharge transistor.

The current source charges the cap giving a ramp, when the ramp meets the
comparator's threshold the discharge transistor turns on discharging the cap
and the cycle begins again. Adjusting the current source alters the frequency
and the comparator threshold determines the amplitude.

Malcolm

1808. Re: saw tooth oscillator circuit wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-11 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.SOL.4.10.9908110103380.27668-100000@Stratus.CAM.ORG>
Source record: 67957

On Tue, 10 Aug 1999, David Cunningham wrote:

>
> >If you don't need a highly linear sawtooth waveform, you can use
> >either a neon lamp or a unijunction to build a minimum-component-count
> >oscillator. Try searching on these topics, or locate an older edition
> >of a GE transistor manual.
> >73,
> >Brad AA1Ip
>
> Good suggestion Brad. Perhaps this would also work with a zener diode and
> lower supply voltage?
>
>
I don't recall ever seeing a ramp generator using a zener, though I recall some articles that had some quite oddball diodes doing the job (and I can't remember what they were, and don't think I ever saw them elsewhere). If zeners worked, I think we'd see them commonly used, since they are common.

A unijunction transistor is the simplest way to go. A 555 (I know you asked for no IC, but you didn't say why) with pins 2 and 6 and 7 tied together and the cap from there to ground and a resistor from there to the supply voltage, will do the same thing, and is sometimes easier to come by.

YOu use to see a PNP and NPN combo that in effect synthesized a unijunctio, but I sure can't remember the exact details. Anyone could pull bipolar transistors out of their junkbox, but I don't recall ever seeing a unijunction that I didn't specifically buy.

If you need a linear ramp, either the unijunction or the 555 can provide one, so long as you use a current source instead of the resistor.

One of the problems with these are that they don't start at zero volts; certainly not the 555. If you want a sawtooth for sound, it doesn't much matter since you can AC couple it. But if you want it for a DC ramp to voltage control something else (such as sweeping a voltage controlled oscillator), you may want something fancier.

Michael VE2BVW

1809. Re: Vernier dials for receivers etc.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-11 00:00:00 UTC
From: Paul <pmartin@bright.net>
Message-ID: <37B15D5A.B3598370@bright.net>
Source record: 67958

How much for the vernier's and how many do you have?
Paul N8ULS

Elite Tubes wrote:

> Is anyone building receivers these days? I know several guys who like
> to build old regen style radios, and others who repair older tube-type
> receivers. The last regen I built was a tube receiver with an FET
> front end that worked quite well.
>
> Does anyone have any use for some Bourns locking knobs for pots?
> Or Vernier reduction drives (Jackson Brothers) 5.6:1
>
> I doubt if anyone other than homebrewers has any use for these items.
>
> Some fellows have told me that the Jackson Brothers reduction drive is
> used on Swan rigs among others. Can anyone confirm this?

1810. Re: CALLING ALL REGEN GURUS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-11 00:00:00 UTC
From: Paul <pmartin@bright.net>
Message-ID: <37B15F6F.868F3AFE@bright.net>
Source record: 67959

Many thanks all for the comments and suggestions. I received 19 emails that had some good ideas and many references. That along with some of my own will give me lots to try out. I'll post my final results but it may be some time yet as work has me pretty busy. Be sure to check out Norcal's Hamcomm99 webpage. The first place winner's case design is quite impressive. I love it. 73 all.

1811. Re: saw tooth oscillator circuit wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-11 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7os0nu$s6r$1@neptunium.btinternet.com>
Source record: 67960

Paul Breed wrote in message <37B108E0.A5A0FC0B@Rasdoc.com>...
>
>How about using an SCR or Triac?
>
>Paul
I haven't heard of that Paul. How would I do that in practice?

1812. FA: Radio books, Kenwood Reference

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-11 00:00:00 UTC
From: K6SDE <k6sde@my-deja.com>
Message-ID: <37B1B481.FA93E7F1@my-deja.com>
Source record: 67961

Electronic & Radio Engineering, 4th Edition, Terman - absolutely beautiful with dust cover:
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=142593010

Radio Engineering Handbook, 5th Edition, Henney - absolutely beautiful with dust cover:
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=142596974

Kenwood publication: Kenwood TS-950S Technical Information (includes SM-230):
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=142492749

1813. Re: UC3842 or TL494 as pulse width controller

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-11 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.990811120102.23561E-100000@oso.slonet.org>
Source record: 67962

```
The UC 3842AM is only $.49 from Electronic Goldmine $10 min.
1-800 445 0697 Cliff K7RR

On 11 Aug 1999, trA namroN wrote:

> I'm sure the manufacturer would be able to help you. Unitrode has an
> excellent tutorial that holds your hand through the design process and has
> torroid part nos, etc.
> It seems that every analog chip maker has new chips for controlling them.
> They can be talked out of samples and have schematics to get you started.
> David Cunningham <D.L.C@btinternet.com> wrote in article
> <7okhgn$qra$1@plutonium.btinternet.com>...
> > Can anyone provide a circuit diagram for a pulse width controller using
> > either of the above chips for use in a homebrew SMPS? I assume that these
> > devices can provide output pulses whose width can be controlled by an
> > external control voltage.
> >
> > D.L.C@btinternet.com
> >
> >
> >
> >
>
>
```

1814. ** FLEA at MIT ** Sunday August 15th Cambridge MA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-11 00:00:00 UTC
From: w1gsl@mit.edu
Message-ID: <7oskkb$7up@senator-bedfellow.MIT.EDU>
Source record: 67963
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc,rec.radio.info,sci.electronics.misc,ne.forsale,ne.general,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Subject: ** FLEA at MIT ** Sunday August 15th Cambridge MA
Summary: Buy Sell SWAP Ham Radio Electronics Computers 9AM - 2PM

This coming Sunday ...

*** !!!! In our Traditional GARAGE and lot !!!! ****
so come rain or shine or super heat the Flea is on !!!

********* $1 buyers discount with hardcopy of this notice ********

COMPUTERS - ELECTRONICS - HAM RADIO - COMPUTERS - ELECTRONICS - HAM RADIO

FLEA all SUMMER at MIT
Sunday August 15th 1999
9AM-2PM

Come to the city for a great flea - plenty of free parking.

MIT's electronics and ham radio flea will take
place on the third Sunday of each month this summer,
April thru October.

There is tailgate space for over 600 sellers and
free, off-street parking for >2000 cars!

Buyers admission is $4 (you get $1 off if
you're lucky enough to have a copy of our ad)
and sellers spaces are $10.00-each at the gate.

The flea will be held at the corner of Albany and
Main streets in Cambridge; right in the Kendall
Square area from 9AM to 2PM, with sellers set-up
time starting at 7AM.

*** Attention Sellers ***
Prepaid vendors.. Season Pass or monthly,
will be admitted FIRST.
Separate lines will form prior to gate opening
for prepaid and nonprepaid vendors

!! RAIN or SHINE !! Have no fear of rain, a covered
well illuminated tailgate area is available for all
sellers (6'8" clearance).

Talk-in: 146.52 and W1XM/R-449.725/444.725 (PL 114.8/2A).

Sponsors: MIT Electronics Research Society
MIT UHF Repeater Association (W1XM)
MIT Radio Society (W1MX)
Harvard Wireless Club (W1AF)

For more info / advanced reservations 617 253 3776

********** $1 buyers discount with hard copy of this notice ************

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Address..... Phone.....

City..... State..... Zip.....

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By ..... Stamp

Enclose SASE for return by mail.

****
Steve Finberg W1GSL w1gsl@mit.edu
PO Box 82 MIT Br Cambridge MA 02139-7082 617 258 3754
****

1815. Copies of Articles Wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-11 00:00:00 UTC
From: Duncan Walters <tesla@cwcom.net>
Message-ID: <37B1DBAB.B49267B@cwcom.net>
Source record: 67964

Can anyone supply me with good quality photocopies of two
articles which were published in Communications Quarterly?
I need the complete articles on Regenerative and Superregenerative
Receivers
which appeared in the Fall 1994 and Fall 1995 issues, I think they were
written
by Charles Kitchin.
I will gladly reimburse all copying and mailing costs to the U.K.
Can anyone please help?
Any assistance will be greatly appreciated.
Please reply soon.

Best regards,
Duncan G4DFV

1816. Re: Still more nearly free stuff in Oradell, NJ

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-11 00:00:00 UTC
From: Tim Nagle <tenagle@mmm.com>
Message-ID: <37B1E255.3BAEAE01@mmm.com>
Source record: 67965
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Robert Casey wrote:
>
> Still have stuff to almost give away.
...
>
> And some more stuff, including speakers and horns.
>

Hello Robert,

What kind of horns do you have? I have a couple of Edison phonographs
and am looking for a horn. Could you describe yours? Such as the
type of machine they came from, shape (witches hat, paneled,
morning glory etc.)?

Thanks,

Tim Nagle
tenagle@mmm.com
(612) 881-4648 (eve)
(651) 736-5886 (day)

1817. Re: saw tooth oscillator circuit wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-11 00:00:00 UTC
From: Bob <hcouture@ime.net>
Message-ID: <7otekq$3hn$1@news.harvard.net>
Source record: 67966

Humm, SCRs and TRIACS are breakover devices. Snap and they are all the way on. How do you generate a sawtooth wid that? Unijunction is a cheap way to go, but for dc rail to rail; use an op amp.
David Cunningham <D.L.C@btinternet.com> wrote in message news:7os0nu$s6r$1@neptunium.btinternet.com...
>
> Paul Breed wrote in message <37B108E0.A5A0FC0B@Rasdoc.com>...
> >
> >How about using an SCR or Triac?
> >
> >Paul
> I haven't heard of that Paul. How would I do that in practice?
>
>
>

1818. An offer: Busted Motorola Spectra A7 for info....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-12 00:00:00 UTC
From: Brian <brian_messman@yahoo.com>
Message-ID: <V4ts3.865$3s5.73844@typhoon01.swbell.net>
Source record: 67967

I've gotten a lot of responses with a lot of suggestions, and I appreciate all your input into the matter. One thing in common, all want the radio for parts, so here's my angle: I need the MARS / CAP mod for the Yaesu FT2600 mobile. I've talked to Yaesu tech support who said they would give info to a valid MARS / CAP certificate holder, which i'm not. I know this radio's not type accepted...blah blah blah...but this is a fine radio, and I would like to put all my ham / public service stuff into one field programmable radio. Whoever can get the mod for me first will get the radio and mic, I'll even pay shipping. Please help!!! This info is available for free out there, just takes resources that i don't have....
Thanks a ton everyone!

original message:

>
>I've got what I believe to be a 60 Watt VHF Spectra, but need more info on
>radio. Any help would be greatly appreciated...
>
>memory channels?
>frequency spread?
>power?
>
>Fireman buddy accidentally "killed" radio when plugging mic cord into radio
>on patrol car. Seems the second from left pin on the bottom row of the mic
>connector bent down and shorted against the chassis. Radio won't turn on
>anymore, awful burn smell from within....
>
>Likelyhood of getting fixed for less than cost of new comparable radio?
>
>No DTMF pad on mic, but phone button on front panel. Has 15 pin accessory
>jack on rear.
>
>Motorola Spectra
>D43KXA7JA5BK
>
>Thanks
>-brian
>
>

1819. 1999 Fingerlakes NY Hamfest and Fly-In

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-12 00:00:00 UTC
From: Mike <ma@lightlink.com>
Message-ID: <37B2D5B5.8824892D@lightlink.com>
Source record: 67968

1999 Fingerlakes NY Hamfest and Fly-In

Saturday, August 21, 1999
General Admission beginning 7:00 AM, vendors 6:30 AM

Great Door Prizes!
Airplane Rides available from FAA certified commercial pilots!
Inexpensive seller space!

Tompkins County Airport
Brown Road, Ithaca, NY
Near the Intersection of Rte 13 and Warren Road
Talk-In via 146.970- Repeater (Ithaca, NY)

Our new location offers:
- Huge airplane hangar with plenty of indoor space
- Breakfast and lunch starting at 6:30 AM
- VE testing onsite (pre-registration preferred)
- New equipment dealers
- Paved flea market and parking areas
- Friday evening setup available
- Handicapped accessible

Admission: $5 door, $4 advanced , under 18 free
(no advanced tickets after July 31, 1999)

Selling space charges:
Indoor tables: $10 / 6 foot space, table supplied
Outdoor spaces: $2 / 8 foot space, table not supplied

Indoor vendor setup 6:30PM - 9:00PM Friday August 20,
and resuming 6:00AM Saturday August 21.

Pilots: Fly in to our Hamfest!
- Tower: 119.60
- ITH VOR 111.80
- ATIS 125.175
- Unicom 122.95

For more info contact:
- Rich Spingarn AA2UP, richard@eagleprint.com
- Dave Flinn W2CFP, dave@starrflinn.com

Sponsored by the Tompkins County Amateur Radio Club
On the web at http://compcenter.com/~tcarc/

1820. Re: Some computer related debris to swap for radio debris

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-12 00:00:00 UTC
From: BOB DUCKWORTH <bob@atl.org>
Message-ID: <37B2B569.BE4@atl.org>
Source record: 67969
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.swap,rec.radio.amateur.homebrew

Whoops, forgot to change date from Y2K test :-)
-bob

1821. Re: RS-Component Tester-22-330

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-12 00:00:00 UTC
From: David Wendt <dwendt@electrocam.com>
Message-ID: <01bee4ef$ff9f4fe0$8202a8c0@wendt.electrocam.com>
Source record: 67970

Actually you can install a 2N2222 backwards and have it act like a lower gain transistor. If it is in an application where the power level is very low it may never even get noticed. On the job, I found production had been able to put them in backwards on a product one day and it was not discovered until the units were tested under heavy load.

Dave

David Shalita <af389@lafn.ORG> wrote in article
<37B03172.7862BB46@lafn.org>...
> Hi,
>
> Did anyone reading this digest buy one of these
> Transistor, diode scr, etc testers from Radio Shack?
>
> Very handy unit when it works.
> With fresh hot Duracell batteries,
> my tester has stopped working, gives totally wrong answers.
> Allows me to instal 2N2222 parts with reversed Emitter and Collector
> leads.
>
> My owners manual is lost in my shop.
> Can someone please read manual and tell me how long is the warranty?
>
> I no longer can receive the HAM_Homebrew Digest via email.
> Sorry, I cannot see your replies that way.
>
> PLEASE replies to me DIRECTLY as well as group.
> Please hurry, my warranty, if 90 days, is running out.
>
> Thanks for any help, 73, W6MIK
> --
> David Shalita (Dave)
> af389@lafn.org
> Van Nuys, CA
>

1822. Re: Hamtronics Rxrs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-12 00:00:00 UTC
From: dave <OMG@dumbasses.com>
Message-ID: <7ov1g4$a9n$1@holly.prod.itd.earthlink.net>
Source record: 67971

Dave,
Thanks for the tip...

--
"No Matter where you go...there you are..."

1823. Re: An offer: Busted Motorola Spectra A7 for info....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-12 00:00:00 UTC
From: dave <OMG@dumbasses.com>
Message-ID: <7ov1p2akc1@holly.prod.itd.earthlink.net>
Source record: 67972

Brian,
The Command/Logic Board is kaput. If you are brave enough,open the puppy up and look inside on the interface connection board....there may only (if you're lucky...) be minor circuit trace damage, if not then send it to Motorola. They charge a flat rate of 225 (at least that was the latest price I had from 3 months ago...) and they'll repair it.
Dave

--
"No Matter where you go...there you are..."

1824. RF Interference Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-12 00:00:00 UTC
From: Pete Riley <riley@sprintXmail.com>
Message-ID: <37B3212A.1910@sprintXmail.com>
Source record: 67973

(NOTE: Anti-spam at work. Read the last line of this note)

I have an odd one here. Hope someone can help.

A customer is installing one of our meteorological systems at a small airport. The signal cable between the sensors and the display panel will be close to the antenna coax (i.e. about 12 inches apart where they both enter the building through the wall). He is concerned about the possibility of the radio signal imposing EFI onto my signal cable. Also, he is sizing the signal cable to be about 50 feet too long in case he needs to move the weather display in the future. He plans to simply coil the signal cable and 'shove it under a desk'. He is concerned that the coil formed by looping the signal cable will act as an inductor and possibly as an antenna.

The signal cable is a 7 conductor (2 for power, 5 for signals) 22 gage with an overall shield. The power in the signal cable is about 15 VDC and the returning signals are all slow moving DC.

Personally I don't think he has anything to worry about in either case (unless he has crappy coax). However, I would welcome any comments.

Thanks.

Regards,

Pete Riley-remove the X from my address if you want to reply by e-mail

1825. Squelch for Grundig Satellit 700

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-12 00:00:00 UTC
From: Horst Winheim <Horst.Winheim@t-online.de>
Message-ID: <7ov8ofhpf1@news08.btx.dtag.de>
Source record: 67974

Hi people,

I am looking for a circuit-idea for an Squelch-function for enlarges my
Grundig Satellit 700.
A possibility were to evaluate that S-meter-signal, but I have no circuit
diagram.
Who has broader ideas or the circuit diagram from the receiver or can help?

Thank in advance
Horst Winheim

1826. Re: RF Interference Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-12 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <37B3349B.80043E93@erols.com>
Source record: 67975

There are a lot of variables here that will affect whether there is an RFI problem or not. Type of coax, amount of transmit power, frequency used, type of sensor cable, level of sensor signals, cable separation and how long the parallel run is. All you can do is try it and move the cables farther apart if you experience RFI.

Pete Riley wrote:
>
> (NOTE: Anti-spam at work. Read the last line of this note)
>
> I have an odd one here. Hope someone can help.
>
> A customer is installing one of our meteorological systems at a small
> airport. The signal cable between the sensors and the display panel
> will be close to the antenna coax (i.e. about 12 inches apart where they
> both enter the building through the wall). He is concerned about the
> possibility of the radio signal imposing EFI onto my signal cable.
> Also, he is sizing the signal cable to be about 50 feet too long in case
> he needs to move the weather display in the future. He plans to simply
> coil the signal cable and 'shove it under a desk'. He is concerned that
> the coil formed by looping the signal cable will act as an inductor and
> possibly as an antenna.
>
> The signal cable is a 7 conductor (2 for power, 5 for signals) 22 gage
> with an overall shield. The power in the signal cable is about 15 VDC
> and the returning signals are all slow moving DC.
>
> Personally I don't think he has anything to worry about in either case
> (unless he has crappy coax). However, I would welcome any comments.
>
> Thanks.
>
> Regards,
>
> Pete Riley-remove the X from my address if you want to reply by e-mail

1827. Q: Homebrew direct-conversion phasing receiver ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-12 00:00:00 UTC
From: Franz Hamberger <hitchhiker@alpha-centauri.net>
Message-ID: <7ove4qrtn2@news02.btx.dtag.de>
Source record: 67976

Hi hombrewers,

some weeks ago on this newsgroup, Rick Campbell's R2
homebrew direct-conversion phasing receiver had been mentioned.

It seems to me, this receiver is the one I'm looking for.
Can anybody tell me more about it? Is there information on the web?

Thanks & 73

Franz DL7AVF

--
Franz Hamberger, DL7AVF, Berlin, Germany
dl7avf@qsl.net
http://www.qsl.net/dl7avf

1828. FS:8877 tube $250.00

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-12 00:00:00 UTC
From: Norman Gillaspie <norman@pcseng.com>
Message-ID: <37b366bf@jolt.pagesat.net>
Source record: 67977
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.swap

I have a Eimac 8877 tube forsale. It is
new and has been used once to verify operation.

It is in perfect condition with the exception
that a small dent in the heatsink. It is guaranteed
to work perfectly.

I am asking $250.00 or best offer by Monday
AM at 10:00AM

PS: I from time to time get RF parts and componenets and am offering them to
hams. If you are interested in getting my messages just let me know via
email.

PCS Engineering
Norman Gillaspie
325M Sharon Park Dr. #210
Menlo park, Ca. 94025
Tel 650-854-5263
Fax 650-854-5445
KF6WHG

1829. FS: $750.00Henry Radio 3000 watt generator/pwr amp and supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-12 00:00:00 UTC
From: Norman Gillaspie <norman@pcseng.com>
Message-ID: <37b374fb@jolt.pagesat.net>
Source record: 67978
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

I have a Henry Radio generator that
has a 3CX3000 tube and amplifier stage.

The unit has a 14MHZ crystal oscillator followed
by a push-pull solid state pre-driver.

Both Solid the pre-driver and driver run off 28 volts.

The pre-driver uses a pair of MRF433 transistors and is
right out of the Motorola App notes.

A 300 Watt push-pull solid state driver amplifier is right out
of the Motorola APP note number EB27A it has 12db of gain
and will output 300 watts using MRF-422 transistors.

These amplifiers drive the 3CX3000 output stage.

I believe this unit can be modfied for a straight amplifier.

It looks in good shape.

It includes the power supply.

The final test report in indicated the following.

plate current .998 amps
grid current .300 amp
PA Voltage 4200 volts
PA Filament 7.6 Volts
3-23-95

The amplifier is in a 45 inch tall by 19 inch rack.

The unit has three sections which can be removed as a unit

3CX3000 tube amplifier section in a chassis with matching circuits
turns counter etc.

The solid State driver section with 28VDC supply

High voltage power supply. I have pictures I can send via email as
PDF files just ask.

I believe it works. I am trying to get schematics

However I am selling it as is. These units were used as RF Sputtering
sources.

I am asking $750.00 for this unit.

From time to time I get various pieces of RF equipment forsale to hams. If you would be interested in being notified when I have equipment forsale please
send an email to norman@pcseng.com and say add me to the list.

Norman Gillaspie

Norman Gillaspie
325M Sharon Park Dr. #210
Menlo park, Ca. 94025
Tel 650-854-5263
Fax 650-854-5445
KF6WHG
Email norman@pcseng.com

1830. Re: saw tooth oscillator circuit wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-12 00:00:00 UTC
From: Paul Breed <Paul@Rasdoc.com>
Message-ID: <37B38A68.E3BBBA98@Rasdoc.com>
Source record: 67979

I am horrible at ASCII art so I will try to explain in verbage....

Charge a capacitor with a current less than the turn off current of an
SCR/TRIAC.
Connect the TRIAC across the cap.
Add a Zener from the cap to the TRIAC gate.
When the voltage gets high enough the TRIAC (or SCR) turns on pulling
the saw touth down.
When it gets to zero the SCR turns off and it does it again.

I have not tried this... but it should work.
It's been a long time since I've played at this level of discrete
analog....
but this should work. All in all I think IC's would be a lot easier.

Paul Breed Chief Architect, NetBurner
Networking in one day.
http://www.netburner.com

1831. HF MOBILE IMAGES SOUGHT

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-12 00:00:00 UTC
From: K2BJ <webmaster@k2bj.com>
Message-ID: <7ovuon$6sm@dfw-ixnews10.ix.netcom.com>
Source record: 67980

Looking for shots of nice HF mobile installations to showcase on my site devoted to HF/M. See archive of past features as well...

Visit:

http://www.k2bj.com and look for the "Mobile of the Month" link!

'73
Brian

1832. Re: Grid Driven 4-1000 amp schematics anyone???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-13 00:00:00 UTC
From: w4pqwhs@aol.com
Message-ID: <19990813082527.13280.00000587@ng-cd1.aol.com>
Source record: 67885

I don`t get it. why set up a grid driven amp to run 3000 or 4000 watts then swamp it down to legal limit,grounded grid is simple, less expensive,linear,tame,and sensible.all exciters run 100 watts output,(most all)that is exactly what you need to run a 4-1000 at legal limit..I just don`t get it.good luck W4PQW
.

1833. Need IC-2340H Dual Band Modifcation

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-13 00:00:00 UTC
From: "David W. Fleming" <davefleming@novagate.com>
Message-ID: <7p199f$i4$0@208.154.0.215>
Source record: 67886

I am looking for a mod to extend the receive frequency coverage of my Icom 2340H dual band mobile transceiver. Can anyone point me in the right direction. Thanks!
Dave
davefleming@novagate.com

1834. Re: Grid Driven 4-1000 amp schematics anyone???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-13 00:00:00 UTC
From: rick@area.com
Message-ID: <7p1bn1ndf1@vax.area.com>
Source record: 67887

In article <19990813082527.13280.00000587@ng-cd1.aol.com>,
W4pqw HS <w4pqwhs@aol.com> wrote:
>I don`t get it. why set up a grid driven amp to run 3000 or 4000 watts then
>swamp it down to legal limit,grounded grid is simple, less
>expensive,linear,tame,and sensible.all exciters run 100 watts output,(most
>all)that is exactly what you need to run a 4-1000 at legal limit..I just don`t
>get it.good luck W4PQW
>.

The 4-1000 in grounded grid (with screen also grounded) couldn't even
get up to the old legal limit with 100 watts drive, let alone the
1500 watt limit. To have any hope of doing that, you would need to
run the screen with DC bias but at RF ground AND you would have to be
running 5000 volts on the plate AND you would have to have a high
impedance output tank that supports 5000 volts (no easy thing on
10 meters).

OTOH, driving the grid of the 4-1000 will probably result in lousy
linearity; it was never designed to be a linear amplifier.

Bottom line: I was once considering a 4-1000 linear (a long time ago)
and concluded this is simply the wrong tube period, even if you can
get them cheap.

(Of course my current linear uses MOSFET's but that's another story).

Rick Karlquist N6RK
rick@area.com

1835. FS: Pair of 6C21's

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-13 00:00:00 UTC
From: MK <blusky@internetcds.com>
Message-ID: <01bee5a8$8ae9d800$cb881ad0@blusky>
Source record: 67888
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

Look good, good fils. 1 Matchlett, 1 Eimac
$50 each + shipping

1836. FS: Ceramic sockets

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-13 00:00:00 UTC
From: msix@nmia.com
Message-ID: <7p1hot$m2b$1@hume.nmia.com>
Source record: 67889

```
Set of 10 real ceramic sockets.
6 4-pin Amphenol, snap ring mount
4 octal Amphenol, snap ring mount
Some new, some used. $23 pp 48.

73 - John W7ZFB
1400 Catron SE Albq, NM 87123
*********************************************************
* Homebrewer since 1947 CW BoatAnchors Norcal #930 *
* BA CW freqs - 3578, 7050, 7147, 14050, 21050, 28050 *
*********************************************************
```

1837. Re: Pager Foxhunt... is it possible?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-13 00:00:00 UTC
From: davem@cs.ubc.ca
Message-ID: <7p1pfj$cq2$1@newcastle.cs.ubc.ca>
Source record: 67890
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

"Brian" <schousek@geocities.com> writes:

>Given a model number and telephone number is it possible to track down a
>pager using any sort of detection method? We have a kidnapped young lady in
>the area and one fact in the case is that she probably has her pager with
>her. The suspect is behind bars, but she has been missing for 10 weeks now.

>The official Motorola response was 'impossible' but I'm wondering if it's
>more like 'very difficult so next to impossible.' I don't know the pager
>protocols... is there a transmitter in the thing or just a receiver?

Standard pagers are receivers only - the transmitters transmit "blind"
and get no acknowledgement of whether the page was actually received.

So this pager will not transmit RF that's detectable from a long
distance. It will have a local oscillator, and knowing the model of
the pager you could find the frequency. But range will be short.
More seriously, *every other* pager of that model, plus any other
pagers of other models tuned to the same service and using the same
local oscillator, will also radiate the same frequency. Finding the
one pager you are looking for would be near impossible.

Dave

1838. FS : Millen Septar sockets

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-13 00:00:00 UTC
From: Richard Matthews <richmatt@worldnet.att.net>
Message-ID: <7p28br$9cd$1@bgtnsc02.worldnet.att.net>
Source record: 67891

Millen septar, ceramic (for 3C33, 829B, 6C33B etc.) - $10.00 each

Richard
Leeds Electronics

http://www.leedselect.com

Tubes and more since 1923

1839. [Annc] 10-mbit/s microwave Ethernet link project results

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-13 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <37B4D1D4.4B0D@pop.removethistomailme.net>
Source record: 67892
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,sci.electronics.design

Some time ago, there were a couple of threads discussing efforts to extend the N6GN 2-mbit/s digital radio link project for use with more modern, readily-available 10-mbit/s Ethernet cards.

I've recently completed work on a project that delivers robust 10-mbit/s performance across an X-band microwave link at a reasonable price/complexity level, and wanted to post an announcement here to let any interested parties know of the results. The link has been in daily use for several weeks between my office and residence, and has worked great so far! Any feedback and questions are welcome.

http://www.qsl.net/ke5fx

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

1840. Re: RF Interference Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-13 00:00:00 UTC
From: Gary Danaher <gdanaher@flash.net>
Message-ID: <37B37054.2B994ADA@flash.net>
Source record: 67981

Frequency and power will affect this more than anything, but you might install some ferrite donuts every so often along the length of the control cable. Might help-might not need them, but they probably aren't going to hurt, so if they are installed upon installation, it won't be a labor problem if you have to tear in again later.

Pete Riley wrote:
>
> (NOTE: Anti-spam at work. Read the last line of this note)
>
> I have an odd one here. Hope someone can help.
>
> A customer is installing one of our meteorological systems at a small
> airport. The signal cable between the sensors and the display panel
> will be close to the antenna coax (i.e. about 12 inches apart where they
> both enter the building through the wall). He is concerned about the
> possibility of the radio signal imposing EFI onto my signal cable.
> Also, he is sizing the signal cable to be about 50 feet too long in case
> he needs to move the weather display in the future. He plans to simply
> coil the signal cable and 'shove it under a desk'. He is concerned that
> the coil formed by looping the signal cable will act as an inductor and
> possibly as an antenna.
>
> The signal cable is a 7 conductor (2 for power, 5 for signals) 22 gage
> with an overall shield. The power in the signal cable is about 15 VDC
> and the returning signals are all slow moving DC.
>
> Personally I don't think he has anything to worry about in either case
> (unless he has crappy coax). However, I would welcome any comments.
>
> Thanks.
>
> Regards,
>
> Pete Riley-remove the X from my address if you want to reply by e-mail

1841. Grid Driven 4-1000 amp schematics anyone???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-13 00:00:00 UTC
From: Tim <tvendt@kear.tds.net>
Message-ID: <3mMs3.101$Sr3.14016@ratbert.tds.net>
Source record: 67982
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hi.... I am in the process of putting together a bunch of stuff that I've had kicking around here together to make a 4-1000 amp... I have at least a dozen schematics for GG amps but almost nothing for Cathode grid driven amps using the 4-1000. The only real drawback that I've seen so far is that it requires a slightly more complicateed power supply (screen voltage and the like) but I already have the stuff to incorporate that into it. The main advantage that I can see for this amp is that it takes very little drive to send a 2500 watt bird slug into oblivion (or at least to cause the needle in the meter housing this slug to gently tap the right hand stop pin). I can imagine, though maybe not rightly, that this amp may be a little more difficult to tame, parasitically speaking, but then I plan to swamp the heck out of the input grid circuit to knock down the input drive to a level that won't cause the tube to exceed the plate dissipation rating....in my way of thinking this would seem to knock down a "possible parasitic" enough to where it would never get started... where is Rich Measures when you need him...anyway, any info would be helpful I'm looking to start this project in the next 1-2 months....
&#
Tim
tvendt@kear.tds.net

1842. Re: FA: 40GHz Counter - Last 3 days

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-13 00:00:00 UTC
From: Philip de Cadenet <BigMobile@g4zow.freeserve.co.uk>
Message-ID: <jF+WjaA9JAt3Ewpv@g4zow.freeserve.co.uk>
Source record: 67983

>Last 3 days at auction for this 'No Reserve' HP 5352B 40GHz Microwave
>Frequency Counter.
>
>The current highest bid still makes this counter a steal at:
>
>http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=143093036
>
>Good luck if you decide to bid.
>
>(((73)))
>
>Phil G4ZOW

1843. FS: GE UHF MVP

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-14 00:00:00 UTC
From: n0hcv@browncom.com
Message-ID: <37b4d888.9569978@news.netins.net>
Source record: 67893

GE MVP for sale. UHF hi power. 30+ Watt. Makes a very fine
repeater, Ham or land mobilel $55 + Ship
Don 712-523-2466
or e-mail

1844. Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-14 00:00:00 UTC
From: billb@eskimo.com
Message-ID: <7p2rv3acn1@eskinews.eskimo.com>
Source record: 67894
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

I finally at long last connected up two separate ideas in my mind, and figured out something about antennas which I've never encountered before.

I've written it up here:

ENERGY-SUCKING ANTENNAS
http://www.amasci.com/tesla/tesceive.html

Atoms are far smaller than the wavelength of light waves, so how come they can absorb light so well? No, it's not a quantum-mechanical effect involving tiny photons hitting tiny atoms. Instead it involves classical EM. Most amazing is the idea that the same physics can probably be used to make very small Tx/Rx antennas.

Awhile back there was a furor about "Crossed-Field Antennas" (CFAs) which supposedly allowed us to transmit efficiently on 80m with a tiny desktop antenna. Well, that might not have been genuine, but I believe that the above "energy sucking" process can do the same thing. The key is to build a high-Q resonant system. It stores energy in the form of an immense EM field, and the field itself acts as the antenna. In other words, if an antenna is far, far smaller than one wavelength, we can still get the signal out by superimposing a huge e-field (or b-field) on the antenna in phase with the transmitter. The large field lets the transmitter couple itself to empty space. To do this, either use a loop antenna with a relatively huge current, or use a dipole with a relatively huge voltage. The antenna itself is far too small to be resonant, and so we add a corresponding coil or capacitor to create a resonator which allows efficient transmission. And for a receiver, if the antenna is actively resonating because of energy it had previously received, then that antenna receives MORE energy than a non-resonating antenna would.

Maybe all the hams here will say "NO DUH!" If so, then why would anyone care about those CFAs and their claimed ability to act as large antennas, while remaining very small? Also, why didn't anyone ever tell me that atoms act like electrically-small resonant loop antennas, and not like electrically large quarter-wave dipoles? I never encountered this idea in any physics class. Maybe only the amateurs know about it, while physicists do not.

Super-regen receivers as well as AM portables have apparantly been using this "energy sucking" effect all along. A resonant loop-antenna is NOT just an inductive pickup coil with a narrow-band filter. It actually behaves electrically far larger than its physical dimensions. And if two resonant coils are near each other, they can behave like a well-coupled transformer even though their mutual inductance is very small and the

distance between the coils is large. Weird! I bet this is no big news to radio designers, but physicists never have encountered such a thing.

Another similar topic:

TESLA'S GREAT MISTAKE
http://www.amasci.com/tesla/tmistk.html

(Nicola Tesla was using 'G-line' microwave waveguides... at 10KHZ!???)

Lots more crack-brained detrius can be found at:

NEW WEBSITE ADDITIONS
http://www.amasci.com/news.html

ELECTRONICS HOBBYIST
http://www.amasci.com/amateur/elehob.html

AMATEUR SCIENCE EMAIL FORUM
http://www.amasci.com/sci-list/sci-list.html

--
((((((((((((((((((((((((O)))))))))))))))))))))))
William J. Beaty SCIENCE HOBBYIST website
billb@eskimo.com http://www.amasci.com
EE/programmer/sci-exhibits science projects, tesla, weird science

1845. Re: CALLING ALL REGEN GURUS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-14 00:00:00 UTC
From: mcalhoun@ksu.edu
Message-ID: <7p3lu0$ji8@unix1.cc.ksu.edu>
Source record: 67895

"abcd1234" <abcd1234@ix.netcom.com> writes:
>The 6SN7GT tube or the 12SNGT tube
>....[snip]....
>If you want a circuit, I can provide it,

I tried to email you to ask for a circuit,
but "abcd1234" isn't a particularly useful address,
and you didn't give a better in the text.

--Myron.
--
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (Professor Emeritus) "Barbershop" tenor. CDL(PTX) W0PBV (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

1846. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-14 00:00:00 UTC
From: notjimbob@worldnet.att.net
Message-ID: <37b68075.2476627@netnews.worldnet.att.net>
Source record: 67896
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

On 14 Aug 1999 04:40:03 GMT, billb@eskimo.com (William Beaty) wrote:

>Atoms are far smaller than the wavelength of light waves, so how come they
>can absorb light so well?

Atoms, acting alone, do *not* absorb light well at all unless the
light's wavelength matches one of the resonances in the electron "shell" of that
atom.

A low pressure gas (or plasma) consisting of individual atoms all of the
same element will be almost completely transparent, absorbing no light, at most
wavelengths. At some resonant wavelengths, the gas will be almost opaque,
absorbing those wavelengths very well.

Your revolutionary breakthru is just a lot of wishful thinking. You
should stick to those things that you can demonstrate rather than things you
think you know that ain't so.

Your excellent writeup on holograms produced with a compass on a sheet
of plastic was a classic example of good science. This cross-fielded Tesla
stuff is a good example of very bad psuedo-science.

Jim

1847. Re: Grid Driven 4-1000 amp schematics anyone???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-14 00:00:00 UTC
From: Barry McCarthy <barry@g0wbf.freeserve.co.uk>
Message-ID: <paZEHBAduat3EwoW@dabsol.co.uk>
Source record: 67897
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <3mMs3.101$Sr3.14016@ratbert.tds.net>, Tim
<tvendt@kear.tds.net> writes
>Hi.... I am in the process of putting together a bunch of stuff that I've
>had kicking around here together to make a 4-1000 amp... I have at least a
>dozen schematics for GG amps but almost nothing for Cathode grid driven amps
>using the 4-1000. The only real drawback that I've seen so far is that it
>requires a slightly more complicateed power supply (screen voltage and the
>like) but I already have the stuff to incorporate that into it.
>

For good, simple passive grid amplifier that works with any tetrode, go
to http://www.oceanfree.net/ei9gq.

In case I've got that wrong, just enter ei9gq into Alta Vista.

No complicated screen supplies. Circuit is based upon the G2DAF linear,
which was popular here in the '60s, using 813's.
--
Barry McCarthy
G0WBF

1848. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-14 00:00:00 UTC
From: hwabnig@netway.at
Message-ID: <37b7acc1.3322730@news.netway.at>
Source record: 67898
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

On 14 Aug 1999 04:40:03 GMT, billb@eskimo.com (William Beaty) wrote:

>
>I finally at long last connected up two separate ideas in my mind, and
>figured out something about antennas which I've never encountered before.
>
>I've written it up here:
>
> ENERGY-SUCKING ANTENNAS
> http://www.amasci.com/tesla/tesceive.html
>
>
>Atoms are far smaller than the wavelength of light waves, so how come they
>can absorb light so well? No, it's not a quantum-mechanical effect
>involving tiny photons hitting tiny atoms. Instead it involves classical
>EM. Most amazing is the idea that the same physics can probably be used
>to make very small Tx/Rx antennas.
>
>
snip
>
>Maybe all the hams here will say "NO DUH!" If so, then why would anyone
>care about those CFAs and their claimed ability to act as large antennas,
>while remaining very small? Also, why didn't anyone ever tell me that
>atoms act like electrically-small resonant loop antennas, and not like
>electrically large quarter-wave dipoles? I never encountered this idea in
>any physics class. Maybe only the amateurs know about it, while
>physicists do not.
>
>........
You never attended a physics class.
No, you didn't.
Don't lie.

W.

1849. Re: GE UHF MVP

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-14 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7p4bt1$q25$1@news1.fast.net>
Source record: 67899

Don <n0hcv@browncom.com> wrote in message
news:37b4d888.9569978@news.netins.net...
> GE MVP for sale. UHF hi power. 30+ Watt. Makes a very fine
> repeater, Ham or land mobilel $55 + Ship
> Don 712-523-2466
> or e-mail

Condition? Location? Do you have the service manual?

Please advise ... I'm interested.

73,

--
Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI
Fellow, Radio Club of America
Senior Member, IEEE
Member, ARRL
Join NCI - Hams for the 21st Century!
Help modernize ham radio and assure its future survival!
http://www.nocode.org

1850. Re: Pager Foxhunt... is it possible?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-14 00:00:00 UTC
From: noone@nowhere.com
Message-ID: <37b8ea5f.70024431@news.squonk.net>
Source record: 67900
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Sun, 8 Aug 1999 21:06:00 -0500, "Brian"
<schousek@geocities.com> wrote:

>Hello all...
>
>Given a model number and telephone number is it possible to track down a
>pager using any sort of detection method? We have a kidnapped young lady in
>the area and one fact in the case is that she probably has her pager with
>her. The suspect is behind bars, but she has been missing for 10 weeks now.
>
>The official Motorola response was 'impossible' but I'm wondering if it's
>more like 'very difficult so next to impossible.' I don't know the pager
>protocols... is there a transmitter in the thing or just a receiver? I Don't
>have a pager, so don't even know if 10 weeks is well beyond expected battery
>life.
>
>Any help in answering the question would be appreciated.
>
>Brian
>KB9TBB
>
The only thought I have is to pick a time and day to page
her, and have all of the residents of the region stop and
listen for a page. I know that's a huge long shot, that it
is on, and somewhere where it could be heard. And you'd
need the cooperation of the police, and the local media, and
lots of random people. Maybe you could even get the local
pager companies to only page that number for some 10 minute
time period?

Grasping at straws, but a sad story. Good luck.

Just random thoughts

1851. How do you attached an LCD to the board?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-14 00:00:00 UTC
From: nathan_c_harris@worldnet.att.net
Message-ID: <37b5c5dc.148279314@netnews.worldnet.att.net>
Source record: 67901

I am looking for some help with my dilemma...
I am trying to replace the LCD on my radio and have received the new one from the factory, but I now have no way to attached it to the board where the contacts are. It was affixed with rubber tape, but they don't appear to sell that anymore. Is there a way to reapply some type of adhesive to the old rubbers and reuse them?

Many many tahnks,
Nate
N5VSH

1852. Re: Grid Driven 4-1000 amp schematics anyone???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-14 00:00:00 UTC
From: rattlesnake <rattlesnake67909@my-deja.com>
Message-ID: <7p4kqb$6cd$1@nnrp1.deja.com>
Source record: 67902
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <paZEHBAduat3EwoW@dabsol.co.uk>,
Barry McCarthy <barry@g0wbf.freeserve.co.uk> wrote:
> In article <3mMs3.101$Sr3.14016@ratbert.tds.net>, Tim
> <tvendt@kear.tds.net> writes
> >Hi.... I am in the process of putting together a bunch of stuff that I've
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> >dozen schematics for GG amps but almost nothing for Cathode grid driven amps
> >using the 4-1000. The only real drawback that I've seen so far is that it
> >requires a slightly more complicateed power supply (screen voltage and the
> >like) but I already have the stuff to incorporate that into it.
> >
>
> For good, simple passive grid amplifier that works with any tetrode, go
> to http://www.oceanfree.net/ei9gq.
>
> In case I've got that wrong, just enter ei9gq into Alta Vista.
>
> No complicated screen supplies. Circuit is based upon the G2DAF linear,
> which was popular here in the '60s, using 813's.
> --
> Barry McCarthy
> G0WBF
>The G2DAF will work good in a 4-1000 amp I have built them.

--
Ho Ho Ho
AYE AYE AYE
PORKBUTT SONG
Rattlesnake

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1853. Re: Grid Driven 4-1000 amp schematics anyone???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-14 00:00:00 UTC
From: Barry McCarthy <barry@g0wbf.freeserve.co.uk>
Message-ID: <Pf1dGKAtKft3Ew9B@g0wbf.freeserve.co.uk>
Source record: 67903
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <7p4kqb$6cd$1@nnrp1.deja.com>, rattlesnake
<rattlesnake67909@my-deja.com> spewed-out the following
>>The G2DAF will work good in a 4-1000 amp I have built them.
>
>--
>Ho Ho Ho
>AYE AYE AYE
>PORKBUTT SONG
>Rattlesnake
>

Is this drivel supposed to mean something?
--
Barry McCarthy
G0WBF

1854. FS: One Weston 697 VOM, Two Tripolets $60 obo

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-14 00:00:00 UTC
From: MICHAEL NEIDICH <neidich@worldnet.att.net>
Message-ID: <7p50tk$3tc$1@bgtnsc03.worldnet.att.net>
Source record: 67904

FS: One Weston 697 VOM, Two Tripolets $60 obo
Cleaning house.
Tripolet 630A, seems to work but switch is dirty.
Tripolet 666-R, condition unknown
Weston 697 - very old "Selective Set Servicer"

All three for $60 obo, I'll pay shipping.
Mike
K2ENN
Santa Clara, CA 95050

1855. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-15 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <37cc091b.203597371@news.atl.bellsouth.net>
Source record: 67905
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

On 14 Aug 1999 04:40:03 GMT, billb@eskimo.com (William Beaty) wrote:
>I finally at long last connected up two separate ideas in my mind, and
>figured out something about antennas which I've never encountered before.
>
>I've written it up here:
>
> ENERGY-SUCKING ANTENNAS
> http://www.amasci.com/tesla/tesceive.html

HA HA HA HA!

Best laugh I've had today.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

1856. Re: DDS VFO Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-15 00:00:00 UTC
From: Ham <hduff@ica.net>
Message-ID: <37B6513E.D2FAC05D@ica.net>
Source record: 67906

> Follow ups to the article and updated source code can be found at the NJQRP
> site:

http://www.njqrp.org/ham-pic/projects.htm

The only phase noise consideration is related to the purity of the reference
oscillator.
The AD9850 DDS is a 125 MHz. part. If you use a 120 MHz. ref. oscillator, you will
be able to get a clean signal up to 1/3 of the clock or 40 MHz.
The AD9852 is good for 180 MHz. and has a built-in PLL clock multiplier that
allows you to use lower frequency ref. oscillators. This one should be able to
provide up to 60 MHz. operation (covering 6 meters) !

Hugh, VA3TO

> In article <933836326.188420@newton.dialix.com.au>,
> ?? henryt@perth.dialix.com.au (Henry Titchen) wrote:
> >Hi All,
> >There was a very interesting DDS (Direct Digital Sythesiser) VFO using the
> >Analogue Devices AD9850 in July '97 QEX.? (I don't have a copy of the
> >article, I have seen some of the PIC code on the net).
> >
> >I am interested in knowing what the limitations might be in using this
> >type of VFO up to 6m frequencies?? Does phase noise become a major
> >problem?? Are there other problems using it on frequencies above 30Mhz?
> >
> >Best Regards From,
> >Henry.

1857. Visit the new online HAMFEST!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-15 00:00:00 UTC
From: compcnsult@aol.com
Message-ID: <19990815085847.08730.00000050@ng-cj1.aol.com>
Source record: 67907

```
Visit the new online Hamfest:

http://www.ehamfest.com

All ads placed free until 10/1/99

What do you have to lose!
```

1858. Help. One frequency RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-15 00:00:00 UTC
From: "D/\\\\/ID Pickard" <pickards@zen.co.uk>
Message-ID: <MrAt3.7213$Bi7.4103@newreader.ukcore.bt.net>
Source record: 67908

Hi guys/guyettes.
I've been told I can build myself a receiver for one specific frequency, and it's not too hard.
The frequency is: 5680kHz. Now, building the VXO is no problem, but the person told me I needed an IF... Where do I put this? I know if have an antenna, then feed the antenna into ??? then to the output of ??? I then add the VXO? then into my decector?
Is this at all right?
I want my IF at 455kHz. Can someone explain, via email what I need to do... none of my text books help.
Thanks in advance
Please help
David P (RS:180152)

--
[)/\\/|[) :oP

1859. Skil Cordless screwdriver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-15 00:00:00 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <01bee743$449086a0$9a874d0c@default>
Source record: 67909

I want to use the motor/gear reduction to drive a variable capacitor.
Does anyone know how the bit holder is held on? Is it pressed on?
is it held on with a screw?
If I take it off, what does the remaining shaft look like?
I want to remove it to shorten the assembly.

Thanks
Mike

1860. Re: lower cost RF design software ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-15 00:00:00 UTC
From: jim@rst-engr.com
Message-ID: <37b6f933.3647332@news.gv.net>
Source record: 67910

maddog@io.com
shared these priceless pearls of wisdom:

->I'm a little confused... are you under the impression ARRL is a
->government agency? or government subsidized?

No, my school bought it on my recommendation. Trying to send it BACK through the school system is like herding cats. Wastes more time and money than it is worth.

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

1861. Phase angle controller circuit wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-15 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7p6vll$lb6$1@neptunium.btinternet.com>
Source record: 67911

I am looking for a circuit to trigger an SCR at a variable phase angle to provide a variable voltage from lumpy, rectified DC. I have seen circuits using a unijunction transistor or a diac for AC, but want something which will use discrete components from my junk box.

1862. TDA1085 data required

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-15 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7p6vnd$li1$1@neptunium.btinternet.com>
Source record: 67912

I am looking for data on this chip, which I assume to be a triac controller.

1863. Kenwood TS-120S TX instanbilities

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-15 00:00:00 UTC
From: la8ak@online.no
Message-ID: <37b3bb53.431224693@news.online.no>
Source record: 67913

found an article in English by ZS6GM*) abt TX instabilities with early (before 1983) versions of TS-120S. Radio ZS Oktober 1990. Haven't seen it mentioned elsewhere, or am I just wrong? It shows some steps with simple modifications, removing capacitors, coils, adding larger value capacitor, resistor and diodes to 3 stages in TX, FINAL UNIT X56-1350-00, RF-UNIT X44-1260-01
ZS6GM also mentions Kenwood bulletin SN-031 25/02/83
(AM Date 02/83/25?)

LA6LCA modified his TS-130, removed the RF amplifier stage, and installed 2m transverter. Then he had a better 2m transceiver than available elsewhere because of the facilities you find with HF transceivers. He slowed down the PLL loop circuit to remove all the birdies on 10m, but he still does not have any circuit diagram showing what he really did.

73
Jan-Martin LA8AK

----------==========
*) Chris Turner, ZS6GM
P.O.Box 19, Wendywood, 2144
South Africa

1864. Re: Skil Cordless screwdriver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-15 00:00:00 UTC
From: "Al, N2NKB"
Message-ID: <7p7d1s$8qu$1@bgtnsc03.worldnet.att.net>
Source record: 67914

I might be missing something here, but have you taken the drill apart
to check out the mechanics? Also, it seems to me that you may need
a gear reduction drive between the chuck and the cap to perform this task.
Al

AMDX wrote in message <01bee743$449086a0$9a874d0c@default>...
>I want to use the motor/gear reduction to drive a variable capacitor.
>Does anyone know how the bit holder is held on? Is it pressed on?
>is it held on with a screw?
> If I take it off, what does the remaining shaft look like?
>I want to remove it to shorten the assembly.
>
> Thanks
> Mike
>
>

1865. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-15 00:00:00 UTC
From: "Al, N2NKB"
Message-ID: <7p7crl$856$1@bgtnsc03.worldnet.att.net>
Source record: 67915
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

You have discovered one of my life-long fantasies. You can
set up an array of antennas, rectify the energy, and power all of your
house-hold appliances.
Al

William Beaty wrote in message <7p2rv3acn1@eskinews.eskimo.com>...
>
>I finally at long last connected up two separate ideas in my mind, and
>figured out something about antennas which I've never encountered before.
>
>I've written it up here:
>
> ENERGY-SUCKING ANTENNAS
> http://www.amasci.com/tesla/tesceive.html
>
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>can absorb light so well? No, it's not a quantum-mechanical effect
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>EM. Most amazing is the idea that the same physics can probably be used
>to make very small Tx/Rx antennas.
>
>
>Awhile back there was a furor about "Crossed-Field Antennas" (CFAs) which
>supposedly allowed us to transmit efficiently on 80m with a tiny desktop
>antenna. Well, that might not have been genuine, but I believe that the
>above "energy sucking" process can do the same thing. The key is to build
>a high-Q resonant system. It stores energy in the form of an immense EM
>field, and the field itself acts as the antenna. In other words, if an
>antenna is far, far smaller than one wavelength, we can still get the
>signal out by superimposing a huge e-field (or b-field) on the antenna in
>phase with the transmitter. The large field lets the transmitter couple
>itself to empty space. To do this, either use a loop antenna with a
>relatively huge current, or use a dipole with a relatively huge voltage.
>The antenna itself is far too small to be resonant, and so we add a
>corresponding coil or capacitor to create a resonator which allows
>efficient transmission. And for a receiver, if the antenna is actively
>resonating because of energy it had previously received, then that antenna
>receives MORE energy than a non-resonating antenna would.
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>Maybe all the hams here will say "NO DUH!" If so, then why would anyone
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>atoms act like electrically-small resonant loop antennas, and not like
>electrically large quarter-wave dipoles? I never encountered this idea in
>any physics class. Maybe only the amateurs know about it, while
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>
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>Super-regen receivers as well as AM portables have apparantly been using
>this "energy sucking" effect all along. A resonant loop-antenna is NOT
>just an inductive pickup coil with a narrow-band filter. It actually
>behaves electrically far larger than its physical dimensions. And if two
>resonant coils are near each other, they can behave like a well-coupled
>transformer even though their mutual inductance is very small and the
>distance between the coils is large. Weird! I bet this is no big news to
>radio designers, but physicists never have encountered such a thing.
>
>
>Another similar topic:
>
> TESLA'S GREAT MISTAKE
> http://www.amasci.com/tesla/tmistk.html
>
>(Nicola Tesla was using 'G-line' microwave waveguides... at 10KHZ!???)
>
>
>
>Lots more crack-brained detrius can be found at:
>
> NEW WEBSITE ADDITIONS
> http://www.amasci.com/news.html
>
> ELECTRONICS HOBBYIST
> http://www.amasci.com/amateur/elehob.html
>
> AMATEUR SCIENCE EMAIL FORUM
> http://www.amasci.com/sci-list/sci-list.html
>
>--
>((((((((((((((((((((((((((O)))))))))))))))))))))))))
>William J. Beaty SCIENCE HOBBYIST website
>billb@eskimo.com http://www.amasci.com
>EE/programmer/sci-exhibits science projects, tesla, weird science

1866. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-15 00:00:00 UTC
From: hap@tscnet.com
Message-ID: <37bb3c36.6432409@localhost>
Source record: 67916
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

On Mon, 17 May 1999 21:43:50 -0500, Sir <sir@sir.com> wrote:

<snip>
>
>There never was or is a code requirement for commercial broadcast.

You mean my First Class Telegraphy License never existed?

1867. Re: DDS VFO Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-15 00:00:00 UTC
From: bcarver@magiclink.com
Message-ID: <37b73020.10707848@news.magiclink.com>
Source record: 67917

There are more, and higher amplitude spurious outputs as your output frequency becomes a higher percentage of the clock frequency. You may get 80 dB of close-in spurious-free dynamic range with a 1 MHz output, but only 60 dB at 1/3 the clock frequency.

The clock-multiplier circuit generates a noisier clock. Injecting the actual clock frequency is better. It's just a little harder to make 180 MHz (can't buy THAT in a canned microprocessor oscillator). I'm sure they exist and will become common Digikey items eventually.

Never something for nothin' - Bill - W7AAZ

On Sun, 15 Aug 1999 01:33:50 -0400, Ham <hduff@ica.net> wrote:

>> Follow ups to the article and updated source code can be found at the NJQRP
>> site:
>
>http://www.njqrp.org/ham-pic/projects.htm
>
>The only phase noise consideration is related to the purity of the reference
>oscillator.
>The AD9850 DDS is a 125 MHz. part. If you use a 120 MHz. ref. oscillator, you will
>be able to get a clean signal up to 1/3 of the clock or 40 MHz.
>The AD9852 is good for 180 MHz. and has a built-in PLL clock multiplier that
>allows you to use lower frequency ref. oscillators. This one should be able to
>provide up to 60 MHz. operation (covering 6 meters) !
>
>Hugh, VA3TO
>
>> In article <933836326.188420@newton.dialix.com.au>,
>> ?? henryt@perth.dialix.com.au (Henry Titchen) wrote:
>> >Hi All,
>> >There was a very interesting DDS (Direct Digital Sythesiser) VFO using the
>> >Analogue Devices AD9850 in July '97 QEX.? (I don't have a copy of the
>> >article, I have seen some of the PIC code on the net).
>> >
>> >I am interested in knowing what the limitations might be in using this
>> >type of VFO up to 6m frequencies?? Does phase noise become a major
>> >problem?? Are there other problems using it on frequencies above 30Mhz?
>> >
>> >Best Regards From,
>> >Henry.
>

1868. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-15 00:00:00 UTC
From: "Al, N2NKB"
Message-ID: <7p7f1vgdg1@bgtnsc03.worldnet.att.net>
Source record: 67918
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

Thanks for your interesting story, Franz.
Many amateur radio operators like myself have lit up fluorescent
bulbs at close range to our transmitters. But I never heard of
someone living to a commercial station that had all of that energy
near by. I hope we hear more interesting stories about this on
this newsgroup; I think that the thread will be long.
Al

Ing. Franz Glaser wrote in message <37B73AE1.780F733D@eunet.at>...
>"Al, N2NKB" wrote:
>>
>> You have discovered one of my life-long fantasies. You can
>> set up an array of antennas, rectify the energy, and power all of your
>> house-hold appliances.
>>
>> William Beaty wrote in message <7p2rv3acn1@eskinews.eskimo.com>...
>> >
>> >I finally at long last connected up two separate ideas in my mind, and
>> >figured out something about antennas which I've never encountered
before.
>> >I've written it up here:
>> > ENERGY-SUCKING ANTENNAS
>> > http://www.amasci.com/tesla/tesceive.html
>
>This is robbery, of course. When I was in school, very close to
>a transmitting station, we could have flourescent lamps light
>brightly without a wall connection. It was necessary to short
>circuit the lamps at night.
>It was possible to drive our pocket radio with the energy from
>the transmitter - but of course we did listen Radio Luxembourg,
>they had much better music :-)
>--
>Franz Glaser, Glasau 3, A-4191 Vorderweissenbach Austria +43-7219-7035-0
>Muehlviertler Elektronik Glaser. Industrial control and instrumentation
>http://members.eunet.at/meg-glaser/ http://members.xoom.com/f_glaser/
>http://www.geocities.com/~franzglaser/ http://start.at/bedarf

1869. Re: DDS VFO Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-15 00:00:00 UTC
From: Dana Myers K6JQ <DMyers@Qnet.com>
Message-ID: <37B74E3D.53B0F6D9@Qnet.com>
Source record: 67919

Bill Carver wrote:

> The clock-multiplier circuit generates a noisier clock. Injecting the
> actual clock frequency is better. It's just a little harder to make
> 180 MHz (can't buy THAT in a canned microprocessor oscillator). I'm
> sure they exist and will become common Digikey items eventually.

In theory, multiplying a clock signal increases the phase noise by the multiplication factor, and dividing a clock signal reduces the phase noise by the divisor. If you start with a 15MHz clock and multiply it with an idea PLL to 180MHz and divide it with a DDS back to 15MHz, you would not see an increase in phase noise. I don't know how noisy the on-chip multiplier PLL is in the DDS, which is the issue here.

A 180MHz external oscillator almost certainly would require multiplying up a crystal reference, so you'd still see some increase in phase noise characteristics. Nothing for free, afterall :-)

Dana K6JQ
Dana@Source.Net

1870. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-15 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.990815172544.2585D-100000@oso.slonet.org>
Source record: 67920
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

As usual, the modern "know everything "digital twiggets", know all there there is to know and the hell with those of use that made it possbile for them to be that stupid!

On Sun, 15 Aug 1999, Hap wrote:

> On Mon, 17 May 1999 21:43:50 -0500, Sir <sir@sir.com> wrote:
>
> <snip>
> >
> >There never was or is a code requirement for commercial broadcast.
>
> You mean my First Class Telegraphy License never existed?
>
>
>

1871. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-15 00:00:00 UTC
From: Andrew Thall <thall@icsi.net>
Message-ID: <xTKt3.14$dA.1268@mercury.intnet.net>
Source record: 67921
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Broadcast and your telegraphy are two completely separate licenses. You needed the telegraphy ticket to operate on a ship but the chief engineer for WABC in NYC never needed one for his broadcasting.

1872. Re: lower cost RF design software ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-15 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@bellsouth.net>
Message-ID: <LRKt3.19848$CI2.155030@news4.mia>
Source record: 67922

ARRL radio designer software works for me on a Win95A machine, but not on a Win95B (OSR2) machine.

I made copies of all the DLLs linked by ARRL.EXE from the system that works and put them in the local EXE directory on the other
machine. It made no difference.

When I told ARRL about this, they said -- "Yes. That's right."

I am thinking of getting EagleWare.

Has anyone tried VIPEC?

1873. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-15 00:00:00 UTC
From: CW <cmagers@sprynet.com>
Message-ID: <7p7us8$2od$1@nntp9.atl.mindspring.net>
Source record: 67923
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Yes, they did. Look back a few messages.

--
CW
KC7NOD
Hap <hap@tscnet.com> wrote in message news:37be7f81.23661524@localhost...
> On Sun, 15 Aug 1999 21:37:59 -0500, "Andrew Thall" <thall@icsi.net>
> wrote:
>
> >Broadcast and your telegraphy are two completely separate licenses. You
> >needed the telegraphy ticket to operate on a ship but the chief engineer
for
> >WABC in NYC never needed one for his broadcasting.
> >
> You are absolutely correct. Did anyone say anything different?
>
> Cheers... Hap

1874. Re: lower cost RF design software ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-15 00:00:00 UTC
From: Dale Parfitt <parinc@bellsouth.net>
Message-ID: <37B77FB7.C59E2E42@bellsouth.net>
Source record: 67924

Bert Douglas wrote:

> ARRL radio designer software works for me on a Win95A machine, but not
> on a Win95B (OSR2) machine.
>
> I made copies of all the DLLs linked by ARRL.EXE from the system that
> works and put them in the local EXE directory on the other
> machine. It made no difference.
>
> When I told ARRL about this, they said -- "Yes. That's right."
>
> I am thinking of getting EagleWare.
>
> Has anyone tried VIPEC?

I have been using Eagleware's Genesys w/ Filter and schematic modules
for years now- the library is very extensive and modeling (using nodal
analysis) is very fast. The optimization routine is wonderful as is
Monte Carlo analysis. It is relatively inexpensive when compared to some
of the stuff out there, but it is easy to tie up several thousand
dollars to get started.

Dale W4OP

Dale W4OP

1875. Re: [Annc] 10-mbit/s microwave Ethernet link project results

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-15 00:00:00 UTC
From: Cathryn Mataga <cathryn@junglevision.com>
Message-ID: <37B78783.BE4808AC@junglevision.com>
Source record: 67925
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,sci.electronics.design

Wow, this is a great site. I'm just overwhelmed by all the information
in here.

John Miles wrote:
>
> Some time ago, there were a couple of threads discussing efforts to
> extend the N6GN 2-mbit/s digital radio link project for use with more
> modern, readily-available 10-mbit/s Ethernet cards.
>
> I've recently completed work on a project that delivers robust 10-mbit/s
> performance across an X-band microwave link at a reasonable
> price/complexity level, and wanted to post an announcement here to let
> any interested parties know of the results. The link has been in daily
> use for several weeks between my office and residence, and has worked
> great so far! Any feedback and questions are welcome.
>
> http://www.qsl.net/ke5fx
>
> -- jm KE5FX
>
> --
> Note: My E-mail address has been altered to avoid spam
> --

--

Work: http://junglevision.com
Radio: http://ke6i.com

1876. Re: Need IC-2340H Dual Band Modifcation

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-15 00:00:00 UTC
From: W5IDX <W5IDX@worldnet.att.net>
Message-ID: <7p83ps$hk9$1@bgtnsc03.worldnet.att.net>
Source record: 67926

http://www.mods.dk/

David W. Fleming wrote in message <7p199f$i4$0@208.154.0.215>...
>I am looking for a mod to extend the receive frequency coverage of my Icom
>2340H dual band mobile transceiver. Can anyone point me in the right
>direction. Thanks!
>Dave
>davefleming@novagate.com
>
>
>

1877. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-15 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <STRXJ6Bjwzt3Ew$D@jmwa.demon.co.uk>
Source record: 67927
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

<7p7crl$856$1@bgtnsc03.worldnet.att.net>, Al, N2NKB <n2nkb@n2nkb.?.world
net.att.net> inimitably wrote:
>You have discovered one of my life-long fantasies. You can
>set up an array of antennas, rectify the energy, and power all of your
>house-hold appliances.
>Al
Yes, you can. You need a lot of antennas, and the regulatory authorities
would take a very dim view of your activity, but it is possible. There
were cases in the 1920s in Britain, when the Daventry transmitter 5XX
(200 kHz) first went on-air. Using neon lamps, no rectification was
necessary.
--
Regards, John Woodgate, OOO - Own Opinions Only.
Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
Did you hear about the hungry genetic engineer who made a pig of himself?
PLEASE DO ****NOT**** MAIL COPIES OF NEWSGROUP POSTS TO ME!!!!

1878. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-16 00:00:00 UTC
From: Mark Fergerson <mfergerson1@home.com>
Message-ID: <37B7A345.ED4AF198@home.com>
Source record: 67785
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

William Beaty wrote:
>
> I finally at long last connected up two separate ideas in my mind, and
> figured out something about antennas which I've never encountered before.

I do that all the time, only to discover I'm not the first. <sigh>

> I've written it up here:
>
> ENERGY-SUCKING ANTENNAS
> http://www.amasci.com/tesla/tesceive.html
>
> Atoms are far smaller than the wavelength of light waves, so how come they
> can absorb light so well? No, it's not a quantum-mechanical effect
> involving tiny photons hitting tiny atoms. Instead it involves classical
> EM. Most amazing is the idea that the same physics can probably be used
> to make very small Tx/Rx antennas.

Making connections to (not to mention impedance matching to)
individual electron shells is a tad tricky...

> Awhile back there was a furor about "Crossed-Field Antennas" (CFAs) which
> supposedly allowed us to transmit efficiently on 80m with a tiny desktop
> antenna. Well, that might not have been genuine, but I believe that the
> above "energy sucking" process can do the same thing. The key is to build
> a high-Q resonant system. It stores energy in the form of an immense EM
> field, and the field itself acts as the antenna. In other words, if an

Congratulations! You have discovered the mysterious Near Field... that
gray area where inverse-square no longer applies. the "Bermuda Triangle"
of Maxwell's equations.

<snip>

> Maybe all the hams here will say "NO DUH!" If so, then why would anyone
> care about those CFAs and their claimed ability to act as large antennas,
> while remaining very small? Also, why didn't anyone ever tell me that
> atoms act like electrically-small resonant loop antennas, and not like
> electrically large quarter-wave dipoles? I never encountered this idea in
> any physics class. Maybe only the amateurs know about it, while
> physicists do not.

Depends where you went to school. Lots of "Physics Professors" never
get past inclined planes and carbon paper. You obviously read a lot, so
read more.

> Super-regen receivers as well as AM portables have apparantly been using
> this "energy sucking" effect all along. A resonant loop-antenna is NOT
> just an inductive pickup coil with a narrow-band filter. It actually
> behaves electrically far larger than its physical dimensions. And if two
> resonant coils are near each other, they can behave like a well-coupled
> transformer even though their mutual inductance is very small and the
> distance between the coils is large. Weird! I bet this is no big news to
> radio designers, but physicists never have encountered such a thing.

A looptenna generally has a core with mu much greater than unity. Are
you trying to make a case for atoms as transformers, with electron
orbits a single turns? Think of a nucleus as a coil core. What's its mu?
What's the mutual coupling between two orbits in different atoms? Small
quantities, small (not very useful) effects.

> Another similar topic:
>
> TESLA'S GREAT MISTAKE
> http://www.amasci.com/tesla/tmistk.html
>
> (Nicola Tesla was using 'G-line' microwave waveguides... at 10KHZ!???)

You know, that sounds loopy as all hell, but the diagrams are pretty
convincing. Might influence us "lightning antenna" addicts.

> Lots more crack-brained detrius can be found at:

<snip>

Bill, your "reality filter" may be a bit more broadband than most, but
you gather interesting reading.

Mark L. Fergerson

1879. Re: FS: GE UHF MVP

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-16 00:00:00 UTC
From: n0hcv@browncom.com
Message-ID: <37b7ab9a.747857@news.netins.net>
Source record: 67786

Sold
On Sat, 14 Aug 1999 02:47:06 GMT, n0hcv@browncom.com (Don) wrote:

>GE MVP for sale. UHF hi power. 30+ Watt. Makes a very fine
>repeater, Ham or land mobilel $55 + Ship
>Don 712-523-2466
>or e-mail

Don Brown
http://www.browncom.com
Radio, Tower, Antennas, Lightning protection, repair service

1880. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-16 00:00:00 UTC
From: Mark Fergerson <mfergerson1@home.com>
Message-ID: <37B7B312.2C30703C@home.com>
Source record: 67787
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

John Woodgate wrote:
>
> <7p7crl$856$1@bgtnsc03.worldnet.att.net>, Al, N2NKB <n2nkb@n2nkb.?.world
> net.att.net> inimitably wrote:
> >You have discovered one of my life-long fantasies. You can
> >set up an array of antennas, rectify the energy, and power all of your
> >house-hold appliances.
> >Al
> Yes, you can. You need a lot of antennas, and the regulatory authorities
> would take a very dim view of your activity, but it is possible. There
> were cases in the 1920s in Britain, when the Daventry transmitter 5XX
> (200 kHz) first went on-air. Using neon lamps, no rectification was
> necessary.

Why would they care? Don't commercial transmitter operators take a tax loss for "unavoidable signal absorption"? They certainly ought to. No real antenna can be sited for perfect radiation. Any signal lost heating a mountainside (or my home) doesn't help get the ads out, which pay the rent (and taxes). Don't electric utility companies do it? That 60 Hz heats a lot of ground... If a power company has to pay "cancer taxes" in California, could they sue for unpaid-for absorbed power from the "victims"?

Mark L. Fergerson

1881. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-16 00:00:00 UTC
From: gerryq@indigo.ie
Message-ID: <k9Pt3.2707$r4.1453@news.indigo.ie>
Source record: 67788
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

In article <37B73AE1.780F733D@eunet.at>, "Ing. Franz Glaser" <meg-glaser@eunet.at> wrote:
>"Al, N2NKB" wrote:
>>
>> You have discovered one of my life-long fantasies. You can
>> set up an array of antennas, rectify the energy, and power all of your
>> house-hold appliances.
>>
>> William Beaty wrote in message <7p2rv3acn1@eskinews.eskimo.com>...
>> >
>> >I finally at long last connected up two separate ideas in my mind, and
>> >figured out something about antennas which I've never encountered before.
>> >I've written it up here:
>> > ENERGY-SUCKING ANTENNAS
>> > http://www.amasci.com/tesla/tesceive.html
>
>This is robbery, of course. When I was in school, very close to
>a transmitting station, we could have flourescent lamps light
>brightly without a wall connection. It was necessary to short
>circuit the lamps at night.
>It was possible to drive our pocket radio with the energy from
>the transmitter - but of course we did listen Radio Luxembourg,
>they had much better music :-)

I remember reading about a guy (may have been German) who was prosecuted
for powering his apartment from a coil hung out the window near a
transmitter. Apparently his efficiency was such that he cast a 'shadow'
- although maybe that's something that was claimed in court so as to
'simplify' matters for the jurors!

The crystal radio, with no power supply, is another example of this
phenomenon.

- Gerry Quinn

1882. Re: DDS VFO Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-16 00:00:00 UTC
From: bcarver@magiclink.com
Message-ID: <37b7aa26.17730833@news.magiclink.com>
Source record: 67789

Agree with you 100% Dana. Multiplying up, then dividing down by the same number doesn't change the phase noise if the multiply/divide circuits are noiseless.

While well-designed multipliers seem to add very, very little additional phase noise, the same can't be said for a PLL. From another Analog Devices chip with 200 MHz internal clock multiplier:

"phase noise at 1 KHz offset, 40 MHz Aout"
REFCLK multiplier disabled : -115 dBc/Hz
REFCLK multiplier X4 : -105 dBc/Hz
REFCLK multiplier X20 : -90 dBc/Hz

Or, in English, with a CONTSANT output frequency the close-in phase noise increases when you use the clock multiplier. Disabling the internal PLL and doing relatively noiseless multiplication externally should give lower phase noise in the output signal. That's more complicated and I've not tried to figure out whether it would make any serious difference in performance of a ham rig. I'm a nitpicker, though, and would probably choose to build a diode multiplier if I needed a VHF clock.

Regards - Bill - W7AAZ

On Sun, 15 Aug 1999 16:33:17 -0700, Dana Myers K6JQ <DMyers@Qnet.com> wrote:

>Bill Carver wrote:
>
>> The clock-multiplier circuit generates a noisier clock. Injecting the
>> actual clock frequency is better. It's just a little harder to make
>> 180 MHz (can't buy THAT in a canned microprocessor oscillator). I'm
>> sure they exist and will become common Digikey items eventually.
>
>In theory, multiplying a clock signal increases the phase noise by
>the multiplication factor, and dividing a clock signal reduces the
>phase noise by the divisor. If you start with a 15MHz clock and
>multiply it with an idea PLL to 180MHz and divide it with a DDS back
>to 15MHz, you would not see an increase in phase noise. I don't know
>how noisy the on-chip multiplier PLL is in the DDS, which is the issue
>here.
>
>A 180MHz external oscillator almost certainly would require multiplying
>up a crystal reference, so you'd still see some increase in phase noise
>characteristics. Nothing for free, afterall :-)
>

>Dana K6JQ
>Dana@Source.Net

1883. Re: lower cost RF design software ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-16 00:00:00 UTC
From: spam@nospam.com
Message-ID: <37b7d537.7644273@news.lin.foa.se>
Source record: 67790

I am a happy user of the Eagleware Genesys programs!
It is almost too fun to use, I never get round to build those
wounderful circuits that is so easy simulated....

The programs are really easy to use but I find the PCB design a bit
too crude. Maybe in the next revision it have a bit more professiona
feel about it, and still maintain the simplicity to use.

The biggest drawback is the form of licensing they use, both a
hardware key AND license mangager requesting new codes every year! One
can request a no-time limit s/w-key to let *YOUR* software function
but if you loose the key, kaputz!

Bottom line I would recomend the Eagelware to anywone, but for
hobbyists it is very expensive despite the offered discount (you must
mention your callsign when ordering).

Eagleware: If you read this newsgroup...what about promoting your
products by letting the ham community have cheaper access (200-300
dollars) to say an older version of your software?? Version 5.4 would
not be very attractive for the pro but would be heaven for us hams....

Lasse SM5GLC
On Sun, 15 Aug 1999 21:38:58 -0500, "Bert Douglas"
<bertdNOSPAM@bellsouth.net> wrote:

>ARRL radio designer software works for me on a Win95A machine, but not on a Win95B (OSR2)
machine.
>
>I made copies of all the DLLs linked by ARRL.EXE from the system that works and put them
in the local EXE directory on the other
>machine. It made no difference.
>
>When I told ARRL about this, they said -- "Yes. That's right."
>
>I am thinking of getting EagleWare.
>
>Has anyone tried VIPEC?
>
>
>
>

1884. Re: DDS VFO Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-16 00:00:00 UTC
From: ralph <crlane@erols.com>
Message-ID: <37B7E33A.A43D5E26@erols.com>
Source record: 67791

You still have the pc boards available? I would be interested in obtaining one.
Ralph Lane in Maryland
crlane@erols.com

Tibor Bece wrote:

> Hi all,
>
> I have a few very nice professional PCB's left over for the AD9850/51.
> It is only for the DDS IC, I do not believe in LO's too near to
> the CPU :) The design has a proper ground-plane, 5V regulator +EMI
> filters on board, silk-screen and plated through holes, line
> conditioning for the serial signals, 9th order output LPF. All
> components are SMD, 0805, except for the 5V regulator and the
> XO. The XO can be DIP8 or DIP14. PCB Size ~1.1in x 1.4in. Email me for
> details if anyone is interested.
>
> SFDR from the AD9850 is excellent, from a 125MHz XO one does not see
> much above -70dBc (as usual, 'bad frequencies' are low N/M ratios
> to the xtal). The AD9851 internal 'x6' is very useful, for instance
> running the DDS from a lower frequency TCXO module. The spectral
> purity in this mode is excellent, perhaps a touch worse than in
> the 'clean' 175MHz XO mode, but probably much better than people
> generally realise.
>
> Thanks Analog Devices!
>
> Tibor
> tbece@netspace.net.au
>
> Electeng network user wrote:
> > I was thinking of the same question. Are any kits of components made/ are
> > there any 'clean' PCB layouts avail. on the net. I think AD is bringing out a
> > pin-compatible chip with 300MHz clk (max), which would be cool.
> >
> > I think that you have to watch out for aliases, and use the highest possible
> > clock rate. If you look at the data sheet then the 2nd order components
> > Fclk-Fout might be troublesome, as Fclk max is only 125MHz. I was thinking of
> > using this chip as a VFO for a D-C, image rejecting transceiver (with ADSP21xx
> > backend).
> >
> > I would expect phase noise to be constant, or nearly so over the entire freq.
> > range. As mentioned above, spurs may come closer to the wanted signal as the
> > freq. is increased.
> >

> > 73 de M1CC0
> > Laurens

1885. Re: lower cost RF design software ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-16 00:00:00 UTC
From: n7ws@arrl.net
Message-ID: <37b806e7.647667050@news.azstarnet.com>
Source record: 67792

On Mon, 16 Aug 1999 01:38:32 GMT, ke4zv@bellsouth.net (Gary Coffman) wrote:

>On Sun, 08 Aug 1999 17:10:34 GMT, jim@rst-engr.com (Jim Weir) wrote:
>>ke4zv@bellsouth.net (Gary Coffman)
>>shared these priceless pearls of wisdom:
>>
>>->On Tue, 20 Jul 1999 02:42:33 GMT, jim@rst-engr.com (Jim Weir) wrote:
>>->>reberhardt@nospam.org (Russell Eberhardt)
>>->>shared these priceless pearls of wisdom:
>>
>>
>>->That's pretty harsh. It is only a linear small signal modeling program,
>>->so it isn't much good for modeling PAs, mixers, or oscillators, but
>>->it is useful for analyzing filters, matching networks, small signal amps,
>>->etc. I wouldn't call RD trash, just horribly horribly limited compared
>>->to something like Design Lab.
>>
>>Gary --
>>
>>Harsh so be it. When I buy a program I sort of expect it to run on most
>>plain-vanilla systems. RD requires a certain level video card, a certain level
>>OS, and anything else jams the system.
>
>Odd, it runs on all of my plain vanilla systems. I haven't tried it on a real
>antique, of course, but it does run on an old 486 running Win 3.11. That's
>as antique as I have running anymore.
>

I have run it on:

1) Gateway 486-33 w3.1
2) Gateway 486 w/pentium 85 MHz overdrive processor w3.1
3) Dell 486-66 w3.11
4) Dell pentium 166 MHz Winnt
5) Dell pentium III 400 MHz w98

N7WS

1886. IBC pcboard mill

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-16 00:00:00 UTC
From: eborys <eborys@inwave.com>
Message-ID: <OWTt3.2660$gW5.802822@homer.alpha.net>
Source record: 67793

Looking for software and info on an ibc pcboard mill
Bought the hardware but no docs available.

--
emil, ak9i

1887. Re: Copies of Articles Wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-16 00:00:00 UTC
From: g345cde@aol.com
Message-ID: <19990816090855.11845.00000385@ng-fu1.aol.com>
Source record: 67794

I think I have the copies. I will check and get back to you. George
G345CDE

1888. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-16 00:00:00 UTC
From: Roy McCammon <rbmccammon@mmm.com>
Message-ID: <37B82950.7F5C5293@mmm.com>
Source record: 67795
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

William Beaty wrote:

> Super-regen receivers as well as AM portables have apparantly been using
> this "energy sucking" effect all along. A resonant loop-antenna is NOT
> just an inductive pickup coil with a narrow-band filter. \

Super regen is just positive feedback.

AM receivers don't require highly efficient antenna's.
Their performance is more governed by signal to noise
ratio and in most populated environments, the dominant noise
is not in the receiver or antenna. Its external. The signal
to noise ratio is fixed before the antenna has any effect.

> It actually
> behaves electrically far larger than its physical dimensions. And if two
> resonant coils are near each other, they can behave like a well-coupled
> transformer even though their mutual inductance is very small and the
> distance between the coils is large.

Well coupled means that M is not much smaller than sqrt (L1*L2)
where M is the mutual inductance and L1 and L2 are the individual
self inductances of the two coils.

> I bet this is no big news to radio designers, but
> physicists never have encountered such a thing.

The original radio designers were physicists.

1889. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-16 00:00:00 UTC
From: Roy McCammon <rbmccammon@mmm.com>
Message-ID: <37B829AD.AC6035A8@mmm.com>
Source record: 67796
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

William Beaty wrote:

> Maybe all the hams here will say "NO DUH!" If so, then why would anyone
> care about those CFAs and their claimed ability to act as large antennas,
> while remaining very small? Also, why didn't anyone ever tell me that
> atoms act like electrically-small resonant loop antennas, and not like
> electrically large quarter-wave dipoles? I never encountered this idea in
> any physics class. Maybe only the amateurs know about it, while
> physicists do not.

I think a physicist might say that an antenna acts like
a big atom, rather than the other way around.

1890. Re: FFFFFFFFFFFFFFFFFFFFFFFFF

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-16 00:00:00 UTC
From: Butch Magee <butchkay@netdoor.com>
Message-ID: <37B84029.BC038D52@netdoor.com>
Source record: 67797

Know just how you feel...!

Butch KF5DE

JBuck6661 wrote:

> f

1891. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-16 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <37B82A1C.4144@pop.removethistomailme.net>
Source record: 67798
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

```
Mark Fergerson wrote:
>
>If a power company has to pay "cancer taxes" in
> California...

Whoa. This, I haven't heard of. Could you elaborate on that?

-- jm KE5FX

------------------------------------------------------
Note: My E-mail address has been altered to avoid spam
------------------------------------------------------
```

1892. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-16 00:00:00 UTC
From: wagray@taz.dra.hmg.gb
Message-ID: <7p9edg$fd1$6@trog.dera.gov.uk>
Source record: 67799
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

In article <STRXJ6Bjwzt3Ew$D@jmwa.demon.co.uk>, John Woodgate <jmw@jmwa.demon.co.uk>
writes:
:<7p7crl$856$1@bgtnsc03.worldnet.att.net>, Al, N2NKB <n2nkb@n2nkb.?.world
:net.att.net> inimitably wrote:
:>You have discovered one of my life-long fantasies. You can
:>set up an array of antennas, rectify the energy, and power all of your
:>house-hold appliances.
:>Al
:Yes, you can. You need a lot of antennas, and the regulatory authorities
:would take a very dim view of your activity, but it is possible. There
:were cases in the 1920s in Britain, when the Daventry transmitter 5XX
:(200 kHz) first went on-air. Using neon lamps, no rectification was
:necessary.

Last time I drove up the M1 I noticed that there were several
old farmhouses actually inside the antenna array. At that
distance I would have thought that drawing any useful amount
of power would be seen immediately as an antenna mismatch.

Walter

Disclaimer: My employer is not responsible for the above.
If you want to email me, please use a valid From: address.

1893. Re: Phase angle controller circuit wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-16 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7p9ibk$8vv$1@plutonium.btinternet.com>
Source record: 67800
Body handling: HTML body converted to readable text

LCTUPAC wrote in message
news:19990816001207.10199.00000336@ng-fq1.aol.com...
> provide a variable voltage from lumpy, rectified DC.>
>
> A more cost effective solution might be to use a $3 lamp dimmer on the
mains
> side of the power supply. I have done this. It works well for conventional
> transformer-diode-capacitor power supplies. Of course, be careful with
more
> sophisticated power supplies.
>
> If you really want to build it, wouldn't it make more sense to use SCRs
to
> do the rectification? Otherwise, you have redundant diodes.
>
If I used an SCR without rectifier diodes, I would have thought that this
will give only half wave rectification, and smoothing of the DC pulses would
be more difficult. As for the dimmer switch option, I live in the UK where
they are still expensive.

1894. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-16 00:00:00 UTC
From: notjimbob@worldnet.att.net
Message-ID: <37be419a.14246923@netnews.worldnet.att.net>
Source record: 67801
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

On Mon, 16 Aug 1999 10:08:00 -0500, Roy McCammon <rbmccammon@mmm.com> wrote:

>William Beaty wrote:
>
>> Super-regen receivers as well as AM portables have apparantly been using
>> this "energy sucking" effect all along.
>
>Super regen is just positive feedback.

Super regeneration isn't "just" positive feedback. Ordinary
regeneration is just positive feedback. Super-regen involves positive feedback
with the feedback level set to cause the detector stage to oscillate *and* a
method to apply supersonic "quenching" to periodically stop the oscillation and
then allow it to begin again.

The quenching is usually done by biasing the oscillating detector stage
to cutoff which reduces its gain to zero and then allowing the bias to slowly
bleed off. The bias can be externally supplied or it can be "self-quenching" by
virtue of the oscillation its self. Such self quenching is also known as
"squegging". As the bias drops, the gain of the stage increases until it breaks
into oscillation. Any external RF signal present at the detector reduces the
time it takes to begin oscillating.

The external RF signal is converted to a sort of PWM signal. The
oscillations start and stop with the duty cycle dependant on the strength of the
received RF signal. Since the oscillations have a much larger amplitude than
the original RF signal, they are very easy to convert back to a DC level that is
a copy of the amplitude variations of the original low level signal. The
quenching is done at a supersonic frequency so that it can be filtered out later
or simply be ignored if we're just listening to the detector as a radio.

The end result is very high gain for the detector since it is always
operating with a high level of carefully controlled positive feedback.

I'm convinced that something very similar is going on in our ears. Our
ears are very sensitive to sound levels in the nano watt range. Recent reports
have indicated that some of the "sounds" like ringing and whistling associated
with a condition known as "tinnitus" can actually be measured with sensitive
microphones as sound generated *in* the ear. I think our ears are super
regenerative systems and that the annoying ringing in the ear that plagues some
of us is simply the supersonic bias dropping down into the audible range of
frequencies.

Jim

1895. Where to learn RF

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-16 00:00:00 UTC
From: Pete Riley <riley@sprintXmail.com>
Message-ID: <37B85509.3DF9@sprintXmail.com>
Source record: 67802

(WARNING: Anti-spam technique in place. Read the last line of this note)

I need to buy/design a circuit that will broadcast a simple (CW maybe) signal at very low power levels (I need to go 30 feet). I need to operate in either 390 MHz or 433 MHz. The transmitter will be left outside, so the temperature span must be fairly large.

Can someone recommend a source for me to learn how to design this circuit? Or (better yet) how about a company that I can buy a board, IC, or circuit from??

Thanks.

Pete Riley-remove the X from my address if you want to reply by e-mail

1896. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-16 00:00:00 UTC
From: Roy McCammon <rbmccammon@mmm.com>
Message-ID: <37B85869.F7C31151@mmm.com>
Source record: 67803
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

Interesting and informative.
Mark Kinsler may want it for his collection.

James Meyer wrote:

> Super regeneration isn't "just" positive feedback. Ordinary
> regeneration is just positive feedback. Super-regen involves positive feedback
> with the feedback level set to cause the detector stage to oscillate *and* a
> method to apply supersonic "quenching" to periodically stop the oscillation and
> then allow it to begin again.
>
> The quenching is usually done by biasing the oscillating detector stage
> to cutoff which reduces its gain to zero and then allowing the bias to slowly
> bleed off. The bias can be externally supplied or it can be "self-quenching" by
> virtue of the oscillation its self. Such self quenching is also known as
> "squegging". As the bias drops, the gain of the stage increases until it breaks
> into oscillation. Any external RF signal present at the detector reduces the
> time it takes to begin oscillating.
>
> The external RF signal is converted to a sort of PWM signal. The
> oscillations start and stop with the duty cycle dependant on the strength of the
> received RF signal. Since the oscillations have a much larger amplitude than
> the original RF signal, they are very easy to convert back to a DC level that is
> a copy of the amplitude variations of the original low level signal. The
> quenching is done at a supersonic frequency so that it can be filtered out later
> or simply be ignored if we're just listening to the detector as a radio.
>
> The end result is very high gain for the detector since it is always
> operating with a high level of carefully controlled positive feedback.

1897. Re: Help. One frequency RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-16 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <37B86113.6084@ixpres.com>
Source record: 67804

D/\\/ID Pickard wrote:
>
> Hi guys/guyettes.
> I've been told I can build myself a receiver for one specific frequency, and
> it's not too hard.
> The frequency is: 5680kHz. Now, building the VXO is no problem, but the
> person told me I needed an IF... Where do I put this? I know if have an
> antenna, then feed the antenna into ??? then to the output of ??? I then add
> the VXO? then into my decector?
> Is this at all right?
> I want my IF at 455kHz. Can someone explain, via email what I need to do...
> none of my text books help.
> Thanks in advance
> Please help
> David P (RS:180152)
>
> --
> [)/\\/|[) :oP

David OM,

You don't need an I.F. It is then called a Direct Conversion (DC)
receiver. See any QRP ham radio books or ham radio handbooks for
examples of simple DC receivers. You do not need a VCXO either, for a
fixed frequency.

73,
Don, W6JL

1898. 4E27's in grounded Grid operation

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-16 00:00:00 UTC
From: wlfuqu00@pop.UKy.EDU
Message-ID: <199908161917.PAA19746@pop.uky.edu>
Source record: 67805

I would like to hear from those of you that have
used 4E27's in grounded grid operation. I found a
military amplifier for 70 to 100 MHz that had the
tank coils removed, but most of it is still there.
And it would be easy to make an HF amplifier from it.
I'd put in 813's but I would have to replace the
filament transformer. And not enough head room for the
taller tubes.
If you have some useful information please let me
know. Especially if you had problems.

73
Bill wa4lav

William L. Fuqua III P.E. E-mail WLFUQU00@POP.UKY.EDU Phone (606) 257-4155
Department of Physics and Astronomy CP-177 Chem. Phys. Bldg.
University of Kentucky , Lexington, Ky 40506-0055

1899. Re: Help. One frequency RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-16 00:00:00 UTC
From: "D/\\\\/ID Pickard" <pickards@zen.co.uk>
Message-ID: <qk_t3.5580$%o1.5869@newreader.ukcore.bt.net>
Source record: 67806

So, if I get an XTAL cut at 5680 kHz. Make an Osc? Then how do I feed in
the signal/where do I feed it in?
73 thanks so far

--
[)/\\/|[) :oP

Don W6JL wrote in message <37B86113.6084@ixpres.com>...
>D/\\/ID Pickard wrote:
>>
>> Hi guys/guyettes.
>> I've been told I can build myself a receiver for one specific frequency,
and
>> it's not too hard.
>> The frequency is: 5680kHz. Now, building the VXO is no problem, but the
>> person told me I needed an IF... Where do I put this? I know if have an
>> antenna, then feed the antenna into ??? then to the output of ??? I then
add
>> the VXO? then into my decector?
>> Is this at all right?
>> I want my IF at 455kHz. Can someone explain, via email what I need to
do...
>> none of my text books help.
>> Thanks in advance
>> Please help
>> David P (RS:180152)
>>
>> --
>> [)/\\/|[) :oP
>
>David OM,
>
> You don't need an I.F. It is then called a Direct Conversion (DC)
>receiver. See any QRP ham radio books or ham radio handbooks for
>examples of simple DC receivers. You do not need a VCXO either, for a
>fixed frequency.
>
> 73,
> Don, W6JL

1900. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-16 00:00:00 UTC
From: Dirk Bruere <artemis@kbnet.co.uk>
Message-ID: <37B8816F.AA3F7A06@kbnet.co.uk>
Source record: 67807
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

Roy McCammon wrote:
>
> > Maybe all the hams here will say "NO DUH!" If so, then why would anyone
> > care about those CFAs and their claimed ability to act as large antennas,
> > while remaining very small? Also, why didn't anyone ever tell me that
> > atoms act like electrically-small resonant loop antennas, and not like
> > electrically large quarter-wave dipoles? I never encountered this idea in
> > any physics class. Maybe only the amateurs know about it, while
> > physicists do not.

> I think a physicist might say that an antenna acts like
> a big atom, rather than the other way around.

I see nobody has mentioned fractal antennas yet.

Dirk

1901. Reworking Bird wattmeter slugs ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-16 00:00:00 UTC
From: Ham <hduff@ica.net>
Message-ID: <37B8A6DC.F506EBC5@ica.net>
Source record: 67808

The science of Bird Wattmeter Slugs;
I have a few questions that I wonder if someone may be able to answer...

1. How does the dimensions and proximity of the pickup affect frequency
range and power ?
��� ie...What differentiates the power rating of a 50 watt and 100 watt
slug
��� of the same frequency range ?
��� What is the differentiates the useable frequency range of a 50 watt
2-30
��� MHz. slug and a 50 watt 25-60 MHz. slug ?

2. Is it possible for the hobbiest to rework slugs ?
��� If came across some oddball slugs at a fleamarket that are
completely
��� useless at Ham radio frequencies, could I remove the pickup loop
��� and install one with the dimensions of another ?
��� Of course, I would need to have something decent to calibrate
against.

3. At what point outside the rated frequency range does the accuracy of
��� these slugs start to really drop ?
��� ie...could I use a 400 - 1000 MHz. slug to measure a signal at 1285
MHz.
��� with reasonable accuracy ?
�
Thanks de Hugh� VA3TO
�
�
�

1902. Bird Peak mod ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-16 00:00:00 UTC
From: Ham <hduff@ica.net>
Message-ID: <37B8AF25.EDE9ED7C@ica.net>
Source record: 67809

Looking for a mod to make a Bird Wattmeter do peak readings.
I thought I saw an article on this several years ago...any else ?

Please reply by email
Hugh VA3TO

1903. FS GEN. RADIO ADJ. AIR LINE

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-16 00:00:00 UTC
From: Joe Ship <ve2js@total.net>
Message-ID: <37B8BB06.F03@total.net>
Source record: 67810

```
--
\\W//
(@ @)
________ooO_(_)_Ooo__________
|Visit Joe Ship's home page at|
| http://www.total.net/~ve2js |
|_____________________________|
```

GENERAL RADIO 874LAL 50 OHM ADJUSTABLE AIR LINE.
Freq. range DC to 7GHz. Adjustment length 15 11/16"
collapsed to 24 1/4" extended. GR type N female
connectors at each end.

These are brand new. I have a quantity of these.
For sale @ (USD) $60. each plus $5. Air Mail to
continental U.S.A.

Joe Ship, VE2JS
ve2js@total.net

Lots more test equipment for sale. See my web page for list.

1904. Re: Help. One frequency RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-16 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.SOL.4.10.9908162316320.8899-100000@Stratus.CAM.ORG>
Source record: 67811

On Mon, 16 Aug 1999, D/\\/ID Pickard wrote:

> So, if I get an XTAL cut at 5680 kHz. Make an Osc? Then how do I feed in
> the signal/where do I feed it in?
> 73 thanks so far
>
> --
> [)/\\/|[) :oP
>
Before you take the suggestion of a direct conversion receiver, I should point out that they do have limitations. One obvious one is that they aren't really a good choice for AM. If you are trying to receiver morse code or single sideband, then a direct conversion receiver might be okay, as long as the other limitations are acceptable.

For a fixed frequency receiver, I wouldn't do away with the VXO. There will always be variation, such as the ideal circuit the crystal is cut for and the actual circuit, or frequency change with temperature, or crystal aging. If you don't put in any means of slightly adjusting the frequency, you may have problems. That's why all those old commercial two-way radios had trimmer capacitors in series with each crystal, so it could be adjusted to be exactly on frequency. For a fixed frequency, you won't need a wide variation, but you will need to pull the crystal a bit, just in case.

Michael VE2BVW

> Don W6JL wrote in message <37B86113.6084@ixpres.com>... > >D/\\/ID
Pickard wrote:
> >>
> >> Hi guys/guyettes.
> >> I've been told I can build myself a receiver for one specific frequency,
> and
> >> it's not too hard.
> >> The frequency is: 5680kHz. Now, building the VXO is no problem, but the
> >> person told me I needed an IF... Where do I put this? I know if have an
> >> antenna, then feed the antenna into ??? then to the output of ??? I then
> add
> >> the VXO? then into my decector?
> >> Is this at all right?
> >> I want my IF at 455kHz. Can someone explain, via email what I need to
> do...
> >> none of my text books help.
> >> Thanks in advance
> >> Please help

> >> David P (RS:180152)
> >>
> >> --
> >> [)/\\/|[) :oP
> >
> >David OM,
> >
> > You don't need an I.F. It is then called a Direct Conversion (DC)
> >receiver. See any QRP ham radio books or ham radio handbooks for
> >examples of simple DC receivers. You do not need a VCXO either, for a
> >fixed frequency.
> >
> > 73,
> > Don, W6JL
>
>
>
>

1905. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-16 00:00:00 UTC
From: "Ing. Franz Glaser" <meg-glaser@eunet.at>
Message-ID: <37B73AE1.780F733D@eunet.at>
Source record: 67928
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

"Al, N2NKB" wrote:
>
> You have discovered one of my life-long fantasies. You can
> set up an array of antennas, rectify the energy, and power all of your
> house-hold appliances.
>
> William Beaty wrote in message <7p2rv3acn1@eskinews.eskimo.com>...
> >
> >I finally at long last connected up two separate ideas in my mind, and
> >figured out something about antennas which I've never encountered before.
> >I've written it up here:
> > ENERGY-SUCKING ANTENNAS
> > http://www.amasci.com/tesla/tesceive.html

This is robbery, of course. When I was in school, very close to
a transmitting station, we could have flourescent lamps light
brightly without a wall connection. It was necessary to short
circuit the lamps at night.
It was possible to drive our pocket radio with the energy from
the transmitter - but of course we did listen Radio Luxembourg,
they had much better music :-)
--
Franz Glaser, Glasau 3, A-4191 Vorderweissenbach Austria +43-7219-7035-0
Muehlviertler Elektronik Glaser. Industrial control and instrumentation
http://members.eunet.at/meg-glaser/ http://members.xoom.com/f_glaser/
http://www.geocities.com/~franzglaser/ http://start.at/bedarf

1906. Re: lower cost RF design software ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-16 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <37e16ab1.294128922@news.atl.bellsouth.net>
Source record: 67929

On Sun, 08 Aug 1999 17:10:34 GMT, jim@rst-engr.com (Jim Weir) wrote:
>ke4zv@bellsouth.net (Gary Coffman)
>shared these priceless pearls of wisdom:
>
>->On Tue, 20 Jul 1999 02:42:33 GMT, jim@rst-engr.com (Jim Weir) wrote:
>->>reberhardt@nospam.org (Russell Eberhardt)
>->>shared these priceless pearls of wisdom:
>
>
>->That's pretty harsh. It is only a linear small signal modeling program,
>->so it isn't much good for modeling PAs, mixers, or oscillators, but
>->it is useful for analyzing filters, matching networks, small signal amps,
>->etc. I wouldn't call RD trash, just horribly horribly limited compared
>->to something like Design Lab.
>
>Gary --
>
>Harsh so be it. When I buy a program I sort of expect it to run on most
>plain-vanilla systems. RD requires a certain level video card, a certain level
>OS, and anything else jams the system.

Odd, it runs on all of my plain vanilla systems. I haven't tried it on a real
antique, of course, but it does run on an old 486 running Win 3.11. That's
as antique as I have running anymore.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

1907. Re: Skil Cordless screwdriver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-16 00:00:00 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <01bee798$474fa600$e3864d0c@default>
Source record: 67930

Hi Al,
I have taken it apart as far as the gearbox, two sets of planetary gears.
I think the output is about 150 rpms at full voltage. I wouldn't need any
additional gear reduction for torque but maybe for resolution. Or I could
use pulses to the motor.
I would like to use someone else's experience about pulling off the bit
holder, I don't want to pull it off and find that the (sun?) gear then
wobbles
in it's bushing.

Al, N2NKB <n2nkb@n2nkb@postoffice.worldnet.att.net> wrote in article
<7p7d1s$8qu$1@bgtnsc03.worldnet.att.net>...
> I might be missing something here, but have you taken the drill apart
> to check out the mechanics? Also, it seems to me that you may need
> a gear reduction drive between the chuck and the cap to perform this
task.
> Al
>
> AMDX wrote in message <01bee743$449086a0$9a874d0c@default>...
> >I want to use the motor/gear reduction to drive a variable capacitor.
> >Does anyone know how the bit holder is held on? Is it pressed on?
> >is it held on with a screw?
> > If I take it off, what does the remaining shaft look like?
> >I want to remove it to shorten the assembly.
> >
> > Thanks
> > Mike
> >
> >
>
>
>

1908. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-16 00:00:00 UTC
From: hap@tscnet.com
Message-ID: <37be7f81.23661524@localhost>
Source record: 67931
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

On Sun, 15 Aug 1999 21:37:59 -0500, "Andrew Thall" <thall@icsi.net>
wrote:

>Broadcast and your telegraphy are two completely separate licenses. You
>needed the telegraphy ticket to operate on a ship but the chief engineer for
>WABC in NYC never needed one for his broadcasting.
>
You are absolutely correct. Did anyone say anything different?

Cheers... Hap

1909. IN DESPERATE NEED OF SABER MANUAL

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-16 00:00:00 UTC
From: jbuck6661@aol.com
Message-ID: <19990816000706.25391.00000687@ng-fa1.aol.com>
Source record: 67932

I screwed my saber III because i don't have any clue how to program it - if you can help please email me - thank you - Andy

1910. Re: Phase angle controller circuit wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-16 00:00:00 UTC
From: lctupac@aol.com
Message-ID: <19990816001207.10199.00000336@ng-fq1.aol.com>
Source record: 67933
Body handling: HTML body converted to readable text

A more cost effective solution might be to use a $3 lamp dimmer on the mains side of the power supply. I have done this. It works well for conventional transformer-diode-capacitor power supplies. Of course, be careful with more sophisticated power supplies.

If you really want to build it, wouldn't it make more sense to use SCRs to do the rectification? Otherwise, you have redundant diodes.

1911. Re: [Annc] 10-mbit/s microwave Ethernet link project results

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-16 00:00:00 UTC
From: quatsein@island.net
Message-ID: <37b79fca.6772624@news.cr.island.net>
Source record: 67934
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,sci.electronics.design

Yes, he should be congratulated on a fine job of documentation on
a complex project.

Steve Carlisle

On Sun, 15 Aug 1999 20:37:39 -0700, Cathryn Mataga
<cathryn@junglevision.com> wrote:

>Wow, this is a great site. I'm just overwhelmed by all the information
>in here.
>
>John Miles wrote:
>>
>> Some time ago, there were a couple of threads discussing efforts to
>> extend the N6GN 2-mbit/s digital radio link project for use with more
>> modern, readily-available 10-mbit/s Ethernet cards.
>>
>> I've recently completed work on a project that delivers robust 10-mbit/s
>> performance across an X-band microwave link at a reasonable
>> price/complexity level, and wanted to post an announcement here to let
>> any interested parties know of the results. The link has been in daily
>> use for several weeks between my office and residence, and has worked
>> great so far! Any feedback and questions are welcome.
>>
>> http://www.qsl.net/ke5fx
>>
>> -- jm KE5FX
>>
>> --
>> Note: My E-mail address has been altered to avoid spam
>> --
>
>--
>_____________________________
>Work: http://junglevision.com
>Radio: http://ke6i.com

1912. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <mR1GjNBkkJu3EwAc@jmwa.demon.co.uk>
Source record: 67812
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

<37B8816F.AA3F7A06@kbnet.co.uk>, Dirk Bruere <artemis@kbnet.co.uk>
inimitably wrote:
>I see nobody has mentioned fractal antennas yet.

You just did. There is a short article on them in 'Scientific American',
July 1999, page 23, with a reference to a much longer one in the March
issue of 'Fractals'.
--
Regards, John Woodgate, OOO - Own Opinions Only.
Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
Did you hear about the hungry genetic engineer who made a pig of himself?
PLEASE DO ****NOT**** MAIL COPIES OF NEWSGROUP POSTS TO ME!!!!

1913. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <jhnHPJBvgJu3EwD1@jmwa.demon.co.uk>
Source record: 67813
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

<37be419a.14246923@netnews.worldnet.att.net>, James Meyer
<notjimbob@worldnet.att.net> inimitably wrote:
>I'm convinced that something very similar is going on in our ears. Our
>ears are very sensitive to sound levels in the nano watt range. Recent reports
>have indicated that some of the "sounds" like ringing and whistling associated
>with a condition known as "tinnitus" can actually be measured with sensitive
>microphones as sound generated *in* the ear. I think our ears are super
>regenerative systems and that the annoying ringing in the ear that plagues some
>of us is simply the supersonic bias dropping down into the audible range of
>frequencies.

That would involve a lot of nerve activity in the inner ear in the
absence of sound, which AIUI, is not observed. The ear/brain system
seems to work like this (highly simplified):

The basilar membrane in the cochlea, in the inner ear, is a form of
band-pass filter array, like a graphic equalizer. Each filter has an
'inner hair cell' at its output, which sends nerve impulses to the brain
when the filter is activated by an incoming sound. The 'gain' of the
inner hair cell is controlled by a mechanical adjustment (!) via an
'outer hair cell', which in turn is controlled by nerve impulses coming
back from the brain. This is effectively an automatic gain control loop,
with a non-linear control law, giving the normal ear its logarithmic
response.

In a damaged ear with 'sensorineural deafness', the 'gain' of the inner
hair cell and the action of the feedback loop are compromised, usually
(AIUI) due to the loss of, or damage to, hair cells. This can have three
effects:

- loss of sensitivity at some (normally the higher) frequencies, if the
inner hair cells are lost or damaged.

- loss of the logarithmic a.g.c., leading to 'recruitment' - a linear
response to sounds above a certain level, which makes apparent loudness
increase very rapidly as sound pressure increases. This may be due to
loss of the feedback signal or loss of forward gain in the loop due to
damage to the inner hair cell.

- instability of, and/or noise generation in, the feedback loop, if
something a bit more subtle happens (I don't think this is well
understood at present), leading to tinnitus and actual low-level sound
emission from the ear canal.

At least, that explanation is consistent with observations, AFAIK, but
it is certainly a simplification.
--
Regards, John Woodgate, OOO - Own Opinions Only.
Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
Did you hear about the hungry genetic engineer who made a pig of himself?
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1914. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: notjimbob@worldnet.att.net
Message-ID: <37bcae5c.42092547@netnews.worldnet.att.net>
Source record: 67814
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

On Mon, 16 Aug 1999 22:23:59 +0100, Dirk Bruere <artemis@kbnet.co.uk> wrote:

>
>I see nobody has mentioned fractal antennas yet.
>
>Dirk

I had just finished installing a huge shortwave log periodic beam on a
50' tower for the maritime radio shore station, WJS, at Duke University's
Oceanographic facility when a nor' easter blew through. The temporary guy ropes
stretched too far and the whole thing came down with a crash.

It might have been a fractal antenna after it hit the ground. I know
for certain it was a *fractured* antenna.

Jim

1915. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: tmacinty@ns.sympatico.ca
Message-ID: <37b8c48b.60291712@news1.ns.sympatico.ca>
Source record: 67815
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

John Woodgate <jmw@jmwa.demon.co.uk> wrote:

><37be419a.14246923@netnews.worldnet.att.net>, James Meyer
><notjimbob@worldnet.att.net> inimitably wrote:
>>I'm convinced that something very similar is going on in our ears. Our
>>ears are very sensitive to sound levels in the nano watt range. Recent reports
>>have indicated that some of the "sounds" like ringing and whistling associated
>>with a condition known as "tinnitus" can actually be measured with sensitive
>>microphones as sound generated *in* the ear. I think our ears are super
>>regenerative systems and that the annoying ringing in the ear that plagues some
>>of us is simply the supersonic bias dropping down into the audible range of
>>frequencies.
>
>That would involve a lot of nerve activity in the inner ear in the
>absence of sound, which AIUI, is not observed. The ear/brain system
>seems to work like this (highly simplified):
>
>The basilar membrane in the cochlea, in the inner ear, is a form of
>band-pass filter array, like a graphic equalizer. Each filter has an
>'inner hair cell' at its output, which sends nerve impulses to the brain
>when the filter is activated by an incoming sound. The 'gain' of the
>inner hair cell is controlled by a mechanical adjustment (!) via an
>'outer hair cell', which in turn is controlled by nerve impulses coming
>back from the brain. This is effectively an automatic gain control loop,
>with a non-linear control law, giving the normal ear its logarithmic
>response.
>
>In a damaged ear with 'sensorineural deafness', the 'gain' of the inner
>hair cell and the action of the feedback loop are compromised, usually
>(AIUI) due to the loss of, or damage to, hair cells. This can have three
>effects:
>
>- loss of sensitivity at some (normally the higher) frequencies, if the
>inner hair cells are lost or damaged.
>
>- loss of the logarithmic a.g.c., leading to 'recruitment' - a linear
>response to sounds above a certain level, which makes apparent loudness
>increase very rapidly as sound pressure increases. This may be due to
>loss of the feedback signal or loss of forward gain in the loop due to
>damage to the inner hair cell.
>
>- instability of, and/or noise generation in, the feedback loop, if
>something a bit more subtle happens (I don't think this is well

>understood at present), leading to tinnitus and actual low-level sound
>emission from the ear canal.
>
>At least, that explanation is consistent with observations, AFAIK, but
>it is certainly a simplification.
>--
>Regards, John Woodgate, OOO - Own Opinions Only.
>Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
>Did you hear about the hungry genetic engineer who made a pig of himself?
>PLEASE DO ****NOT**** MAIL COPIES OF NEWSGROUP POSTS TO ME!!!!

I lost ALL hearing in my left ear due to a skull fracture in 1983...there hasn't been any invasive examination, but I've been told that the nerve was damaged, and irreversibly so. There's been no sign of substantial facial nerve damage despite the close proximity of same to the auditory nerve. I suffer from LOUD tinnitus 24/7. The loudness and frequencies vary...loudness can increase due to physical exertion and/or being in a high-dB SPL environment, and at random, which seems to be the way frequencies vary. My equilibrium was severely affected by this injury as well, and I think that, in the long term, such things as concentration, memory, and mood control have suffered as well...I look upon the ringing as a sign that my auditory center is still alive, hopefully awaiting that magical surgical technique which will restore my hearing. That's all now, because thinking about it and talking about it make me more aware of it...Murphy's law, I suppose.

Tom

1916. Re: DDS VFO Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: bcarver@magiclink.com
Message-ID: <37b8d729.3170435@news.magiclink.com>
Source record: 67816

Tibor's board is beautiful, 110% professional - W7AAZ

On Mon, 16 Aug 1999 06:08:58 -0400, ralph <crlane@erols.com> wrote:

>You still have the pc boards available? I would be interested in obtaining one.
>Ralph Lane in Maryland
>crlane@erols.com
>
>Tibor Bece wrote:
>
>> Hi all,
>>
>> I have a few very nice professional PCB's left over for the AD9850/51.
>> It is only for the DDS IC, I do not believe in LO's too near to
>> the CPU :) The design has a proper ground-plane, 5V regulator +EMI
>> filters on board, silk-screen and plated through holes, line
>> conditioning for the serial signals, 9th order output LPF. All
>> components are SMD, 0805, except for the 5V regulator and the
>> XO. The XO can be DIP8 or DIP14. PCB Size ~1.1in x 1.4in. Email me for
>> details if anyone is interested.
>>
>> SFDR from the AD9850 is excellent, from a 125MHz XO one does not see
>> much above -70dBc (as usual, 'bad frequencies' are low N/M ratios
>> to the xtal). The AD9851 internal 'x6' is very useful, for instance
>> running the DDS from a lower frequency TCXO module. The spectral
>> purity in this mode is excellent, perhaps a touch worse than in
>> the 'clean' 175MHz XO mode, but probably much better than people
>> generally realise.
>>
>> Thanks Analog Devices!
>>
>> Tibor
>> tbece@netspace.net.au
>>
>> Electeng network user wrote:
>> > I was thinking of the same question. Are any kits of components made/ are
>> > there any 'clean' PCB layouts avail. on the net. I think AD is bringing out a
>> > pin-compatible chip with 300MHz clk (max), which would be cool.
>> >
>> > I think that you have to watch out for aliases, and use the highest possible
>> > clock rate. If you look at the data sheet then the 2nd order components
>> > Fclk-Fout might be troublesome, as Fclk max is only 125MHz. I was thinking of
>> > using this chip as a VFO for a D-C, image rejecting transceiver (with ADSP21xx
>> > backend).
>> >

>> > I would expect phase noise to be constant, or nearly so over the entire freq.
>> > range. As mentioned above, spurs may come closer to the wanted signal as the
>> > freq. is increased.
>> >
>> > 73 de M1CC0
>> > Laurens
>

1917. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: Science Hobbyist <bbeaty@microscan.com>
Message-ID: <7parho$b3p$1@nnrp1.deja.com>
Source record: 67817
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

In article <37b68075.2476627@netnews.worldnet.att.net>,
notjimbob@worldnet.att.net (James Meyer) wrote:
> On 14 Aug 1999 04:40:03 GMT, billb@eskimo.com (William Beaty) wrote:
>
> >Atoms are far smaller than the wavelength of light waves, so how come they
> >can absorb light so well?
>
> Atoms, acting alone, do *not* absorb light well at all unless the
> light's wavelength matches one of the resonances in the electron "shell" of that
> atom.

Exactly. Because of resonance, an atom can present a relatively
enormous cross-section to incoming photons. As you say,
resonance is the key. That was a big thing with Tesla too, no?
What was missing is the fact that classical concepts have bearing
on atomic resonance. At resonance, photons can't pass by an
atom, even though the atom is hundreds of times smaller than the
wavelength of the light.

> Your revolutionary breakthru is just a lot of wishful thinking. You
> should stick to those things that you can demonstrate rather than things you
> *think* you know that ain't so.

Did you read Dr. Bohren's excellent little paper in AJP? Or
the one in the Russian physics journal? To me your response
seems rife with prejudice. You hear the word "Tesla" and you leap
to a stance of hostile disbelief? You don't need to examine any
evidence before rendering judgement? A dangerous
practice for people in science. But perhaps warranted in my case,
since I do have that enormous "weird science" section on my
website, and the pseudoscience is bound to leak out and infect
any nearby "proto-science" material! :)

All I'm saying is that resonant electromagnetic systems behave
electrically larger than non-resonant EM systems. It works for
atoms, and it works in LC circuits. It is supported in the physics
literature and I certainly wasn't the first one to wonder about such
things. It definitely is not my discovery.

"Good Science" involves verifying the references before leaping
to a stance based on beliefs and emotions. "Believers" have
trouble with gullibility, while "skeptics" have trouble with
closemindedness. A good scientist should be careful to avoid
prejudice against certain topics, *AND* to avoid believing certain
topics without evidence.

> Your excellent writeup on holograms produced with a compass on a sheet
> of plastic was a classic example of good science. This cross-fielded Tesla
> stuff is a good example of very bad psuedo-science.

I agree that the "crossed-field" stuff doesn't work. Read my
article again, and pay attention to my circuit analysis. That is
my "evidence." If you want to rebut my claims, then poke
holes in my reasoning, don't just apply disrespectful lables.

I'm not discussing crossed-field antennas. I'm saying that tiny
antennas can behave electrically "large" in the
same way that resonant atoms can behave optically opaque.
A high-Q resonant circuit is not just a bandpass filter, instead it
processes incoming energy differently than an untuned circuit.
Once the energy has built up in the circuit, we can draw off a
higher level of power than we could in an untuned circuit. This
seems highly counterintuitive to me, that's why I'm making such
a big deal about it. It makes me think "damn, Tesla was right about
this crazy stuff after all."

Hams have used tuned loop receiving antennas for decades. I
always thought that the tuning capacitor was just there to filter out
unwanted stations. On the contrary, it appears that a resonating
antenna can become "opaque" to incoming frequencies and absorb
far more energy than a simple untuned inductive pickup loop. With
a good low-noise front end this might be irrelevant. If you need
greater sensitivity, just crank up the gain. (Or replace your tiny loop
with a 1/4-wave dipole.)

But if we want to light a light bulb via an alternating electrostatic field,
then a tuned circuit can make your antenna reach out and "grab
power" from the nearby transmitter. This stuff is all entirely
conventional, and from my viewpoint as an electonics experimenter I
already knew about it. My "physicist" side just discovered what my
"electronics" side knew all along.

((((((((((((((((((((((O)))))))))))))))))))))
William Beaty bbeaty@microscan.com
Software Engineer http://www.microscan.com
Microscan Inc., Renton, WA 425-226-5700 x1135

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1918. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: Science Hobbyist <bbeaty@microscan.com>
Message-ID: <7parqr$b6a$1@nnrp1.deja.com>
Source record: 67818
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

In article <37cc091b.203597371@news.atl.bellsouth.net>,
>
> HA HA HA HA!
>
> Best laugh I've had today.

Watch out, I may have the last laugh!

What will happen is that everyone will realize that
this "energy sucking" stuff is entirely conventional.
It's just like sticking a resistor in a constant-current
conductor path and having the resistor get hot.
The high-ohms resistor "sucked energy" from the system,
whereas the lo-ohms wire did not. A tuned circuit
acts like a resistor, whereas an untuned circuit has
inductive or capacitive reactance only, and cannot
absorb much energy even if a resistve load is
attached to it. Simple stuff. Don't know why it
took me this long to notice it. But then, nobody else
noticed it either.

((((((((((((((((((((((O)))))))))))))))))))))
William Beaty bbeaty@microscan.com
Software Engineer http://www.microscan.com
Microscan Inc., Renton, WA 425-226-5700 x1135

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1919. Re: Help. One frequency RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <37e7e954.1608800873@news.sci.fi>
Source record: 67819

On Mon, 16 Aug 1999 23:22:04 -0400, Michael Black <blackm00@CAM.ORG>
wrote:

:
:
: On Mon, 16 Aug 1999, D/\\/ID Pickard wrote:
:
: > So, if I get an XTAL cut at 5680 kHz. Make an Osc? Then how do I feed in

Is this a maritime search and rescue frequency ? What modulation
(AM/SSB) is used ?

: > the signal/where do I feed it in?
: > 73 thanks so far
: >
: > --
: > [)/\\/|[) :oP
: >
: Before you take the suggestion of a direct conversion receiver, I should
: point out that they do have limitations. One obvious one is that they
: aren't really a good choice for AM.

A tuned radio frequency (TRF) receiver might be used for AM, with a
crystal filter (one or two crystals) in the front end centered at 5680
kHz. For 6 kHz bandwidth, the loaded Q for the filter would have to be
about 1000, so the filter would have to be resistively loaded to drop
the very high unloaded Q of a single crystal. An IC intended for IF
amplifiers could then be used to provide sufficient amplification,
detection and generation of a.g.c. Since all amplification is on the
RF frequency, the receiver must be well shielded in order to prevent
any radiation back to the antenna. An ordinary LC filter might also be
required in the front end to attenuate the 3rd and 5th harmonic
response of the crystal.

In some fixed tuned 121.5 Mhz aeronautical search and rescue
receivers, a ceramic filter is used in the front end to provide
sufficient image rejection and an other ceramic resonator (at 121.045
MHz) is used as local oscillator to generate the 455 kHz IF. In this
way the receiver does not need any tuning during manufacturing or
maintenance.

Paul OH3LWR

1920. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: Science Hobbyist <bbeaty@microscan.com>
Message-ID: <7paue6crc1@nnrp1.deja.com>
Source record: 67820
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

In article <37B7A345.ED4AF198@home.com>,
Mark Fergerson <mfergerson1@home.com> wrote:

> Congratulations! You have discovered the mysterious Near Field... that
> gray area where inverse-square no longer applies. the "Bermuda Triangle"
> of Maxwell's equations.

Exactly. It is very weird in there. The impedance of free space isn't
an impedance anymore, and voltage and current can be manipulated
separatly. I never would have believed it if I didn't think it through
on my own (and if I didn't find some articles in a physics journal which
support the concept.) By adding an in-phase current to a loop
antenna, we can crank up the received power. It's very silly.
If it's real, why doesn't everyone know about it? For one thing, it only
works with short antennas. If you have a 1/4-wave dipole, you
already are presenting an enormous collection "cross section" to the
incoming waves. Whoda thunk that a little bitty antenna could do
a similar thing (if its Q-factor could be cranked up to immense values.)

> Depends where you went to school. Lots of "Physics Professors" never
> get past inclined planes and carbon paper. You obviously read a lot, so
> read more.

I've never stumbled across these ideas in any physics textbook
in my collection, but then physics textbooks don't tend to have much
EM except the very fundamental topics. This "energy sucking" thing
is much more like engineering than like physics. I don't recall
ever hearing it mentioned in my fields/waves engineering courses.
I would have remembered something this odd.

What's amazing to me is that the Bohren paper in AJP doesn't
reference an enormous number of similar papers, and also it was
published in the 1980s. Instead there is only one other paper that
discusses this topic (at least on the micro-scale version of the
phenomena.) That paper is also from the 1980s. Maybe there are
many papers in old engineering journals about this stuff.

> A looptenna generally has a core with mu much greater than unity. Are
> you trying to make a case for atoms as transformers, with electron
> orbits a single turns? Think of a nucleus as a coil core. What's its mu?
> What's the mutual coupling between two orbits in different atoms? Small
> quantities, small (not very useful) effects.

Nope, I'm seeing that a single atom is similar to a coil/capacitor
resonator. Hit it with an alternating e-field, and if you match its

resonant freq., you will pump the electrons to higher states. Or,
do the same thing with an alternating magnetic field. Or just
shine EM waves of the appropriate wavelength at it. In any case,
the atom will NOT behave as an antenna which is << the wavelength
of the radiation. Instead it will absorb far more energy than such a
tiny object has any right to do. In particle-accelerator jargon, the
photon collision cross-section of the atom is larger at resonance. The
weird part is that a macroscopic coil and capacitor ALSO has an
enlarged collision-cross-section at resonance, even if it's the photons
from the 550KHz AM band that are doing the colliding.

> You know, that sounds loopy as all hell, but the diagrams are pretty
> convincing. Might influence us "lightning antenna" addicts.

Here's something that's far loopier. WHAT IF there are some relatively
coherent vertical AC e-field modes in the earth's Shumann cavity?
Driven by thunderstorms all over the planet? As I mentioned in the
article, radios might not detect these signals if they were using loop
antennas. Perhaps these signals do not exist (meaning, the signal
strength is low compared to the broadband hash.) But if they do
exist, then a long-wire antenna connected to some sort of high-
voltage resonant circuit might be able to build up a fairly large
resonance. If this occurred, the resonator would essentially be
"storing" a high-voltage AC signal, and building it up with time.
The same thing can be done with a "Franklin Antenna" connected
to a capacitor: if you wait long enough the, tiny DC atmospheric
leakage will charge your capacitor to lethal levels. But if it's done at
AC, then something weird happens: if we draw off some of the energy
from the resonator, we can obtain an unexpectedly large power.
The amount of power received by the antenna is larger if we allow
a big AC signal to build up in the LC circuit attached to the antenna.
Maybe hang a little pickup-coil around the coil of the resonator, and
light an LED from the Earth's net AC output from lightning strikes
everywhere.

All speculation. One would need to build a tuned circuit of VERY
high Q and capable of standing off a very high voltage, and then tune
it to various frequencies down below the commercial AM band.

((((((((((((((((((((((O)))))))))))))))))))))
William Beaty bbeaty@microscan.com
Software Engineer http://www.microscan.com
Microscan Inc., Renton, WA 425-226-5700 x1135

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1921. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: Science Hobbyist <bbeaty@microscan.com>
Message-ID: <7pauovctu1@nnrp1.deja.com>
Source record: 67821
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

In article <37be419a.14246923@netnews.worldnet.att.net>,
notjimbob@worldnet.att.net (James Meyer) wrote:
> I'm convinced that something very similar is going on in our ears. Our
> ears are very sensitive to sound levels in the nano watt range. Recent reports
> have indicated that some of the "sounds" like ringing and whistling associated
> with a condition known as "tinnitus" can actually be measured with sensitive
> microphones as sound generated *in* the ear. I think our ears are super
> regenerative systems and that the annoying ringing in the ear that plagues some
> of us is simply the supersonic bias dropping down into the audible range of
> frequencies.

Dr. Thomas Gold (lately of Cornell Astrophysics) came up with the same
theory. When he presented it to hearing specialists, they refused to take it
seriously. The event is described in Gold's paper "New Ideas in Science",
http://www.amasci.com/freenrg/newidea1.html where he outlines some of the
damage that peer-review and "concensus-think" can have on science.

--
(((((((((((((((((((((((O)))))))))))))))))))))))
William Beaty bbeaty@microscan.com
Software Engineer http://www.microscan.com
Microscan Inc., Renton, WA 425-226-5700 x1135

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1922. $20.00 GPS Project Complete w/Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: John Plemons <john@mavin.com>
Message-ID: <37B8F22F.5F19432B@mavin.com>
Source record: 67822
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.swap

Check out http://mavin.com/slickitems.html for info on the Electro
Mavin GPS project, a brand new complete unit including active antenna.

Thanks,
John

1923. (none)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: luke@trio.COM.AU
Message-ID: <199908170636.XAA26572@mailbox3.ucsd.edu>
Source record: 67823

Hi Bert,

>Date: Sun, 15 Aug 1999 21:38:58 -0500
>From: "Bert Douglas" <bertdNOSPAM@bellsouth.net>
>Subject: lower cost RF design software ?

>ARRL radio designer software works for me on a Win95A machine, but not on
a Win95B (OSR2) machine.

I have exactly the same problem. It crashes Win95b hard (ie: Hardware Reset
Required)!!!

>I am thinking of getting EagleWare.

I still don't know why you dont try Aplac. You get to simulate many things
for free
(before the memory
limitation takes effect), it is documented far better than Eagleware, and
is available
on the web at www.aplac.com

Okay, you don't get the schematic entry unless you pay, but if your used to
using ARRL, then you will find Aplac easy to use. Its also far more powerful
than ARRL. The other thing I like about Aplac is that the documentation
contains heaps of worked examples and results. I really can't reconmended
anything higher than Aplac for the experimenting radio amateur who
can't afford to spend money on simulation software.

I have no affiliation with Aplac, just a good experience using it at Uni..

Eagleware is also a very good program, and it used at my work for
almost everything. However, it would be considered very expensive
for an experimenter to buy, and you would only consider it if
you would be getting some finacial return from the software
(Unless you have cash to burn...HI HI)

Regards,
Luke

Luke Enriquez (VK3EM) Trio Communications 2000 Pty. Ltd.
Electronics Design Engineer. 41 Aster Ave.
B.Eng (Comms) Hon. Carrum Downs, Victoria. 3201
03-9775-0505 (BH) Australia
0414-679-432 (Mob) http://www.trio.com.au

1924. Re: $20.00 GPS Project Complete w/Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: kyrrin@my-deja.com
Message-ID: <37b90446.14274115@news.jps.net>
Source record: 67824
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.swap

On Tue, 17 Aug 1999 05:27:36 GMT, John Plemons <john@mavin.com> wrote:

>>Check out http://mavin.com/slickitems.html for info on the Electro
>>Mavin GPS project, a brand new complete unit including active antenna.

<snip>

I took the liberty of examining one of these units, and the included documentation, at John's booth at the Bay Area's Foothill swap meet back in July.

Although I can see that the boards are clearly useful for some applications, be aware that they do NOT put out NMEA-compliant data bursts. The output format is most definitely proprietary (though it is thoroughly documented in the links referenced on John's web page).

In any case, this means that the receivers cannot be directly used with some popular mapping software packages, such as Chicago Map's 'Precision' CD, or with DeLorme's Street Atlas, that expect NMEA-compliant data streams. I suppose it's possible to construct some sort of format converter if one wanted to go to all the effort.

Caveat GPS...

-=-=-=-=-=-=-=-=-
Bruce Lane, Owner and head honcho,
Blue Feather Technologies -- kyrrin (at) bluefeathertech [dot] com
Web: http://www.bluefeathertech.com
"...No matter how we may wish otherwise, our science can only describe an object, event, or living thing in our own human terms. It cannot possibly define any of them..."

1925. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <7pb5dl$gt2$1@news.hawaii.edu>
Source record: 67825
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

Follow-up set to just .policy and .misc

Walt Davidson <no.junk.mail@thank.you> wrote:
>On Mon, 16 Aug 1999 03:04:51 GMT, hap@tscnet.com (Hap) wrote:

>>You are absolutely correct. Did anyone say anything different?

>You did. Quote from earlier posting:

>Question: >>There never was or is a code requirement for commercial
>broadcast.

>Hap: >You mean my First Class Telegraphy License never existed?

>By inference, you are saying a First Class Telegraphy License was for
>commercial broadcast. It was not.

Every commercial radio-telegraph shore station did in fact conduct
broadcasts, including weather and traffic lists. (See the FCC's
definition of "broadcast" -- I believe Part 1 or Part 2 contains
all telecommunication definitions.)

73, Jeff KH6O (who used to broadcast from NMO on 500 kc CW)

1926. Guide to the rec.radio Newsgroups

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <7pb5js$gu2$1@news.hawaii.edu>
Source record: 67826
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Archive-name: radio/personal-intro

This message describes the rec.radio.amateur.*, rec.radio.cb, rec.radio.info, and rec.radio.swap newsgroups, as well as their Internet mailing list counterparts and complements. It is intended to serve as a guide for the new reader on what to find where. Questions and comments may be directed to Jeffrey Herman, KH6O, jeffreyh@hawaii.edu, or Paul Schleck, K3FU, pschleck@novia.net.

This message was last changed on 14 March, 1998.

History
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Way back when, before there was a Usenet, the Internet hosted a mailing list for hams, called (appropriately enough) INFO-HAMS. Ham radio discussions were held on the mailing list, and sent to the mailboxes of those who had signed up for it. When the Usenet software was created, and net news as we now know it was developed, a newsgroup was created for hams: net.ham-radio. The mailing list and the newsgroup were gatewayed together, eventually.

Over the years, as the net grew, the volume of discussion became progressively higher. First one by one, and then as part of two reorganizations, what was once one group became many. In the process, developments elsewhere on the net were reflected in the groups as they were created, most notably the change to place all of the ham radio groups in one hierarchy.

The collection of newsgroups continues to grow as more people join the net, and as more topics of discussion gain volume, I expect to see more groups be created as well. This follows what is happening on the rest of the net.

Nearly all of the radio newsgroups have corresponding mailing lists, the notable exception being rec.radio.swap. There are also a few mailing lists that don't have newsgroups.

The Current Groups
==================

It's important to post messages to the group that's appropriate for them, and not to the groups that aren't. The whole idea of having different newsgroups is so that folks who aren't interested in, say, homebrewing, don't have to wade through messages about homebrewing on the way to read about Field Day. Posting appropriately is just good etiquette.

The rec.radio.amateur.misc group is the catchall. It is what rec.ham-radio was renamed to during the first major reorganization. Any message that's not more appropriate in one of the other groups belongs here, from contesting to DX to ragchewing on VHF to information on becoming a ham.

The group rec.radio.amateur.digital.misc is for discussions related to (surprise!) digital amateur radio. This doesn't have to be the common two-meter AX.25 variety of packet radio, either; some of the most knowledgeable folks in radio digital communications can be found here, and anything in the general area is welcome. The name was changed to emphasize this, and to encourage discussion not only of other text-based digital modes, such as AMTOR, RTTY, and Clover, but things like digital voice and video as well. The former group, rec.radio.amateur.packet, was removed on September 21st, 1993. It is obsolete, and you should use .digital.misc instead (or the appropriate new mailing list, mentioned below). The group has .misc as part of the name to allow further specialization if the users wish it, such as .digital.tcp-ip.

The swap group is rec.radio.swap. This recognizes a fact that became evident shortly after the original group was formed: Hams don't just swap ham radio gear, and other folks besides hams swap ham equipment. If you have radio equipment, or test gear, or computer stuff that hams would be interested in, here's the place. Equipment wanted postings belong here too. Discussions about the equipment generally don't; if you wish to discuss a particular posting with the buyer, email is a much better way to do it, and the other groups, especially .equipment and .homebrew, are the place for public discussions. There is now a regular posting with information on how to go about buying and selling items in rec.radio.swap; please refer to it before you post there. To answer a frequently asked question: No, there is no mailing list that goes along with this group. If you can't read Usenet news directly, you're out of luck.

The group rec.radio.amateur.policy was created as a place for all the discussions that seem to drag on interminably about the many rules, regulations, legalities, and policies that surround amateur radio, both existing and proposed. Recent changes to the Amateur Radio Rules (FCC Part 97) have finally laid to rest the Great Usenet Pizza Autopatch Debate - it's now legal to order a pizza on the autopatch, if you're not in the pizza business - as well as complaints about now-preempted local scanner laws hostile to amateurs, but plenty of discussion about what a bunch of rotten no-goodniks the local frequency coordinating body is, as well as the neverending no-code debate, may still be found here.

The group rec.radio.cb is the place for all discussion about the Citizens' Band radio service. Such discussions have been very inflammatory in rec.ham-radio in the past; please do not cross-post to both rec.radio.cb and rec.radio.amateur.* unless the topic is genuinely of interest to both hams and CBers - and very few topics are.

The rec.radio.info group is just what its name implies: it's the place where informational messages from across rec.radio.* may be found, regardless of where else they're posted. As of this writing, information posted to the group includes Cary Oler's daily solar progagation bulletins, ARRL

bulletins, the Frequently Asked Questions files for the various groups, and radio modification instructions. This group is moderated, so you cannot post to it directly; if you try, even if your message is crossposted to one of the other groups, your message will be mailed to the moderator, who is currently David Dodell, WB7TPY. The email address for submissions to the group is rec.radio.info-moderator@primenet.com. Inquires and other adminis-trivia should be directed to rec.radio.info-request@primenet.com. For more information about rec.radio.info, consult the introduction and posting guidelines that are regularly posted to that newsgroup.

The groups r.r.amateur.antenna, .boatanchors, .dx, .equipment, .homebrew, and .space are for more specialized areas of ham radio: discussions about antennas, the older tube based amateur, military, and commercial gear, commercially-made equipment, homebrewing, and amateur radio space operations. The .equipment group is not the place for buying or selling equipment; that's what rec.radio.swap is for. Similarly, the .space group is specifically about amateur radio in space, such as the OSCAR program and SAREX, the Shuttle Amateur Radio EXperiment; other groups cover other aspects of satellites and space. Homebrewing isn't about making your own alcoholic beverages at home (that's rec.crafts.brewing), but rather construction of radio and electronic equipment by the amateur experimenter. The .dx group is devoted to long distance amateur communications. Each of these subgroups has its own charter and FAQ; please refer to the archives to find these documents.

Except for rec.radio.swap and rec.radio.cb, all of these newsgroups are available by Internet electronic mail in digest format; send a mail message containing "help" on a line by itself to listserv@ucsd.edu for instructions on how to use the mail server.

All of the groups can be posted to by electronic mail, though, by using a gateway at the University of Texas at Austin. To post a message this way, change the name of the group you wish to post to by replacing all of the '.'s with '-'s - for example, rec.radio.swap becomes rec-radio-swap - and send to that name@cs.utexas.edu (rec-radio-swap@cs.utexas.edu, for example). You may crosspost by including multiple addresses as Cc: entries (but see below). This gateway's continued availability is at the pleasure of the admins at UT-Austin, and is subject to going away at any time - and especially if forgeries and other net.abuses become a problem. You have been warned.

Mailing Lists

In addition to the mailing lists that mirror the Usenet newsgroups, there also are a few that stand alone. These cover specific areas of ham radio, and discussion is focused on just those areas. PLEASE BE SURE TO SAVE THE WELCOME MESSAGE YOU RECEIVE AFTER SUBSCRIBING -- IT WILL CONTAIN IMPORTANT INFO REGARDING UNSUBSCRIBING!

The cq-contest mailing list is for discussions of contesting in ham radio. To join, send an email to cq-contesting-request@contesting.com.

The DX mailing list covers the finer points of DXing. This one is also joined by mailing "subscribe" on a line by itself, this time to dx-request@unbc.edu.

There's also a VHF mailing list, for VHF operators of the weak signal persuasion. You can join this one be sending "subscribe vhf" on a line by itself to vhf-request@w6yx.stanford.edu.

The QRP-L list is devoted to building and operating gear at low-power outputs. To subscribe, send an email to listproc@lehigh.edu and only write: subscribe qrp-l Your Name.

The TopBand e-list is devoted to all areas of operation on 160m. To subscribe, send an email to majordomo@contesting.com and only write: subscribe topband and follow the instructions you'll be sent.
This site, contesting.com, also hosts a couple dozen other ham-related e-lists. Use the above address, and only write: lists to get the entire index.

The Boatanchors e-list is devoted to the older tube-based ham, military, and commercial communications gear. To subscribe, send an email to: listserv@listserv.tempe.gov and only write: subscribe boatanchors

For homebuilding transmitters and receivers using tube technology, there is the Glowbugs e-list; send an email to: majordomo@piobaire.mines.uidaho.edu and only write: subscribe glowbugs <your@address.here>

The VHF DX discussion list can be accessed by sending an email to: majordomo@blacksheep.org and only writing: subscribe VHF-DX-discuss.

We now have a list devoted to amateur radio history. To subscribe, send an email to: ham-radio-history-subscribe@egroups.com - leave the body of the message blank.

Qth.net hosts over 100 ham-related e-lists, including lists devoted to each state, manufacturer, mode, band - too many to state here. Send an email to majordomo@qth.net and only write: lists to get the complete index.

For one of the most complete indexes of email lists, see the excellent web site http://pw2.netcom.com/~ac6v/pageae.html

Please do NOT send subscription requests to the mailing lists themselves; that doesn't work very often, and is very annoying to those on the list. Also, please keep your electronic mail address current with any mailing lists you subscribe to, as dealing with returned email is a nuisance for the person maintaining the mailing list.

A Few Words on Crossposting
==========

Please do not crosspost messages to two or more groups unless there is genuine interest in both groups in the topic being discussed, and when you do, please include a header line of the form "Followup-To: group.name" in your article's

headers (before the first blank line). This will cause followups to your article to go to the group listed in the Followup-To: line. If you wish to have replies to go to you by email, rather than be posted, use the word "poster" instead of the name of a group. Such a line appears in the headers of this article.

One of the few examples of productive cross-posting is with the rec.radio.info newsgroup. To provide a filtered presentation of information articles, while still maintaining visibility in their home newsgroups, the moderator strongly encourages cross-posting. All information articles should be submitted to the rec.radio.info moderator so that he may simultaneously cross-post your information to the appropriate newsgroups. Most newsreaders will only present the article once, and network bandwidth is conserved since only one article is propagated. If you make regular informational postings, and have made arrangements with the moderator to post directly to the group, please cross-post as appropriate.

--
Jeffrey Herman, KH6O, and your friendly rec.radio.amateur working-group
jeffreyh@hawaii.edu

1927. Re: TCM3105

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: Anto Veldre <anto@anubis.kbfi.ee>
Message-ID: <37B9543F.B7F179B6@anubis.kbfi.ee>
Source record: 67827

Matthew Bilston wrote:
> Does anybody know where to get a TCM 3105 Chip in Australia? I need it to
> build a baycom modem!

Subject not in production anymore,
only small quantities somehere on the stock.
Try FX-14 (if not mistaken) from National (the same).
Main functionality is the same.

Anto,
es1lau

1928. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: Roy McCammon <rbmccammon@mmm.com>
Message-ID: <37B957A5.721724AC@mmm.com>
Source record: 67828
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

Science Hobbyist wrote:

> What will happen is that everyone will realize that
> this "energy sucking" stuff is entirely conventional.
> It's just like sticking a resistor in a constant-current
> conductor path and having the resistor get hot.
> The high-ohms resistor "sucked energy" from the system,
> whereas the lo-ohms wire did not. A tuned circuit
> acts like a resistor, whereas an untuned circuit has
> inductive or capacitive reactance only, and cannot
> absorb much energy even if a resistve load is
> attached to it.

Take a series R, L, C circuit. Drive it with a constant
current sinusoidally alternating source.

It will absorb the same amount of energy whether
the L and C resonate with the source or not.

1929. Re: TCM3105 replacement: FX614

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: ppak <ppakotze@firga.sun.ac.za>
Message-ID: <37B95E08.47E73D5A@firga.sun.ac.za>
Source record: 67829

FX614 from CML semiconductor products

Anto Veldre wrote:

> Matthew Bilston wrote:
> > Does anybody know where to get a TCM 3105 Chip in Australia? I need it to
> > build a baycom modem!
>
> Subject not in production anymore,
> only small quantities somehere on the stock.
> Try FX-14 (if not mistaken) from National (the same).
> Main functionality is the same.
>
> Anto,
> es1lau

--
-P.P.A. Kotze [ZS1PK] - University of Stellenbosch
-Room E153, E&E Engineering, Banghoekweg, Stellenbosch, 7600, South Africa
-FAX: +27 21 8084981 - PHONE: +27 21 8083763
-http://sunsat.ee.sun.ac.za (SO-35)

1930. Re: Phase angle controller circuit wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <37f378d9.428845847@news.atl.bellsouth.net>
Source record: 67830

On Mon, 16 Aug 1999 18:38:23 +0100, "David Cunningham" <D.L.C@btinternet.com> wrote:
>LCTUPAC <lctupac@aol.com> wrote in message
>news:19990816001207.10199.00000336@ng-fq1.aol.com...
>> If you really want to build it, wouldn't it make more sense to use SCRs to
>> do the rectification? Otherwise, you have redundant diodes.
>>
>If I used an SCR without rectifier diodes, I would have thought that this
>will give only half wave rectification, and smoothing of the DC pulses would
>be more difficult. As for the dimmer switch option, I live in the UK where
>they are still expensive.

No, use the SCRs in a fullwave bridge configuration. This is used in
TIG welder power supplies to obtain precise current control.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

1931. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: Roy McCammon <rbmccammon@mmm.com>
Message-ID: <37B97B22.6810906F@mmm.com>
Source record: 67831
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

Science Hobbyist wrote:

> Exactly. Because of resonance, an atom can present a relatively
> enormous cross-section to incoming photons. As you say,
> resonance is the key. That was a big thing with Tesla too, no?
> What was missing is the fact that classical concepts have bearing
> on atomic resonance. At resonance, photons can't pass by an
> atom, even though the atom is hundreds of times smaller than the
> wavelength of the light.

Not sure what you are saying here, some numbers
may be useful.

Whenever you have a bunch of atoms in proximity,
they can "share" electrons so that the relevant
"size" is the atom to atom spacing rather than
the size of a single atom.

So are you speaking of isolated atoms, such as
in a low pressure gas or clumps of atoms such
as in a chunk of glass or copper wire?

1932. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: Roy McCammon <rbmccammon@mmm.com>
Message-ID: <37B97D0B.794AFB@mmm.com>
Source record: 67832
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

Science Hobbyist wrote:

> All I'm saying is that resonant electromagnetic systems behave
> electrically larger than non-resonant EM systems.

I guess I'll just have to ask; what is the electrical
size of a non-resonent EM system?

1933. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: Lyle Koehler <lyle@mlecmn.net>
Message-ID: <37B98A96.4EE28203@mlecmn.net>
Source record: 67833
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

Science Hobbyist wrote:
>

>
> All speculation. One would need to build a tuned circuit of VERY
> high Q and capable of standing off a very high voltage, and then tune
> it to various frequencies down below the commercial AM band.
>

It's easy to fall into the trap of confusing voltage with power. A high-Q tuned circuit in the presence of an RF field can deliver a high voltage to an open circuit, but since power is E^2/R and since R is infinite, the "captured" power is zero. As soon as you load the circuit with a finite resistance, the Q starts to degrade. Q of a small antenna is important because it is related to the losses in the circuit, and therefore to the efficiency of the antenna for either transmitting or receiving. But there is nothing magic about high Q antennas that will allow them to suck huge amounts of energy from an RF field.

It isn't difficult to estimate how much energy can be captured with a small, tuned loop antenna. The amount of *power* available to the receiver is equal to the incident power density times the effective area of the antenna. Power density in watts per square meter is given by E^2/377 or H^2*377, where E or H represents the field intensity. To estimate the effective area of the antenna, use the formula A(eff) = G*(wavelength)^2/(4*PI). G is the "real" gain of the antenna, which includes the directive gain and the efficiency. The program RJELOOP3.EXE by Reg Edwards can be downloaded from Reg's web site at http://www.btinternet.com/~g4fgq.regp/. RJELOOP3 includes a calculation of the Q and the gain (in dB) relative to a full-size quarter wave antenna. The gain in dB must of course be converted to power gain for use in the effective area equation.

For example, a 1 meter square loop wound with 20 turns of #18 (1 mm dia) wire has a gain of -64 dB (about 4e-7) at 200 kHz. The wavelength is 1500 meters, and the effective area is about 0.07 square meters. It's not going to "suck" much energy from a transmitter unless the field strength is really huge. Note that the Q didn't show up explicitly in my calculations; losses were already taken into account in Reg's computation of the antenna gain.

Ferrite loading of a small loop antenna can provide a very large improvement in gain. But a ferrite loopstick of practical size will still have very low gain. Radiation resistance of a small loop is proportional to area squared times the square of the effective

permeability, which is typically on the order of 100 to 1000. (Ferrite materials with bulk permeabilities above 1000 are available, but the effective permeability is much smaller than the bulk permeability except for very large length-to-diameter ratios). So a ferrite loaded loop can be a million times better than an air-core loop of the same dimensions. However, the area squared term kills you. An LF loopstick antenna wound on a 1/2 inch diameter rod is *much* less efficient than the 1-meter square air loop in the example above.

Yes, it's possible to capture energy from RF fields. A friend of mine has run a little electric motor with energy captured from 50-kW AM station WCCO, several miles away. But he uses a fairly long wire antenna, something like 200 feet if I remember correctly.

--
Lyle, K0LR

http://www.computerpro.com/~lyle

1934. SK0MK KE5FX Microwavedatalink project | Hispeed infrastructure |

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: m8114@abc.se
Message-ID: <7pbvgh$r7t@atle.abc.se>
Source record: 67834
Cross-posted to: alt.hacking,rec.radio.amateur.homebrew

There is now ongoing a new project with its goal to create a 10Mbit Microwave kit. Much efforts has Allready been made, and the ones who feels that they have a call for this sort of stuff are very much wellcome to join us. People of intrests are they who has writeln ethernet protocols, people who has wiroked with microwaves - PCB design and the rest who feels that they can contribute with something needed inhere.

The project style are driven in the Linux project model.

There is in some locations a badly need of infrastructure in some places and at the same time a very bad usement of the 44 andresses, and that is something I have in mind to change by this. So fellows who feels that the old packetradio standard needs a major upgrade, then please join us.

To join, and for more information about the mailinglist

Enter :www.abc.se/~m8114/hamradio

/Marcel Bos
Sweden

--

```
-------------------------------------------------------------------
|Media producent Marcel Bos / Sweden | Marcel_I_Bos@hotmail.com|
-------------------------------------------------------------------
```

1935. EI9GQ homebrew radio page. Update.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: Eamon Skelton <nospam@oceanfree.net>
Message-ID: <7pc5gmerj1@fu-berlin.de>
Source record: 67835

```
Recent update.
New circuits.
New pictures.

http://www.qsl.net/ei9gq/index.html

73, Ed. EI9GQ

--
Eamon 'Ed' Skelton EI9GQ
Cork, Ireland.

My e-mail address really is:
nospam@oceanfree.net

Home brew radio page
http://www.qsl.net/ei9gq
```

1936. AMP TUNING??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: Leon Snider <leons@worldnet.att.net>
Message-ID: <7pc7jv$1du$1@bgtnsc03.worldnet.att.net>
Source record: 67836

I have a homwbrew amp with three adjustable controls: LOAD,PLATE and INDUCTOR. I've never been really sure how to tune the INDUCTOR. Anyone have any simple solutions,or comments? Thanks for any help. Leon KE4GG

1937. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: Science Hobbyist <bbeaty@microscan.com>
Message-ID: <7pcbn0$ec5$1@nnrp1.deja.com>
Source record: 67837
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

In article <37B97D0B.794AFB@mmm.com>,
rbmccammon@mmm.com wrote:
> Science Hobbyist wrote:
>
> > All I'm saying is that resonant electromagnetic systems behave
> > electrically larger than non-resonant EM systems.
>
> I guess I'll just have to ask; what is the electrical
> size of a non-resonent EM system?

Good question. Let's see. If the EM system is being
"illuminated" with propagating EM waves, and the
waves have a certain power density P/(meter^2), then
an ideal quarter-wave dipole antenna with an impedance-
matched resistive load would intercept X watts, and we could
calculate the "absorbtion cross-sectional area" of that antenna
from X/P, and if we assume that this area is circular, then the
"electrical size" of that antenna is SQRT(X/P/pi)

If we do the same for ANY antenna, we can figure out
how "large" it is electrically, and compare it to the "size"
of an ideal quarter-wavelength dipole.

((((((((((((((((((((((O)))))))))))))))))))))
William Beaty bbeaty@microscan.com
Software Engineer http://www.microscan.com
Microscan Inc., Renton, WA 425-226-5700 x1135

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1938. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: Science Hobbyist <bbeaty@microscan.com>
Message-ID: <7pcceueul1@nnrp1.deja.com>
Source record: 67838
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

In article <37B97B22.6810906F@mmm.com>,
rbmccammon@mmm.com wrote:
> Science Hobbyist wrote:
>
> > Exactly. Because of resonance, an atom can present a relatively
> > enormous cross-section to incoming photons. As you say,
> > resonance is the key. That was a big thing with Tesla too, no?
> > What was missing is the fact that classical concepts have bearing
> > on atomic resonance. At resonance, photons can't pass by an
> > atom, even though the atom is hundreds of times smaller than the
> > wavelength of the light.
>
> Not sure what you are saying here, some numbers
> may be useful.
>
> Whenever you have a bunch of atoms in proximity,
> they can "share" electrons so that the relevant
> "size" is the atom to atom spacing rather than
> the size of a single atom.

Yes, I was imagining individual, widely-separated Sodium
atoms in a vacuum, or the individual Chromium atoms in a
doped aluminum oxide (ruby) laser resonator.

Me too, I would like to find some numbers to apply
to this. Right now all I have is thought-experiments,
and the analyses in those two research papers.
(Isn't SCI.PHYSICS a great place? People start spitting
on an idea even before reading the references. In my
opinion, anyone who wants to "spit" on colleagues had better
check and see if their victim is 'beneath' them. If they have to
spit 'upwards', chances are that they will embarass only
themselves.)

Rather than looking at atoms, those authors looked at
IR absorbtion by particles with diameter << than the IR
wavelength. One of their examples involved surface
plasmons in metal particles, the other involved phonons
in dielectric particles. I recall that, for IR light in the
absorbtion band of the particles (i.e. at resonance,)
they calculated that the "electrical size" of the particles
was about 15 times larger than the physical size, as if
the particles were reaching out and "sucking" EM
energy from a large area around themselves. Very

weird. The authors then pointed out that this is a well-
known phenomenon in particle physics: at resonance,
the collision cross-section of a particle can be far larger
than its physical size. Another way to say it: at resonance,
the particle grows to fill the electromagnetic "near field"
volume. Obviously this only becomes significant for
particles which are << than the wavelengths being
absorbed. And when applied to circuitry, it only becomes
significant for small dipoles and loop antennas, where the
physical size of the antenna is << than the wavelength
being received.

((((((((((((((((((((((((O)))))))))))))))))))))))
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Sent via Deja.com http://www.deja.com/
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1939. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: Science Hobbyist <bbeaty@microscan.com>
Message-ID: <7pccld$f1u$1@nnrp1.deja.com>
Source record: 67839
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

In article <37B957A5.721724AC@mmm.com>,
rbmccammon@mmm.com wrote:
> Science Hobbyist wrote:
>
> > What will happen is that everyone will realize that
> > this "energy sucking" stuff is entirely conventional.
> > It's just like sticking a resistor in a constant-current
> > conductor path and having the resistor get hot.

> Take a series R, L, C circuit. Drive it with a constant
> current sinusoidally alternating source.
>
> It will absorb the same amount of energy whether
> the L and C resonate with the source or not.

Do the same for a parallel RLC circuit as shown in the
ASCII art in my "energy sucking" article. See what
happens? (Or perhaps I'm wrong about *ALL* of this
stuff, and I simply have not found my glaring error.)

--
((((((((((((((((((((((((O)))))))))))))))))))))))
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1940. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: Science Hobbyist <bbeaty@microscan.com>
Message-ID: <7pce90$gc8$1@nnrp1.deja.com>
Source record: 67840
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

In article <37b7acc1.3322730@news.netway.at>,
hwabnig@netway.at (Helmut Wabnig) wrote:

> You never attended a physics class.
> No, you didn't.
> Don't lie.

Ah, a flamer. OK, flamer here's my specs:

BSEE U. of Rochester 1980
Resume at http://www.amasci.com/me.html
Science hobbyist all my life, almost exclusively
in physics.

And you, are you a bully who cruises newsgroups looking
for weak minds to attack? Watch out, some weak minds
will bite back. Are you unable to understand and refute an idea,
and so you can only attack on a personal level? Not the
characteristics of a thinking person, if you ask me. But I forgot,
this is Newsgroups, and I should expect this forum to be full of this
kind of thing. There's no way to elevate these discussions to
a civilized level, and so they decend into the depths. Very
sad.

If there is something wrong with the concepts I present,
pleas show the audience the glaring flaw you've uncovered,
then we will all benefit.

((((((((((((((((((((((((O)))))))))))))))))))))))
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Sent via Deja.com http://www.deja.com/
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1941. Microwave varactor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: smitsp <Harke.Smits@net.HCC.nl>
Message-ID: <37BA2848.7D50@net.HCC.nl>
Source record: 67841

I plan to use a Toshiba S3041B microwave varactor to double a 23.5 G
signal to 47 G. What side of diode needs to be cooled with a heatsink?
Please answer at pa0hrk@amsat.org
73 de Harke

1942. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: Science Hobbyist <bbeaty@microscan.com>
Message-ID: <7pchku$j5k$1@nnrp1.deja.com>
Source record: 67842
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

In article <37B98A96.4EE28203@mlecmn.net>,
Lyle Koehler <lyle@mlecmn.net> wrote:

> It's easy to fall into the trap of confusing voltage with power. A
> high-Q tuned circuit in the presence of an RF field can deliver a high
> voltage to an open circuit, but since power is E^2/R and since R is
> infinite, the "captured" power is zero.

That's what I thought initially. But look at my two examples.
When I load the untuned system down to V= .707x,
I get microwatts, but when I do the same with the tuned system,
I get watts. This is extremely counterintuitive. Just by allowing
a big voltage to build up, I should *NOT* be able to draw any
more power from the antenna, right? That's an understandable
conclusion. But unless there is a big error in my reasoning, that
conclusion is wrong, and it is possible to draw far more power from a
resonant receiver than can be drawn from an inductive or a capacitve
pickup alone.

> As soon as you load the circuit
> with a finite resistance, the Q starts to degrade. Q of a small antenna
> is important because it is related to the losses in the circuit, and
> therefore to the efficiency of the antenna for either transmitting or
> receiving. But there is nothing magic about high Q antennas that will
> allow them to suck huge amounts of energy from an RF field.

That's the central point. I think that there *IS* something magic
about small, high-Q antennas. (Remain aware that this only
applies to small antennas. Connectiing a resonator to a
half-wave dipole should not increase the received power.)

>
> It isn't difficult to estimate how much energy can be captured with a
> small, tuned loop antenna. The amount of *power* available to the
> receiver is equal to the incident power density times the effective area
> of the antenna.

Exactly. Exactly. Check out those two physics papers. At resonance, the
effective area of an electrically-small antenna increases. At resonance, the
antenna no longer behaves as we might expect. The authors demonstrate this as
applied to particles being illuminated by IR light, but this is a Classical
Physics (non-QM) effect, and so it applies to EM devices in general. A tiny
antenna can "expand" its effective area into the nearfield region if that
antenna is a resonator. This does not apply to 1/4-wave dipoles and larger,
since those antennas are already dominating the area of the nearfield region.

> Power density in watts per square meter is given by
> E^2/377 or H^2*377, where E or H represents the field intensity. To
> estimate the effective area of the antenna, use the formula A(eff) =
> G*(wavelength)^2/(4*PI). G is the "real" gain of the antenna, which
> includes the directive gain and the efficiency. The program RJELOOP3.EXE
> by Reg Edwards can be downloaded from Reg's web site at
> http://www.btinternet.com/~g4fgq.regp/. RJELOOP3 includes a calculation
> of the Q and the gain (in dB) relative to a full-size quarter wave
> antenna. The gain in dB must of course be converted to power gain for
> use in the effective area equation.

If that program does not include the effects of applying
a synchronised b-field to the nearfield region of the antenna loop,
then it does not include this bizarre "energy sucking" effect.

As I understand it, small resonant antennas rely on the
ability to apply EITHER an e-field OR a b-field to the
nearfield region, and therefor to affect the power seen
by the antenna. It's a nearfield-only effect. If we artificially
increase the current only, then the received power increases.
Impossible? Not if there's empirical evidence that this occurs.
"If it happens, it must be possible."

Please note: this is NOT my field of expertise, and there is still
a chance that this phenomenon is not real. If it wasn't supported
in the physics literature, I would insist performing my own
experiments before accepting that any of this is possible.

> Yes, it's possible to capture energy from RF fields. A friend of mine
> has run a little electric motor with energy captured from 50-kW AM
> station WCCO, several miles away. But he uses a fairly long wire
> antenna, something like 200 feet if I remember correctly.

As a kid we lived next to WENY in Elmira, NY. Crystal radios
worked very well, even without a tuned circuit or a longwire
antenna (although our selection of programming was somewhat
limited!) I can easily accept that a big loop or a longwire antenna
can intercept significant power. A small, high-Q tuned circuit might
build up a very large signal, and we'd expect that its impedance would
be so high that little energy could be withdrawn, but energy goes as
the square of voltage, and that is the key. Get your resonator going,
so the voltage goes way up, and you can withdraw a proportionally
larger amount of energy. Very weird. The phase-locked oscillating
fields around a high-Q resonator can distort the patterns of a nearby
transmitter's antenna: the "energy sucker" casts a shadow as
it absorbs energy from the transmitter.

((((((((((((((((((((((O)))))))))))))))))))))
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Microscan Inc., Renton, WA 425-226-5700 x1135

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1943. Another DDS question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: Rafael Pinto <rgcpp@telemar-rj.com.br>
Message-ID: <7pcerg$ma5$1@nobel2.pacific.net.sg>
Source record: 67843

How are you guys dealing with the TSSOP package of the Analog Devices'
DDSs ??? Silk??

Rafael

1944. Re: Fair Radio Sales?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: donrm@sr.hp.com
Message-ID: <7pcicp$jrd@canyon.sr.hp.com>
Source record: 67844
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Eric F. Richards (efricha@flatland.dimensional.com) wrote:
> Greetings, all...

> What is the reputaion of Fair Radio Sales? There are a couple of items
> I've seen in their catalog that I've considered purchasing but have
> shied away from when I see them labeled "Works -- may or may not be within
> spec" or other lukewarm recommendations.

I've found them to be of high integrity and honesty. When they say some-
thing may be out of spec, it probably means it works but they didn't have
time to thoroughly check it out. In other words, I'd rather have "lukewarm"
recommendations instead of a used car salesman's hype.

Don K6LTS
donrm@sr.hp.com

1945. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: Roy McCammon <rbmccammon@mmm.com>
Message-ID: <37B9D14F.CDAAF9ED@mmm.com>
Source record: 67845
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

Science Hobbyist wrote:
>
> In article <37B957A5.721724AC@mmm.com>,
> rbmccammon@mmm.com wrote:
> > Science Hobbyist wrote:
> >
> > > What will happen is that everyone will realize that
> > > this "energy sucking" stuff is entirely conventional.
> > > It's just like sticking a resistor in a constant-current
> > > conductor path and having the resistor get hot.
>
> > Take a series R, L, C circuit. Drive it with a constant
> > current sinusoidally alternating source.
> >
> > It will absorb the same amount of energy whether
> > the L and C resonate with the source or not.
>
> Do the same for a parallel RLC circuit as shown in the
> ASCII art in my "energy sucking" article.

Oh that one we drive with a constant voltage.

At this point I'm not challenging your conclusions,
but I think the analogies may not be stiff.

1946. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <O1yMaoB7Fdu3EwnK@jmwa.demon.co.uk>
Source record: 67846
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

<7pccld$f1u$1@nnrp1.deja.com>, Science Hobbyist <bbeaty@microscan.com>
inimitably wrote:
>(Or perhaps I'm wrong about *ALL* of this
>stuff, and I simply have not found my glaring error.)

You may not be wrong, but what you have found may not be novel, just that your way of describing it is not the usual one. I wonder if you are thinking along these lines:

To take a practical example of a tuned circuit interacting with an external field, consider the 'passive amplifier' or whatever name you like to call it, which is a large coil tuned by a variable capacitor to the AM broadcasting band. You stand an AM portable radio, with a ferrite antenna, beside it and tune the radio to a weak station. When you tune the large coil to the same frequency, the radio gets louder, maybe much louder. (If the coupling is too close, the radio can be pulled off-tune.)

What is happening? Well, the current in the large coil sets up a local field which interacts with the transmitted field. Off-tune, the coil current is weak and has little effect. But at resonance, it is much larger, maybe 100 times larger, and it distorts the field pattern so that the field is stronger in the neighbourhood of the coil than it would be in the absence of the coil, but it's correspondingly weaker in other places. The tuned circuit acts as a *field concentrator*, which is a reasonably correct name for the device. There are no strange, unexplained effects, but a demonstration of the device leads people to look for concealed batteries etc., because on the face of it, a tuned circuit cannot do what it clearly does do.
--
Regards, John Woodgate, OOO - Own Opinions Only.
Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
Did you hear about the hungry genetic engineer who made a pig of himself?
PLEASE DO ****NOT**** MAIL COPIES OF NEWSGROUP POSTS TO ME!!!!

1947. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: Roy McCammon <rbmccammon@mmm.com>
Message-ID: <37B9D4A1.97159C0E@mmm.com>
Source record: 67847
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

Science Hobbyist wrote:

> Good question. Let's see. If the EM system is being
> "illuminated" with propagating EM waves, and the
> waves have a certain power density P/(meter^2), then
> an ideal quarter-wave dipole antenna with an impedance-
> matched resistive load would intercept X watts, and we could
> calculate the "absorbtion cross-sectional area" of that antenna
> from X/P, and if we assume that this area is circular, then the
> "electrical size" of that antenna is SQRT(X/P/pi)

That sounds like a definition that could be
made to work, maybe. I guess you wouild specify
plane waves from a source very far away? It would
seam that highly directional antennas for have an
advantage over less directional. Also, I'm
having trouble visualizing a non resonant antenna.
A log periodic comes to mind, but it is really
a collection of stagger tuned resonant elements.

I guess you come have a whip that was very much
smaller than a wavelenght, but to match it to a
load you would wind up resonating it. Maybe that's
the question; how do you have a non resonent antenna
that is matched to its load?

> If we do the same for ANY antenna, we can figure out
> how "large" it is electrically, and compare it to the "size"
> of an ideal quarter-wavelength dipole.

So now what does the "actual" or "physical" size mean?

Greatest dimension. Diameter of a bounding sphere?

And then we would get data showing ratioes of electrical
size to physical size for various antennas.

1948. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: Roy McCammon <rbmccammon@mmm.com>
Message-ID: <37B9D991.B4997D3C@mmm.com>
Source record: 67848
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

John Woodgate wrote:
>
> <7pccld$f1u$1@nnrp1.deja.com>, Science Hobbyist <bbeaty@microscan.com>
> inimitably wrote:
> >(Or perhaps I'm wrong about *ALL* of this
> >stuff, and I simply have not found my glaring error.)
>
> You may not be wrong, but what you have found may not be novel, just
> that your way of describing it is not the usual one. I wonder if you are
> thinking along these lines:
>
> To take a practical example of a tuned circuit interacting with an
> external field, consider the 'passive amplifier' or whatever name you
> like to call it, which is a large coil tuned by a variable capacitor to
> the AM broadcasting band. You stand an AM portable radio, with a ferrite
> antenna, beside it and tune the radio to a weak station. When you tune
> the large coil to the same frequency, the radio gets louder, maybe much
> louder. (If the coupling is too close, the radio can be pulled off-
> tune.)
>
> What is happening? Well, the current in the large coil sets up a local
> field which interacts with the transmitted field. Off-tune, the coil
> current is weak and has little effect. But at resonance, it is much
> larger, maybe 100 times larger, and it distorts the field pattern so
> that the field is stronger in the neighbourhood of the coil than it
> would be in the absence of the coil, but it's correspondingly weaker in
> other places. The tuned circuit acts as a *field concentrator*, which is
> a reasonably correct name for the device. There are no strange,
> unexplained effects, but a demonstration of the device leads people to
> look for concealed batteries etc., because on the face of it, a tuned
> circuit cannot do what it clearly does do.

and of course, the large coil is physically large.

1949. Re: Help. One frequency RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: "D/\\\\/ID Pickard" <pickards@zen.co.uk>
Message-ID: <36lu3.527$jm3.5782@newreader.ukcore.bt.net>
Source record: 67849

Hi,
You are right about 5680kHz. It's USB. Kinloss rescue use it here.
Thanks for the suggestions. Someone hasn't been as helpful!

--
[)/\\/|[) :oP

Paul Keinanen wrote in message <37e7e954.1608800873@news.sci.fi>...
>On Mon, 16 Aug 1999 23:22:04 -0400, Michael Black <blackm00@CAM.ORG>
>wrote:
>
>:
>:
>: On Mon, 16 Aug 1999, D/\\/ID Pickard wrote:
>:
>: > So, if I get an XTAL cut at 5680 kHz. Make an Osc? Then how do I feed
in
>
>Is this a maritime search and rescue frequency ? What modulation
>(AM/SSB) is used ?
>
>: > the signal/where do I feed it in?
>: > 73 thanks so far
>: >
>: > --
>: > [)/\\/|[) :oP
>: >
>: Before you take the suggestion of a direct conversion receiver, I should
>: point out that they do have limitations. One obvious one is that they
>: aren't really a good choice for AM.
>
>A tuned radio frequency (TRF) receiver might be used for AM, with a
>crystal filter (one or two crystals) in the front end centered at 5680
>kHz. For 6 kHz bandwidth, the loaded Q for the filter would have to be
>about 1000, so the filter would have to be resistively loaded to drop
>the very high unloaded Q of a single crystal. An IC intended for IF
>amplifiers could then be used to provide sufficient amplification,
>detection and generation of a.g.c. Since all amplification is on the
>RF frequency, the receiver must be well shielded in order to prevent
>any radiation back to the antenna. An ordinary LC filter might also be
>required in the front end to attenuate the 3rd and 5th harmonic
>response of the crystal.
>
>In some fixed tuned 121.5 Mhz aeronautical search and rescue
>receivers, a ceramic filter is used in the front end to provide

>sufficient image rejection and an other ceramic resonator (at 121.045
>MHz) is used as local oscillator to generate the 455 kHz IF. In this
>way the receiver does not need any tuning during manufacturing or
>maintenance.
>
>Paul OH3LWR
>
>

1950. Please help with unknown bandwidth of Crystal Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: rjburden@bigpond.com
Message-ID: <37bade4f.1803266@news.bigpond.com>
Source record: 67850

Hi,

picked up some surplus commercial VHF radios at a recent Hamfest and
wondered if anyone knew the bandwidth for the following crystal
filters:

HyQ "QF10701" and "QF10A7"
HCM "10M-4B"
Phillips "10.7N" and "10.7P"

Thanks in advance,

Richard VK5OO

ps - if these are of use to you then let me know!!

1951. Re: How do you attached an LCD to the board?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: donrm@sr.hp.com
Message-ID: <7pcrsd$jrd@canyon.sr.hp.com>
Source record: 67851

Nate Harris (nathan_c_harris@worldnet.att.net) wrote:
> I am looking for some help with my dilemma...
> I am trying to replace the LCD on my radio and have received the new
> one from the factory, but I now have no way to attached it to the
> board where the contacts are. It was affixed with rubber tape, but
> they don't appear to sell that anymore. Is there a way to reapply
> some type of adhesive to the old rubbers and reuse them?

I'm trying to visualize what you're talking about. If it's an
LCD that lies on top of a "rubber tape" on the PC board, then
that rubber tape is actually the connection between the contacts
on the LCD and the contacts on the PC board. It's commonly called
"zebrastrip" because it has alternating layers of conductors and
insulators from one edge to the other. The supplier of the LCD
should have it. You could probably reuse the original if you
cleaned the contaminants from all surfaces.

Don K6LTS
donrm@sr.hp.com

1952. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: Lyle Koehler <lyle@mlecmn.net>
Message-ID: <37B9F45B.45DB6B73@mlecmn.net>
Source record: 67852
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

Science Hobbyist wrote:
>
> In article <37B98A96.4EE28203@mlecmn.net>,
> Lyle Koehler <lyle@mlecmn.net> wrote:
>
> > It's easy to fall into the trap of confusing voltage with power. A
> > high-Q tuned circuit in the presence of an RF field can deliver a high
> > voltage to an open circuit, but since power is E^2/R and since R is
> > infinite, the "captured" power is zero.
>
> That's what I thought initially. But look at my two examples.
> When I load the untuned system down to V= .707x,
> I get microwatts, but when I do the same with the tuned system,
> I get watts. This is extremely counterintuitive. Just by allowing
> a big voltage to build up, I should *NOT* be able to draw any
> more power from the antenna, right? That's an understandable
> conclusion. But unless there is a big error in my reasoning, that
> conclusion is wrong, and it is possible to draw far more power from a
> resonant receiver than can be drawn from an inductive or a capacitve
> pickup alone.
>

Maybe we're just disagreeing on semantics. I think of the antenna as a source with a certain internal impedance (mostly reactance in the case of electrically small antennas). In order to extract maximum power from that source, it's necessary to provide a conjugate match between the source and load impedance. If we can arbitrarily choose the load resistance to match the "R" part of the antenna's impedance, all that is needed is a series tuning element (inductor for a short whip; capacitor for a small loop), and we're simply "resonating" the antenna. To match a fixed load resistance like 50 ohms usually requires a somewhat more complex circuit, but the net effect is the same. The circuit has to be tuned for optimum power transfer, and a small antenna (if it's at all efficient) will exhibit narrow bandwidth, meaning that it has a high Q.

> > As soon as you load the circuit
> > with a finite resistance, the Q starts to degrade. Q of a small antenna
> > is important because it is related to the losses in the circuit, and
> > therefore to the efficiency of the antenna for either transmitting or
> > receiving. But there is nothing magic about high Q antennas that will
> > allow them to suck huge amounts of energy from an RF field.
>
> That's the central point. I think that there *IS* something magic
> about small, high-Q antennas. (Remain aware that this only

> applies to small antennas. Connectiing a resonator to a
> half-wave dipole should not increase the received power.)
>
> >
> > It isn't difficult to estimate how much energy can be captured with a
> > small, tuned loop antenna. The amount of *power* available to the
> > receiver is equal to the incident power density times the effective area
> > of the antenna.
>
> Exactly. Exactly. Check out those two physics papers. At resonance, the
> effective area of an electrically-small antenna increases. At resonance, the
> antenna no longer behaves as we might expect. The authors demonstrate this as
> applied to particles being illuminated by IR light, but this is a Classical
> Physics (non-QM) effect, and so it applies to EM devices in general. A tiny
> antenna can "expand" its effective area into the nearfield region if that
> antenna is a resonator. This does not apply to 1/4-wave dipoles and larger,
> since those antennas are already dominating the area of the nearfield region.
>
> > Power density in watts per square meter is given by
> > E^2/377 or H^2*377, where E or H represents the field intensity. To
> > estimate the effective area of the antenna, use the formula A(eff) =
> > G*(wavelength)^2/(4*PI). G is the "real" gain of the antenna, which
> > includes the directive gain and the efficiency. The program RJELOOP3.EXE
> > by Reg Edwards can be downloaded from Reg's web site at
> > http://www.btinternet.com/~g4fgq.regp/. RJELOOP3 includes a calculation
> > of the Q and the gain (in dB) relative to a full-size quarter wave
> > antenna. The gain in dB must of course be converted to power gain for
> > use in the effective area equation.
>
> If that program does not include the effects of applying
> a synchronised b-field to the nearfield region of the antenna loop,
> then it does not include this bizarre "energy sucking" effect.
>

You lose me with the synchronized b-field stuff. Sounds akin to the
"theory" of the crossed-field antenna, and I don't want to get into that
discussion. Catch a Poynting vector, put it in your pocket, etc.

Again, maybe we just disagree on what is "bizarre" Yes, it's hard to
visualize a small antenna with an effective area that is much greater
than its physical dimensions, but it's easy to build one. Going back to
RJELOOP3, let's increase the size of the loop to 3.16 meters square, and
make it from a single turn of 25 millimeter copper tubing. (The number
of turns in the loop has little effect on efficiency -- what counts is
the amount of copper.) Now the gain at 200 kHz is -36 dB, or
approximately 2.5e-4, and the effective area is about 45 square meters.
That's pretty good for a loop that has an enclosed physical area of only
10 square meters. And if we increase the size of the loop to 15 meters
(still only 1/100th of a wavelength) square, the calculated effective
area is about 4500 square meters -- almost 20 times the physical area.
That sounds pretty bizarre all right, but it's what one would expect

from some pretty standard antenna calculations.

There is an ongoing related thread on "capture area" in the rec.radio.antenna newsgroup, and it's obvious from the postings that the idea of a large effective area from a small antenna bothers people with a lot more antenna experience than I have. And the confusion doesn't apply just to electrically small antennas. I used to believe that my homebrew 2-meter "collinear" antenna (actually a combination of collinear and broadside elements backed by reflectors) was a better "receiving" antenna than a Yagi with the same gain. Intuitively this had to be correct. How could a skinny little Yagi capture as much signal as that big bedspring-looking affair? Observations also seemed to confirm this. The collinear picked up signals off the back and sides that a Yagi couldn't hear. But in my age and wisdom(?) I now concede that the homebrew collinear simply had a lousy front-to-back ratio and lots of sidelobes.

Lyle, K0LR

http://www.computerpro.com/~lyle

1953. Swap ZIF sockets ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: Ham <hduff@ica.net>
Message-ID: <37B9F93B.F0A57E3F@ica.net>
Source record: 67853

I have a bunch of 40 pin .6" width DIP IC ZIF sockets.
I'd like to swap for some 18 and 20 pin .3" width ZIF sockets.
Anyone ?
Please reply by email.
Hugh VA3TO

1954. Re: Help. One frequency RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.SOL.4.10.9908172330390.7733-100000@Stratus.CAM.ORG>
Source record: 67854

On Tue, 17 Aug 1999, Paul Keinanen wrote:

> On Mon, 16 Aug 1999 23:22:04 -0400, Michael Black <blackm00@CAM.ORG>
> wrote:
>
> :
> :
> : On Mon, 16 Aug 1999, D/\\/ID Pickard wrote:
> :
> : > So, if I get an XTAL cut at 5680 kHz. Make an Osc? Then how do I feed in
>
> Is this a maritime search and rescue frequency ? What modulation
> (AM/SSB) is used ?
>
> : > the signal/where do I feed it in?
> : > 73 thanks so far
> : >
> : > --
> : > [)/\\/|[) :oP
> : >
> : Before you take the suggestion of a direct conversion receiver, I should
> : point out that they do have limitations. One obvious one is that they
> : aren't really a good choice for AM.
>
> A tuned radio frequency (TRF) receiver might be used for AM, with a
> crystal filter (one or two crystals) in the front end centered at 5680
> kHz. For 6 kHz bandwidth, the loaded Q for the filter would have to be
> about 1000, so the filter would have to be resistively loaded to drop
> the very high unloaded Q of a single crystal. An IC intended for IF
> amplifiers could then be used to provide sufficient amplification,
> detection and generation of a.g.c. Since all amplification is on the
> RF frequency, the receiver must be well shielded in order to prevent
> any radiation back to the antenna. An ordinary LC filter might also be
> required in the front end to attenuate the 3rd and 5th harmonic
> response of the crystal.
>
> In some fixed tuned 121.5 Mhz aeronautical search and rescue
> receivers, a ceramic filter is used in the front end to provide
> sufficient image rejection and an other ceramic resonator (at 121.045
> MHz) is used as local oscillator to generate the 455 kHz IF. In this
> way the receiver does not need any tuning during manufacturing or
> maintenance.
>
> Paul OH3LWR

>
>
You've brought up an interesting solution.

Back in the late sixties, there were some articles by a VE7, Larry Walrod, about SSB transceivers with the crystal filter right on the signal frequency. Direct conversion without the audio image problem.

He ground surplus crystals to frequency himself to make the filters. I imagine it's more of a problem when you want the filter on an exact frequency.

Somehow I picture making filters for an exact frequency a bit more than many of us are prepared for. On the other hand, if someone got a big supply of identical crystals inside a ham band, it would be something interesting to try.

Around the same time, Hank Olson described a TRF WWV receiver for 15MHz. He had an FET RF amplifier, a single crystal filter (if I remember, the crystal was in series with the signal, with capacitors on each end, and a coil across the crystal), an IC IF amplifier, a detector and an audio amplfier. It made a lot of sense, since it's often nice to have a dedicated radio for a time station, and WWV operated on nice round frequencies where crystals were commonly available. One of these days I may get around to trying something like that.

Of course, one reason for wanting to receive WWV would be to adjust a frequency standard to zero beat. It occurred to me that that is a case where a direct conversion receiver would be suitable for AM, since you want the crystal right on frequency, and that's the only case where a direct conversion receiver is optimum with AM (leaving aside the matter of a synchronous detector where the PLL operates right on the signal frequency, which could be considered a form of direct conversion). Your frequency standard would be the the injection oscillator into the product detector. Before I had a chance to try something along these lines. there was an article that showed how to build that very thing in QST. It was about ten years ago.

Michael VE2BVW

1955. FS: HP 3460A DVM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-17 00:00:00 UTC
From: Mike Schuckert <mikes@newulmtel.net>
Message-ID: <37BA1BB0.7824@newulmtel.net>
Source record: 67855
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.swap

HP 3460A Digital Voltmeter. Works good. $175.00/bo.
Email at above address if interested.

1956. Re: Solder battery case?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: Victoria Welch <vikki@oz.net>
Message-ID: <7pf0j6jle0@216.39.144.179>
Source record: 67735

Clif Holland wrote:
>
> Jack Taylor wrote:
> >
> > The lithium battery in my TS-440 has gone away. This is a little guy about
> > the size of a quarter and has a couple of leads bonded to each polarity.
> > Found a similar one at Wall Mart but without the leads. Is there a
> > preferred technique for soldering leads onto the battery case?
> >
> > 73 de Jack
>
> Don't. It has a habit of damaging the battery.

I can't confirm this, having never tried it and never knowing anyone who
did, but I have seen warnings that soldering to these kinds of batteries
can cause them to "explode". Not sure just what that means or what the
results of such would spread around inside a piece of (expensive)
equipment. The ones I have seen like this look to me like the wires
have been "spot welded" in place.

Hope this helps in some way. Be safe :-) and kind to expensive
equipment ;-).
--
Victoria Welch, WV9K, DoD#-13, Net/Sys/WebAdmin SeaStar.org,
vikki.oz.net
"Walking on water and developing software to specification are
easy as long as both are frozen" - Edward V. Berard.
Do not unto others, that which you would not have others do unto you.

1957. Re: soldering wire to shielding of audio cable

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: Ralph Mowery <rmowery@ibm.net>
Message-ID: <37BAFE1F.6D7A8C08@ibm.net>
Source record: 67736

First, you should not be using audio cable, but coax cable that is
rated for radio frequency use.

It is possiable that the shield of the cable is not copper but
aluminum that is made to be crimped on and normal solder will not
stick to it.
Some of the cable tv cable is made that way.

pharoe99 wrote:
>
> hi i was wondering if anyone could help me out!!! im tryin to build a
> homebrew anttena for my base scanner but i cant get solder to take hold
> on the wire shielding that is in the jacket of the audio cable ... help
> please
>
> Sent via Deja.com http://www.deja.com/
> Share what you know. Learn what you don't.

1958. Re: AMP TUNING??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: Bob Liesenfeld <robert.liesenfeld@neicoltech.org>
Message-ID: <37BB11A1.D6434A8D@neicoltech.org>
Source record: 67737

Leon Snider wrote:

> I have a homwbrew amp with three adjustable controls: LOAD,PLATE and
> INDUCTOR. I've never been really sure how to tune the INDUCTOR. Anyone have
> any simple solutions,or comments? Thanks for any help. Leon KE4GG

Sounds to me like a wide range PI-net type output network. This should allow for a >wide< range of R+/-j to be transformed to the proper Z for the tube (xisitor), while keeping the loaded Q under control. If done with thought out values, this can be very useful. Many years ago this kind of design was popular, but seems to have fallen into disuse in this age of "50 Ohm" antennas.

Tell us more about the output device, B+ (or Vcc), freq range etc., and I could give more info.

72
Bob L. WB0POQ

1959. Re: Help Plse: trying to find circuit from 73 mag several years ago...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: Bob Liesenfeld <robert.liesenfeld@neicoltech.org>
Message-ID: <37BB142E.4486CB65@neicoltech.org>
Source record: 67738

Victoria Welch wrote:

> Hi all and thanks in advance,
>
> I've looked around the net for 73 magazine but with no luck, I can't
> imagine that old "on top of everything" Wayne Green isn't out there, but
> who knows. If there is a URL for it, I'd apreciate knowing. Assuming
> it still exists...
>
> A number of years ago, 73 published a schematic for a "blood purifier"
> or something along those lines that might have / did / could "cure"
> diseases using around 27V going though something like an "H-bridge"
> using 4N38 opto-isolators a couple of transistors and some miscellaneous
> parts.

YIKES! I can hear the herd of lawyers sprinting towards your house even
as we speak! What are you going to do with said device? Sorry I don't have
a copy of the article, but I would advise >caution<

Bob WB0POQ

1960. voltage regulators

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: ian@wireless-sparks.freeserve.co.uk
Message-ID: <37bb147a.85787874@news.freeserve.net>
Source record: 67739

Hello All,

Three pin 1 A voltage regulators: If a 12v regulator gets 12 volts on its output pin, while it has nothing on its input, will it come to any harm? Do they have protection if they find themselves being used the 'wrong way' around?

I'm designing a piece of gear that will be used off the mains supply and portable 12v. I have put a diode in series with the output pin to prevent external volts going into the IC, but this means a 0.7v drop, which varies slightly with the load, occurring when used off the mains with the IC in use, making the regulation poorer than if it were omitted!

Thanks,

G4JQT
===
ian@wireless-sparks.freeserve.co.uk

1961. FS: Swan 1200 HF Amp.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: barbizilla@aol.com
Message-ID: <19990818164438.08484.00000873@ng-fa1.aol.com>
Source record: 67740

Has 8950 tubes & works. Some rust on chassis & cover. See pics at
http://members.aol/Barbizilla/swan1200

Location near Philadelphia, PA. Can bring amp. to this Sunday's, Aug22,
hamfest in South Jersey. $200 or best offer. Tubes checked 90%.

Bob

1962. Re: Help Plse: trying to find circuit from 73 mag several years ago...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: Victoria Welch <vikki@oz.net>
Message-ID: <7pf6jh$5ke$0@216.39.144.179>
Source record: 67741

Bob Liesenfeld wrote:
>
> Victoria Welch wrote:
>
> > Hi all and thanks in advance,
> >
> > I've looked around the net for 73 magazine but with no luck, I can't
> > imagine that old "on top of everything" Wayne Green isn't out there, but
> > who knows. If there is a URL for it, I'd apreciate knowing. Assuming
> > it still exists...
> >
> > A number of years ago, 73 published a schematic for a "blood purifier"
> > [...]
>
> YIKES! I can hear the herd of lawyers sprinting towards your house even
> as we speak! What are you going to do with said device? Sorry I don't have
> a copy of the article, but I would advise >caution<

<grin>, nothing like that :-), although that shouldn't matter to the
lawyers once they get the scent of blood, er ah, money :-).

I just happen to have a bunch of 4N38s and am looking for a cheap way
(yes, I am a ham :) to be able to make a cheap H-bridge type thing for a
little robot I am playing with :-), modified servos seem to leave
something to be desired, too much overhead for the processor I am using
doing PWM. More time and oddball parts than money these days :-). I
originally saved the schematic for that thing just for this purpose
"just in case" and now I have some time (and no money :) and "just in
case" has arrived :-).

Take care es 72/73, Vikki.
--
Victoria Welch, WV9K, DoD#-13, Net/Sys/WebAdmin SeaStar.org,
vikki.oz.net
"Walking on water and developing software to specification are
easy as long as both are frozen" - Edward V. Berard.
Do not unto others, that which you would not have others do unto you.

1963. Re: FS: Swan 1200 HF Amp.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: barbizilla@aol.com
Message-ID: <19990818171420.08484.00000906@ng-fa1.aol.com>
Source record: 67742

Sorry, correct URL for the pics is http://members.aol.com/Barbizilla/swan1200

Bob

1964. Re: Solder battery case?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <37BB2378.929B00A6@erols.com>
Source record: 67743

You are right, heat can make a lithium battery explode. It probably
won't be much with a little watch battery but don't try it with a "D"
cell unless your insurance policy is paid up.

Victoria Welch wrote:
>
> Clif Holland wrote:
> >
> > Jack Taylor wrote:
> > >
> > > The lithium battery in my TS-440 has gone away. This is a little guy about
> > > the size of a quarter and has a couple of leads bonded to each polarity.
> > > Found a similar one at Wall Mart but without the leads. Is there a
> > > preferred technique for soldering leads onto the battery case?
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> > > 73 de Jack
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> > Don't. It has a habit of damaging the battery.
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> I can't confirm this, having never tried it and never knowing anyone who
> did, but I have seen warnings that soldering to these kinds of batteries
> can cause them to "explode". Not sure just what that means or what the
> results of such would spread around inside a piece of (expensive)
> equipment. The ones I have seen like this look to me like the wires
> have been "spot welded" in place.
>
> Hope this helps in some way. Be safe :-) and kind to expensive
> equipment ;-).
> --
> Victoria Welch, WV9K, DoD#-13, Net/Sys/WebAdmin SeaStar.org,
> vikki.oz.net
> "Walking on water and developing software to specification are
> easy as long as both are frozen" - Edward V. Berard.
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1965. Re: Help Plse: trying to find circuit from 73 mag several years ago...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: "Peter O. Brackett" <nospam-ab4bc@ix.netcom.com>
Message-ID: <7pf99j$d9b@dfw-ixnews19.ix.netcom.com>
Source record: 67744

Victoria:

Search around this site a little and you should find what you are looking
for:

http://www.waynegreen.com/

Peter AB4BC

Victoria Welch wrote in message <7pf6jh$5ke$0@216.39.144.179>...
>Bob Liesenfeld wrote:
>>
>> Victoria Welch wrote:
>>
>> > Hi all and thanks in advance,
>> >
>> > I've looked around the net for 73 magazine but with no luck, I can't
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>> > who knows. If there is a URL for it, I'd apreciate knowing. Assuming
>> > it still exists...
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>> > A number of years ago, 73 published a schematic for a "blood purifier"
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>> as we speak! What are you going to do with said device? Sorry I don't
have
>> a copy of the article, but I would advise >caution<
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><grin>, nothing like that :-), although that shouldn't matter to the
>lawyers once they get the scent of blood, er ah, money :-).
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>I just happen to have a bunch of 4N38s and am looking for a cheap way
>(yes, I am a ham :) to be able to make a cheap H-bridge type thing for a
>little robot I am playing with :-), modified servos seem to leave
>something to be desired, too much overhead for the processor I am using
>doing PWM. More time and oddball parts than money these days :-). I
>originally saved the schematic for that thing just for this purpose
>"just in case" and now I have some time (and no money :) and "just in
>case" has arrived :-).
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>Take care es 72/73, Vikki.
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>Victoria Welch, WV9K, DoD#-13, Net/Sys/WebAdmin SeaStar.org,
>vikki.oz.net
>"Walking on water and developing software to specification are
>easy as long as both are frozen" - Edward V. Berard.
>Do not unto others, that which you would not have others do unto you.

1966. Help with spec on Motorola amplifier module.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <7pfe1k$hmn@nnrp1.farm.idt.net>
Source record: 67745

I have a General Instrument Starline X Series bridging amplifier JNBA-450RUN.1. Inside there is a Motorola amplifier module stamped with the numbers S134-129-01 404. Does anyone have any data on this module? I checked on the Motorola web site and had zero luck finding anything with this part number. I did find the CATV amplifier modules they have now, but these numbers are not to be found.

I would like to know what module can do and if it's worth while to save it for a use in a home-brew project at some time. I don't even know if the module itself is any good right now.

73's,

Leland C. Scott
KC8LDO

ARRL member
NCI member

"You ask what Morse Code is good for? I'll tell you. Morse Code is used exclusively by Electronics Based life forms to communicate amongst themselves using advanced Organic Digital Signal Processors, running state of the art Artificial Intelligence Software, to perform the highly complex transmit encryption, receive decryption and error correction functions."

1967. Re: Solder battery case?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: dialcover@webtv.net
Message-ID: <14349-37BB3736-12@newsd-122.bryant.webtv.net>
Source record: 67746

It doesn't sound difficult to fabricate a "clamp" holder

disregard caps, visual problem
Bill Turner WA0ABI
1117 Pike Street
Saint Charles, MO 63301
636-949-2210

1968. Re: AMP TUNING??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: dialcover@webtv.net
Message-ID: <14349-37BB388A-13@newsd-122.bryant.webtv.net>
Source record: 67747

WHAT DOES THE "INDUCTOR" TUNE ?

disregard caps, visual problem
Bill Turner WA0ABI
1117 Pike Street
Saint Charles, MO 63301
636-949-2210

1969. Re: Solder battery case?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.990818191259.7819A-100000@oso.slonet.org>
Source record: 67748

Aw come on! use a little common sense! There is no way that any battery
can "explode" unless you are totally careless with application of heat.
Any jerk that cooks a solder connection needs a facefull of electrolyte.
Usual care is just fine for most applications. Cliff K7RR

On Wed, 18 Aug 1999, Bob Lewis wrote:

> You are right, heat can make a lithium battery explode. It probably
> won't be much with a little watch battery but don't try it with a "D"
> cell unless your insurance policy is paid up.
>
> Victoria Welch wrote:
> >
> > Clif Holland wrote:
> > >
> > > Jack Taylor wrote:
> > > >
> > > > The lithium battery in my TS-440 has gone away. This is a little guy about
> > > > the size of a quarter and has a couple of leads bonded to each polarity.
> > > > Found a similar one at Wall Mart but without the leads. Is there a
> > > > preferred technique for soldering leads onto the battery case?
> > > >
> > > > 73 de Jack
> > >
> > > Don't. It has a habit of damaging the battery.
> >
> > I can't confirm this, having never tried it and never knowing anyone who
> > did, but I have seen warnings that soldering to these kinds of batteries
> > can cause them to "explode". Not sure just what that means or what the
> > results of such would spread around inside a piece of (expensive)
> > equipment. The ones I have seen like this look to me like the wires
> > have been "spot welded" in place.
> >
> > Hope this helps in some way. Be safe :-) and kind to expensive
> > equipment ;-).
> > --
> > Victoria Welch, WV9K, DoD#-13, Net/Sys/WebAdmin SeaStar.org,
> > vikki.oz.net
> > "Walking on water and developing software to specification are
> > easy as long as both are frozen" - Edward V. Berard.
> > Do not unto others, that which you would not have others do unto you.
>
>

1970. Re: Solder battery case?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: Joe Leikhim <jleikhim@nettally.com>
Message-ID: <37BB6C2D.95ECB0E9@nettally.com>
Source record: 67749

Lithium batteries have been known to explode when exposed to excessive heat. Don't do it. Check Digikey catalog for battery styles (CR2035) with welded tabs. You can also buy a battery holder for your Walmart battery at Digikey.

Jack Taylor wrote:

> The lithium battery in my TS-440 has gone away. This is a little guy about
> the size of a quarter and has a couple of leads bonded to each polarity.
> Found a similar one at Wall Mart but without the leads. Is there a
> preferred technique for soldering leads onto the battery case?
>
> 73 de Jack

--
Joe Leikhim K4SAT (EX KE4TZH)
Jleikhim@nettally.com

"tv dinner by the pool,
i'm so glad i finished school" -F.Zappa 1967

"The Revolution will NOT be televised" -Gil Scott Heron

1971. Re: Solder battery case?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: Joe Leikhim <jleikhim@nettally.com>
Message-ID: <37BB6C4C.9882B71@nettally.com>
Source record: 67750

Lithium batteries have been known to explode when exposed to excessive heat.
Don't do it. Check Digikey catalog for battery styles (CR2035) with welded
tabs. You can also buy a battery holder for your Walmart battery at Digikey.

Jack Taylor wrote:

> The lithium battery in my TS-440 has gone away. This is a little guy about
> the size of a quarter and has a couple of leads bonded to each polarity.
> Found a similar one at Wall Mart but without the leads. Is there a
> preferred technique for soldering leads onto the battery case?
>
> 73 de Jack

--
Joe Leikhim K4SAT (EX KE4TZH)
Jleikhim@nettally.com

"tv dinner by the pool,
i'm so glad i finished school" -F.Zappa 1967

"The Revolution will NOT be televised" -Gil Scott Heron

1972. Re: Solder battery case?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: Joe Leikhim <jleikhim@nettally.com>
Message-ID: <37BB6C50.9943C457@nettally.com>
Source record: 67751

Lithium batteries have been known to explode when exposed to excessive heat.
Don't do it. Check Digikey catalog for battery styles (CR2035) with welded
tabs. You can also buy a battery holder for your Walmart battery at Digikey.

Jack Taylor wrote:

> The lithium battery in my TS-440 has gone away. This is a little guy about
> the size of a quarter and has a couple of leads bonded to each polarity.
> Found a similar one at Wall Mart but without the leads. Is there a
> preferred technique for soldering leads onto the battery case?
>
> 73 de Jack

--
Joe Leikhim K4SAT (EX KE4TZH)
Jleikhim@nettally.com

"tv dinner by the pool,
i'm so glad i finished school" -F.Zappa 1967

"The Revolution will NOT be televised" -Gil Scott Heron

1973. West Texas Hamfest

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: n5rkn <justuse-n5rkn@cableone.net>
Message-ID: <rrn2f5t8boh7@corp.supernews.com>
Source record: 67752

Announcing the Sixteenth Annual Odessa Texas Hamfest, sponsored by the West Texas ARC.
This year, as in the past, the Hamfest takes place on the 1st full weekend of November. This year, the fest is on November 6th & 7th. We expect over 2,000 in attendance over 2 days. Dealers come in from around the SouthWest.

We are one of the ONLY Hamfests that has ONLINE registration! You need not be present to win any of the major prizes, but must be present for the hourly door prizes. Over 200 tables should be filled as they were last year. Prices are reasonable & will remain so. We have hidden transmitter hunts & lots of fun. If you are planning on making a fest in the SouthWest this year, don't overlook this one!! Check out our website for more info on dealers, pictures from 1998, and prize info.

Check out our hamfest page at: http://www.wt5arc.org/hamfest/hamfest.html
Or, the main club page at: http://www.wt5arc.org
(where you will find the link for online registration)
Regular mailing flyers go in the mail in late September & if you are interested in receiving one, I need the mailing info by September 1st.
See you in November
Robert Jordan
Hamfest Chairman 1990-1999
n5rkn@cableone.net

1974. Re: voltage regulators

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: The Ronneys <pronney@sprynet.com>
Message-ID: <7pg26ilqp1@nntp3.atl.mindspring.net>
Source record: 67753

Hi Ian.
Ian Liston-Smith wrote in message <37bb147a.85787874@news.freeserve.net>...
>Three pin 1 A voltage regulators: If a 12v regulator gets 12 volts on
>its output pin, while it has nothing on its input, will it come to any
>harm? Do they have protection if they find themselves being used the
>'wrong way' around?
If you're talking about the typical 7805/7808/Etc 3 terminal regulator,
it'll be toast instantly if Vout>Vin.
In the old days everyone knew that. (Myself, I learned that from bitter
personal experience. I don't remeber if the datasheets mention it.)

>I'm designing a piece of gear that will be used off the mains supply
>and portable 12v. I have put a diode in series with the output pin to
>prevent external volts going into the IC, but this means a 0.7v drop,
>which varies slightly with the load, occurring when used off the mains
>with the IC in use, making the regulation poorer than if it were
>omitted!

Add the diode in series with the output. Add a similar diode from the
common connection to ground. The common lead will be raised by one diode
drop and the series diode will drop the output back to (within reason) the
original design value output. Be sure to add filter caps after the series
diode to reduce supply impedance back to a reasonable value and you may want
to add a resistor from the input voltage to the 'upper' end of the diode in
the common line to guarantee some level of current through that diode. As I
recall, the current coming out the common pin of 7805/7808/Etc is relatively
constant, in the 10-20 mA range. Check the data sheet.

Martin,WB6YMI

1975. Re: QRP Power Source

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19990818233735704 32@zetnet.co.uk>
Source record: 67754

> Anyway, that's food for thought. Cellphones and ricebox HT's moved away
> from NiCds some years ago. NiMH or lithium ion seem to me to be better
> choices for backpack rigs than gel cells or NiCds.
==========
The advantage of NiMH batteries versus NiCad is their higher charge
density ,that's why they are popular for HTs and back pack equipment
, however their self discharge rate is higher than that of NiCad batteries.

73 Frank , GM0CSZ / KN6WH

1976. soldering wire to shielding of audio cable

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: pharoe99 <pharoe99@my-deja.com>
Message-ID: <7pd67i$2db$1@nnrp1.deja.com>
Source record: 67856

hi i was wondering if anyone could help me out!!! im tryin to build a homebrew anttena for my base scanner but i cant get solder to take hold on the wire shielding that is in the jacket of the audio cable ... help please

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1977. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: notjimbob@worldnet.att.net
Message-ID: <37ba0abb.35139542@netnews.worldnet.att.net>
Source record: 67857
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

On Tue, 17 Aug 1999 19:16:57 GMT, Science Hobbyist <bbeaty@microscan.com> wrote:

>than its physical size. Another way to say it: at resonance,
>the particle grows to fill the electromagnetic "near field"
>volume. Obviously this only becomes significant for
>particles which are << than the wavelengths being
>absorbed.

A small particle or a photon cannot be used realistically in a thought experiment as though they were just smaller versions of golf balls. Photons, electrons, and atoms at temperatures other than absolute zero cannot be described as having a fixed position. The "uncertainty principle" must be considered. Those small particles have only a probability for being in a particular place, and they also have a probability for being anywhere in a volume much larger than their size would imply.

It's the interaction of the atom's "volume of probability" (tm) with the photon's volume of probability that makes them appear to have a larger area of interaction than their size could justify.

> And when applied to circuitry, it only becomes
>significant for small dipoles and loop antennas, where the
>physical size of the antenna is << than the wavelength
>being received.

No. You cannot apply the same theories that work for submicroscopic particles to macroscopic things like antennas. The larger an object is, the more likely it is to not occupy a volume of probability larger than its self.

I'm surprised I have to explain these simple things to a science guy.

Jim

1978. FS Vernier National Dial

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: Larry Asp <larry.asp@sympatico.ca>
Message-ID: <37BA21C5.4FB8@sympatico.ca>
Source record: 67858
Cross-posted to: rec.radio.amateur.homebrew,rec.radiol.swap

Velvet Vernier National Dial, 3" diameter, skirt 1/2". $15.00 plus postage.

1979. FS ARC5 85kc NIB IF Transformers.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: Larry Asp <larry.asp@sympatico.ca>
Message-ID: <37BA2703.7B56@sympatico.ca>
Source record: 67859
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

I have 6 of these. 85kc IF transformers, New in the Box, 5 still sealed in original packing materials and envelopes. These are replacement IFs for the ARC5 receiver that tuned below 550kc (Q5er). Part# 12011 $7.00 each plus postage.

I also have 5 new in the box 175kc IF transformers made by Standard Radio Co. $2.00 each plus postage.

1980. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: Science Hobbyist <bbeaty@microscan.com>
Message-ID: <7pdhfq$9t5$1@nnrp1.deja.com>
Source record: 67860
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

Lyle Koehler <lyle@mlecmn.net> 08/17 4:46 PM wrote

> Maybe we're just disagreeing on semantics. I think of the antenna as a
> source with a certain internal impedance (mostly reactance in the case
> of electrically small antennas). In order to extract maximum power from
> that source, it's necessary to provide a conjugate match between the
> source and load impedance.

Right. With perfect impedance matching, the antenna should absorb
all of the energy that hits it. But if this is *just* impedance
matching, then we wouldn't expect to change the effective area of the
antenna by very much. A high-Q antenna can intercept far more than
just the EM energy that hits it. THAT'S the "magical" part.

It might not seem like magic if we only raise the Q a little bit; only
making our loop antenna behave a few times larger than normal. But
in theory we could be using superconductors and high-value capacitors with
vacuum dielectrics, and making the Q absolutely humongous, and increasing
the effective size of the antenna by an impressive extent. Imagine a
little bitty device that sits on your desktop and totally wipes out
longwave radio reception for thousands of feet all around (on one narrow
frequency, of course) because its effective area has grown to, say, 1/10
of a wavelength? The coil inside that device might have mega-ampere-turns
of flux spewing out of it (remember, this is theory only, and maybe
difficult to do in practice, even if we use superconductors.) Because
it is phase-locked with the incoming waves, any field it generates
is going to seriously distort the pattern of the incoming waves.

A high-Q antenna is an oscillator. It's driven by the incoming waves,
and then stores their energy. As far as our instruments are concerned,
a high-Q antenna is surrounded by a powerful AC EM field. Yes, the
energy for that field was gathered from a distant transmitter
rather than from a local power supply. And it seems like coincidence
that the field is phased just right to "cancel out" some the incoming
EM waves for many meters around. This is the "energy sucking"
phenomenon in action. I still say it's counterintuitive: build a
powerful oscillator and adjust its phase and frequency so that it
cancels out the energy of EM waves which happen to pass by... and
the missing energy ends up inside the little oscillator?!!! It's the
reverse of radio transmission. With proper phasing, one transmitter
can steal energy from another (if they are in each other's near-field
region). Or, one transmitter can create a big shadow in the pattern
of waves coming from another transmitter, and the missing energy is
absorbed.

(Nasty cackle) if a number of high-Q resonant antennas were set up around any transmitter, in theory they could swallow the transmitter's entire output, even though the oscillators might be physically so tiny that they might be hard to find. To be oqaque to sodium-light, the cloud of sodium gas really doesn't need that many atoms!

> > If that program does not include the effects of applying
> > a synchronised b-field to the nearfield region of the antenna loop,
> > then it does not include this bizarre "energy sucking" effect.
>
> You lose me with the synchronized b-field stuff.

If we imagine a hi-Q resonant loop-antenna to be an oscillator which produces its own surrounding field, we will see that its b-field is in the proper phase to cancel a portion of the incoming waves (which really means "absorb them"). When the effective area of the loop antenna is made larger, it's because of this "oscillator" effect, not because we've matched the antenna to the load resistor. Although in a certain sense we HAVE matched the antenna to the load. We've matched it so well that the resistor is receiving far more than just the EM waves that physically touch the antenna.

> Sounds akin to the
> "theory" of the crossed-field antenna, and I don't want to get
> into that discussion. Catch a Poynting vector, put it in your
> pocket, etc.

Now I'm wondering if the "CFA" people were actually just building high-Q resonant loop antennas without realizing it? Maybe the CFAs do work, but not for the reasons that their supporters claim.

Here's one very interesting aspect of those two physics papers mentioned in my article. They give diagrams of the Poynting vector field surrounding the resonant particle. When an EM plane wave illuminates a resonant particle, the fields of the resonator superpose on the plane wave. The resulting Poynting-flow is bent inwards so it flows directly into the tiny resonator. If the fields created by the resonator are fairly intense (meaning that Q is very high) and as a result they fill a significant volume of space around the resonator with fields which rival that of the plane wave, then that volume becomes a sort of "lens" for the Poynting vector field. The plane wave becomes focussed onto the resonant particle.

I bet the same thing happens with Yagi director-elements. They set up their own fields which then divert the Poynting energy-flow and focus it on the active element. This stuff about the "energy sucking resonator" is simply a more powerful version of the "director" element of a Yagi. (But when the resonator is far smaller than the length of the received waves, and there is no large metal element, there's just a tiny "dot" that is generating a powerful field, and the energy flow is forced to focus upon that

little "dot.")

> There is an ongoing related thread on "capture area" in the
> rec.radio.antenna newsgroup, and it's obvious from the postings
> that the idea of a large effective area from a small antenna bothers
> people with a lot more antenna experience than I have.

I have very little antenna experience, so this "capture area enhancement" only bothers my physics intuition. But bother it does! Doesn't it mean that, if we are within maybe 0.1 wavelength of an AM tower, and if we are allowed to used superconductors in our antenna loop, that we can expand the "capture area" of our little antenna-coil to such an extent that it absorbs almost the entire output of that AM transmitter?!!! I can't help but think that it's weird. It's only NOT weird if we use low-Q circuits.

In your example with the 25cm copper pipe, what if we wound a 100-turn square coil with that pipe, so it weighed hundreds of pounds. At 200KHZ, couldn't we make a loop antenna that punches an enormous hole in the pattern of any plane waves which happen to be passing by?

> And the
> confusion doesn't apply just to electrically small antennas. I used
> to believe that my homebrew 2-meter "collinear" antenna (actually a
> combination of collinear and broadside elements backed by reflectors)
> was a better "receiving" antenna than a Yagi with the same gain.
> Intuitively this had to be correct. How could a skinny little Yagi
> capture as much signal as that big bedspring-looking affair?

Heh heh. We can use a large-area "solar cell", or we can use a little bitty solar cell with a great big lens in front of it.

==========
NOTE: I recently started an amateur science email forum.
It only has about 50 people as subscribers so far. For info
on subscribing, see http://www.amasci.com/sci-list/sci-list.html
==========

((((((((((((((((((((((((O)))))))))))))))))))))))
William J. Beaty SCIENCE HOBBYIST website
billb@eskimo.com http://www.amasci.com
EE/programmer/sci-exhibits science projects, tesla, weird science
Seattle, WA 206-781-3320 freenrg-L taoshum-L vortex-L webhead-L

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1981. Re: Please help with unknown bandwidth of Crystal Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: Mitch <mitch@nw.com.au>
Message-ID: <37BA40B7.1CDB82CC@nw.com.au>
Source record: 67861

Hmmmmmn wrote:
>
> Hi,
>
> picked up some surplus commercial VHF radios at a recent Hamfest and
> wondered if anyone knew the bandwidth for the following crystal
> filters:
>
> HyQ "QF10701" and "QF10A7" =25/30khz
> HCM "10M-4B" 25khz
> Phillips "10.7N" and "10.7P" i think both are 25khz
>
> Thanks in advance,
>
> Richard VK5OO
>
> ps - if these are of use to you then let me know!!

1982. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: Science Hobbyist <bbeaty@microscan.com>
Message-ID: <7pdiia$ak6$1@nnrp1.deja.com>
Source record: 67862
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

In article <37ba0abb.35139542@netnews.worldnet.att.net>,

notjimbob@worldnet.att.net (James Meyer) wrote:
> On Tue, 17 Aug 1999
19:16:57 GMT, Science Hobbyist <bbeaty@microscan.com> wrote:
>
> > And when
applied to circuitry, it only becomes
> >significant for small dipoles and
loop antennas, where the
> >physical size of the antenna is << than the
wavelength
> >being received.
>
> No. You cannot apply the same
theories that work for submicroscopic
> particles to macroscopic things like
antennas. The larger an object is, the
> more likely it is to not occupy a
volume of probability larger than its self.
>
> I'm surprised I have
to explain these simple things to a science guy.

My advantage is that I've
been reading those physics
papers. Sometimes the wave physics works at the
atomic level
and also at the macro-level.

It's clear that this is a matter
of wave-models versus
particle-models, and when the wavelength is long
compared to
our instruments (or to our thought experiments' size), then
the
wave-models dominate. I'm not saying that QM doesn't
raise its head when
antenna theory is applied to atoms or
to IR absorbtion by atomic clusters.
But it mostly applies to the
quantization of the energy being stored, and
not to the shape of the
EM fields surrounding the atoms. Although the atoms

emit and
absorb distinct quanta, when those photons are flying between
atoms,
they behave very much like radio waves. If I build an "energy
sucking"
resonator, it acts like a single atom, but it's an atom which
can store a
large number of quanta in a single narrow energy band.

C. F. Bohren, "How
can a particle absorb more than the light incident
on it?", Am J Phys, 51
#4, pp323 Apr 1983

H. Paul and R. Fischer "Light Absorbtion by a
dipole", SOV. PHYS. USP.,
26(10) Oct. 1983 pp 923-926

ENERGY-SUCKING
ANTENNAS?
http://www.amasci.com/tesla/tesceive.html

(((((((((((((((((((((
((((O)))))))))))))))))))))))
William J. Beaty SCIENCE
HOBBYIST website
billb@eskimo.com http://www.amasci.com
EE/programmer/sci-exhibits science projects, tesla, weird science
Seattle,
WA 206-781-3320 freenrg-L taoshum-L vortex-L webhead-L

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1983. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: Science Hobbyist <bbeaty@microscan.com>
Message-ID: <7pdjer$b2f$1@nnrp1.deja.com>
Source record: 67863
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

In article <O1yMaoB7Fdu3EwnK@jmwa.demon.co.uk>,
John Woodgate
<jmw@jmwa.demon.co.uk> wrote:
> <7pccld$f1u$1@nnrp1.deja.com>, Science
Hobbyist <bbeaty@microscan.com>
> inimitably wrote:

> What is happening?
Well, the current in the large coil sets up a local
> field which interacts
with the transmitted field. Off-tune, the coil
> current is weak and has
little effect. But at resonance, it is much
> larger, maybe 100 times larger,
and it distorts the field pattern so
> that the field is stronger in the
neighbourhood of the coil than it
> would be in the absence of the coil, but
it's correspondingly weaker in
> other places. The tuned circuit acts as a
field concentrator, which is
> a reasonably correct name for the device.
There are no strange,
> unexplained effects, but a demonstration of the
device leads people to
> look for concealed batteries etc., because on the
face of it, a tuned
> circuit cannot do what it clearly does do.

Yes,
that's it exactly. One way to use a resonant antenna
is to wind a small
coupling coil around the inductor in the
resonator, so that
high-current/low-voltage energy can be
tapped off. By putting the AM
receiver's loop antenna near
the larger resonator, it acts as coupling. The
resonator works
its magic by supplying an enlarged "collection area" for
incoming
waves. Then the AM radio connects to it inductively.

The device
can only divert energy, not create it. However, I'm
amazed by the *size* of
the region of diverted energy. If the
Q is very high, the device can divert
the RF from hundreds of
feet around itself, limited only by the 1/4
wavelength radius of
the nearfield region. In the AM band, the nearfield
region is
around 300 feet in diameter.

If I wasn't being an idiot, I might
have called it a "field concentrator"
or an "RF lens" rather than an "energy
sucker." Got people's
attention, though! :)

In theory, if the "amplifier"
device had a high enough Q, the
fields around it might become so intense that
it would kill the
front end of the AM radio. In practice, I wouldn't be
suprised if
this actually happened to people who live a few blocks from a big
AM
tower. (Or maybe the coil within the "amplifier" would smoke!)
((((((((((((((((((((((O)))))))))))))))))))))
William
Beaty bbeaty@microscan.com
Software Engineer http://www.microscan.com
Microscan Inc., Renton, WA 425-226-5700 x1135

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

1984. WTB: looking for a dead HP86290B p.i.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: ik1osg <b.sacco@rai.it>
Message-ID: <7pdqb4$d8v$1@serv1.iunet.it>
Source record: 67864
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,uk.radio.amateur

.. to fix the one I have!
(in case, I'd be interested in just some minor parts)
Please e-mail me your offer.

ik1osg

b.sacco@rai.it

1985. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <W2fGg5AUkmu3Ew1t@jmwa.demon.co.uk>
Source record: 67865
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

<37B9D991.B4997D3C@mmm.com>, Roy McCammon <rbmccammon@mmm.com>
inimitably wrote:
>and of course, the large coil is physically large.

Well, one uses a convenient cardboard box for the demo, maybe a cereal
box (still occupied!). So it's very small compared with a wavelength,
even at 1.6 MHz.
--
Regards, John Woodgate, OOO - Own Opinions Only.
Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
Did you hear about the hungry genetic engineer who made a pig of himself?
PLEASE DO ****NOT**** MAIL COPIES OF NEWSGROUP POSTS TO ME!!!!

1986. Re: Another DDS question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: hb9dnn@gmx.net
Message-ID: <37bb7c56.166369296@news.hasler.ascom.ch>
Source record: 67866

On Tue, 17 Aug 1999 16:58:08 -0300, "Rafael Pinto"
<rgcpp@telemar-rj.com.br> wrote:

> How are you guys dealing with the TSSOP package of the Analog Devices'
> DDSs ??? Silk??

No, solder...8-)
Seriously. I use solder flux (e.g. alpha-metals write flux). Solder
the corner pins (does not matter , if You hit two pins). THis is
easier and IMHO better than glueing the chip onto the PCB. Then apply
solder flux and solder in one movement from the other corner. If two
pins were connected, chances are good, that the solder will be sucked
out again due to the flux. If not, reapply flux and use solder wick to
get rid of the excessive solder. If You get more and more experienced,
You will get results looking as good as if it were processed in a
reflow station. The most important thing is to avoid too much solder.

Have fun

73/72

Robert

--

Robert M. Ganter HB9DNN

1987. Re: Another DDS question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: Rafael Pinto <rgcpp@telemar-rj.com.br>
Message-ID: <7pe31n$i5a$1@nobel2.pacific.net.sg>
Source record: 67867

Cool, I'll try it... But what I meant was:

"How are you dudes making the PCB??". It's not that easy to make a .1 in
track using marker pens! I had problems using silk too... I'm trying to use
the silk-screen emulsion directly over the PCB but I still can't find the
right exposure time...

Thank anyway,

Rafael Pinto

Robert M. Ganter escreveu na mensagem
<37bb7c56.166369296@news.hasler.ascom.ch>...
>On Tue, 17 Aug 1999 16:58:08 -0300, "Rafael Pinto"
><rgcpp@telemar-rj.com.br> wrote:
>
>> How are you guys dealing with the TSSOP package of the Analog
Devices'
>> DDSs ??? Silk??
>
>No, solder...8-)
>Seriously. I use solder flux (e.g. alpha-metals write flux). Solder
>the corner pins (does not matter , if You hit two pins). THis is
>easier and IMHO better than glueing the chip onto the PCB. Then apply
>solder flux and solder in one movement from the other corner. If two
>pins were connected, chances are good, that the solder will be sucked
>out again due to the flux. If not, reapply flux and use solder wick to
>get rid of the excessive solder. If You get more and more experienced,
>You will get results looking as good as if it were processed in a
>reflow station. The most important thing is to avoid too much solder.
>
>Have fun
>
>Robert M. Ganter HB9DNN

1988. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <RXjXoSBm5nu3EwGv@jmwa.demon.co.uk>
Source record: 67868
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

<7pdjer$b2f$1@nnrp1.deja.com>, Science Hobbyist <bbeaty@microscan.com>
inimitably wrote:
>(Or maybe the coil within the "amplifier" would smoke!)

It is interesting to look at the value of current in the final IF
transformer in a portable radio. The collector signal current may be 2
mA p-p and the loaded Q may be 100 (it ought to be less but selectivity
is more important that audio bandwidth!). So the current in the tuned
circuit is 200 mA p-p! In valve/tube receivers of yesteryear, currents
of greater than 2 A could occur, but the IF transformers were much
larger, of course.

NEW SUBJECT: Could you please check your newsreader settings, because
your posts are being received with the '>' quote marks scattered
throughout the lines, and that makes them very difficult to read.
--
Regards, John Woodgate, OOO - Own Opinions Only.
Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
Did you hear about the hungry genetic engineer who made a pig of himself?
PLEASE DO ****NOT**** MAIL COPIES OF NEWSGROUP POSTS TO ME!!!!

1989. Re: Fair Radio Sales?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: Paul <pmartin@bright.net>
Message-ID: <37BAB000.E6DDDCB1@bright.net>
Source record: 67869
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

> ditto

Paul N8ULS

>
>
> I've found them to be of high integrity and honesty. When they say some-
> thing may be out of spec, it probably means it works but they didn't have
> time to thoroughly check it out. In other words, I'd rather have "lukewarm"
> recommendations instead of a used car salesman's hype.
>
> Don K6LTS
> donrm@sr.hp.com

1990. Re: FS Vernier National Dial

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: Paul <pmartin@bright.net>
Message-ID: <37BAB06B.384FAF8F@bright.net>
Source record: 67870
Cross-posted to: rec.radio.amateur.homebrew,rec.radiol.swap

Do you still have it and how much for postage?
Paul
pmartin@bright.net

Larry Asp wrote:

> Velvet Vernier National Dial, 3" diameter, skirt 1/2". $15.00 plus
> postage.

1991. Re: [Annc] 10-mbit/s microwave Ethernet link project results

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: "Eric S. Johansson" <esj@harvee.billerica.ma.us>
Message-ID: <7pe9eg$m8q$1@harvee.billerica.ma.us>
Source record: 67871
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,sci.electronics.design

In rec.radio.amateur.digital.misc John Miles <jmiles@pop.removethistomailme.net> wrote:
> Some time ago, there were a couple of threads discussing efforts to
> extend the N6GN 2-mbit/s digital radio link project for use with more
> modern, readily-available 10-mbit/s Ethernet cards.

> I've recently completed work on a project that delivers robust 10-mbit/s
> performance across an X-band microwave link at a reasonable
> price/complexity level, and wanted to post an announcement here to let
> any interested parties know of the results. The link has been in daily
> use for several weeks between my office and residence, and has worked
> great so far! Any feedback and questions are welcome.

> http://www.qsl.net/ke5fx

> -- jm KE5FX

found this in the comp.protocols.tcp-ip.domains newsgroup.

From: m8114@abc.se (Marcel Bos)
Newsgroups: comp.protocols.tcp-ip.domains
Subject: SK0MK KE5FX Microwave datalink Project
Date: 17 Aug 1999 16:03:15 GMT
Organization: ABC-Klubben
Lines: 28
Message-ID: <7pc143$22$2@oden.abc.se>
NNTP-Posting-Host: atle.abc.se
X-Newsreader: TIN [version 1.2 PL2]
Xref: harvee comp.protocols.tcp-ip.domains:875

There is now ongoing a new project with its goal to create a 10Mbit
Microwave kit. Much efforts has Allready been made, and the ones who feels
that they have a call for this sort of stuff are very much wellcome to join
us. People of intrests are they who has writeln ethernet protocols, people
who has wiroked with microwaves - PCB design and the rest who feels that
they can contribute with something needed inhere.

The project style are driven in the Linux project model.

There is in some locations a badly need of infrastructure in some places and
at the same time a very bad usement of the 44 andresses, and that is
something I have in mind to change by this. So fellows who feels that the
old packetradio standard needs a major upgrade, then please join us.

To join, and for more information about the mailinglist

Enter :www.abc.se/~m8114/hamradio

/Marcel Bos
Sweden

---

fyi,
--- eric (ka1eec)

1992. Eimac 1,500,000 watt HF tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: John Williams <ac6tsXX@n2.net>
Message-ID: <37bac23a.0@wagner.n2.net>
Source record: 67872

>Take a look at this 175lb. 1,500,000 watt transmitter tube.
>-- go to link at bottom of 1st page

Page at-> http://www.angelfire.com/ca2/home4biz/index.html
---/---
---/---
----/----
-----/-----

AC6TS John Williams
LAT. 33.06.15 LON. -117.03.36 7.030Mhz CW
DM13KC 14.030Mhz CW

1993. Solder battery case?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: Jack Taylor <n7oo@theriver.com>
Message-ID: <NkAu3.11309$gO1.419159@news2.giganews.com>
Source record: 67873

The lithium battery in my TS-440 has gone away. This is a little guy about the size of a quarter and has a couple of leads bonded to each polarity. Found a similar one at Wall Mart but without the leads. Is there a preferred technique for soldering leads onto the battery case?

73 de Jack

1994. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: Lyle Koehler <lyle@mlecmn.net>
Message-ID: <37BAD012.FD879F0@mlecmn.net>
Source record: 67874
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

Science Hobbyist wrote:

> It might not seem like magic if we only raise the Q a little bit; only
> making our loop antenna behave a few times larger than normal. But
> in theory we could be using superconductors and high-value capacitors with
> vacuum dielectrics, and making the Q absolutely humongous, and increasing
> the effective size of the antenna by an impressive extent. Imagine a
> little bitty device that sits on your desktop and totally wipes out
> longwave radio reception for thousands of feet all around (on one narrow
> frequency, of course) because its effective area has grown to, say, 1/10
> of a wavelength? The coil inside that device might have mega-ampere-turns
> of flux spewing out of it (remember, this is theory only, and maybe
> difficult to do in practice, even if we use superconductors.) Because
> it is phase-locked with the incoming waves, any field it generates
> is going to seriously distort the pattern of the incoming waves.
>

> (Nasty cackle) if a number of high-Q resonant antennas were set up
> around any transmitter, in theory they could swallow the transmitter's
> entire output, even though the oscillators might be physically so
> tiny that they might be hard to find. To be oqaque to sodium-light,
> the cloud of sodium gas really doesn't need that many atoms!
>
The popular NEC or MININEC-based antenna modeling programs will probably
let you simulate this. Download the demo for EZNEC, NEC4WIN or NF (NF is
a stripped-down version of AO 6.5, used for near-field RF safety
evaluation). I know that in AO (or NF), you can specify any of several
common wire materials or ideal, zero-loss wires. Set up one antenna in
NF as a source with one or more "sucker" antennas near it, and do a
near-field analysis. You can get a tabulation of the field strengths in
the vicinity of the antennas, as well as the details on the current
distributions in every "pulse" in each antenna.

> Now I'm wondering if the "CFA" people were actually just
> building high-Q resonant loop antennas without realizing it?
> Maybe the CFAs do work, but not for the reasons that their
> supporters claim.
>

My own belief is that they simply built a small, high Q, end loaded
dipole with a lot of feedline radiation. It's possible to get better
efficiency (hence higher gain and greater capture area) with a short
top-loaded vertical than with a loop of the same volume, and certainly
with less mass of copper. I used to have a copy of a paper, probably in

the IEEE Transactions on Antennas and Propagation from 30 or 40 years ago, and probably by R. C. Hansen, that went through the math. Unfortunately I can't find the paper and am too lazy to search for the reference. It's just as easy nowdays to run a couple of models for the particular antenna geometries of interest.

> > > There is an ongoing related thread on "capture area" in the
> > > rec.radio.antenna newsgroup, and it's obvious from the postings
> > > that the idea of a large effective area from a small antenna bothers
> > > people with a lot more antenna experience than I have.
> >
> > I have very little antenna experience, so this "capture area
> > enhancement" only bothers my physics intuition. But bother it
> > does! Doesn't it mean that, if we are within maybe 0.1 wavelength
> > of an AM tower, and if we are allowed to used superconductors in
> > our antenna loop, that we can expand the "capture area" of our
> > little antenna-coil to such an extent that it absorbs almost the
> > entire output of that AM transmitter?!!! I can't help but think
> > that it's weird. It's only NOT weird if we use low-Q circuits.
> >

Yep, you could absorb much of the power if you have a reasonably efficient antenna (fairly large or very high Q) close enough to the transmitter. But it would be easier to run a piece of coax:-) "Absorb" may not be totally correct, either, because some (probably half) of the power will be re-radiated. Again, this can be simulated with today's modeling software if you really want to explore the effect.

> > In your example with the 25cm copper pipe, what if we wound a
> > 100-turn square coil with that pipe, so it weighed hundreds of
> > pounds. At 200KHZ, couldn't we make a loop antenna that punches
> > an enormous hole in the pattern of any plane waves which happen
> > to be passing by?
> >

It's easier to improve the efficiency of a small antenna by increasing the size, which is admittedly cheating, than by trying to reduce the losses to zero. That's because you have to contend not only with the losses in the antenna itself, but in any object in the near field. Ground losses are very significant in short verticals as well as in loop antennas in close proximity to ground. That places a practical limit on the efficiency attainable with very small antennas. No matter how high you make the Q, the best gain you can achieve with a small antenna is slightly less than that of a half-wave dipole. By the way, a 15 meter square loop with 100 turns of 25 mm pipe has a self-resonance well below 200 kHz, so it would be a lousy antenna.

I have a LowFER beacon antenna that consists of a top-loaded vertical less than 15 meters high, with a loading coil Q of around 600. The actual Q of the antenna system is between 100 and 200, depending on time of year and how long since the last rainfall. It's tuned to 186.75 kHz

and should have a reasonably large capture area, probably a few thousand square meters. Does it create a "black hole" for LF? Nope. In fact, because of re-radiation the signals on a nearby longwire receiving antenna are enhanced at frequencies near 186.75, in the same way that you can use a large passively-coupled loop to improve the sensitivity of a transistor radio.

--
Lyle, K0LR

http://www.computerpro.com/~lyle

1995. Re: RS-Component Tester-22-330

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: knox_k_NOBS@nemaine.com
Message-ID: <37badc9b.17324459@news.nemaine.com>
Source record: 67875

On 10 Aug 99 14:04:34 GMT, af389@lafn.ORG (David Shalita) wrote:

>Hi,
>
>Did anyone reading this digest buy one of these
>Transistor, diode scr, etc testers from Radio Shack?
>
>Very handy unit when it works.
>With fresh hot Duracell batteries,
>my tester has stopped working, gives totally wrong answers.
>Allows me to instal 2N2222 parts with reversed Emitter and Collector
>leads.
>
>My owners manual is lost in my shop.
>Can someone please read manual and tell me how long is the warranty?
>
>I no longer can receive the HAM_Homebrew Digest via email.
>Sorry, I cannot see your replies that way.
>
>PLEASE replies to me DIRECTLY as well as group.
>Please hurry, my warranty, if 90 days, is running out.
>
>Thanks for any help, 73, W6MIK
>--
>David Shalita (Dave)
>af389@lafn.org
>Van Nuys, CA
Manual information can be found at:

http://support.tandy.com/support_meters/52057.htm

Ken

1996. Re: Solder battery case?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <37BAE14E.81D719D8@erols.com>
Source record: 67876

You should not solder leads to these batteries as they generally will
not survive the heat. Usually, solder won't stick to the case anyway.
Tabs are normally spot welded to the battery case. I'd keep looking for
the proper battery.

Jack Taylor wrote:
>
> The lithium battery in my TS-440 has gone away. This is a little guy about
> the size of a quarter and has a couple of leads bonded to each polarity.
> Found a similar one at Wall Mart but without the leads. Is there a
> preferred technique for soldering leads onto the battery case?
>
> 73 de Jack

1997. HELP! Tube Guru's Advice Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <37BADF60.AED359A3@midwestmicro-tek.com>
Source record: 67877

I finished building a CW, 75 watt, 80m transmitter last night. I uses the 1625 final and it is crystal controlled at 3.710MHz. I got the design from the 1967 ARRL Radio Amatuer Handbook. I've never built a tranmitter before and I have some questions about its operation.

After turning it on and then turning it off and installing the VR tubes so it would work properly then turning it back on again, I went through the tuning procedure described in the article. I used a 40 watt light bulb for the dummy antenna. After tuning around a bit I found that I could get the light bulb to light, but very dimmly. I guess that I had always assumed that the light should be very brite, is something amiss?

I attached my oscilloscope to the antenna output and found that thier was about 80 volts pp on the output signal and that it was at about 4.44MHz. After attaching the o-scope probe I also noted that when I keyed that transmitter it turned my color TV into a black and white TV with lots of fuzz so obviously it is transmitting something.

I think I have two probelms but they are probaly from the same error. First, the voltage output may be alright but maybe I'm not getting enough current? Second, how am I pulling a 3.710MHz crystal to 4.44MHz? Any help would be great.

Rick

1998. Re: WTB: looking for a dead HP86290B p.i.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: <>
Message-ID: <37baee47.11868024@philproxy>
Source record: 67878
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,uk.radio.amateur
Body handling: HTML body converted to readable text

what's a 86290B?? I see lots of HP printers and stuff at my goodwill store.....

"ik1osg" wrote:

>.. to fix the one I have!
>(in case, I'd be interested in just some minor parts)
>Please e-mail me your offer.
>
>ik1osg
>
>b.sacco@rai.it
>
>
>
>
>
>

1999. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <37fddb7e.519648641@news.atl.bellsouth.net>
Source record: 67879
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

On Tue, 17 Aug 1999 19:04:09 GMT, Science Hobbyist <bbeaty@microscan.com> wrote:
>In article <37B97D0B.794AFB@mmm.com>,
> rbmccammon@mmm.com wrote:
>> Science Hobbyist wrote:
>>
>> > All I'm saying is that resonant electromagnetic systems behave
>> > electrically larger than non-resonant EM systems.
>>
>> I guess I'll just have to ask; what is the electrical
>> size of a non-resonent EM system?
>
>Good question. Let's see. If the EM system is being
>"illuminated" with propagating EM waves, and the
>waves have a certain power density P/(meter^2), then
>an ideal quarter-wave dipole antenna with an impedance-
>matched resistive load would intercept X watts, and we could
>calculate the "absorbtion cross-sectional area" of that antenna
>from X/P, and if we assume that this area is circular, then the
>"electrical size" of that antenna is SQRT(X/P/pi)
>
>If we do the same for ANY antenna, we can figure out
>how "large" it is electrically, and compare it to the "size"
>of an ideal quarter-wavelength dipole.

Ah, conventional resonant dipoles are halfwave, not
quarterwave. A quarterwave dipole would be naturally
resonant at *twice* its quarterwave frequency, ie when
it is an electrical halfwave. A quarterwave *monopole*,
worked against a counterpoise (often the Earth) would
be resonant at its quarterwave frequency. The Earth
is a lossy medium for radio waves, however, so monopole
efficiency would be less than for the dipole.

The free space power density due to an isotropic source
is simply

PD = Pt /(4*pi*R^2)

Where Pt is transmitted power in watts and R is the
distance in meters from the source. PD is in watts/m^2.
If the source is not isotropic, then this figure has to be
multiplied by Gt, the transmit antenna gain over isotropic.

There is a formula for calculating the effective aperture
of a receiving antenna. It is

Ae = Gr * lambda^2 /(4*pi)

Where Ae is in square meters, Gr is antenna gain
with respect to isotropic, and lambda is the operating
wavelength in meters.

Gr for a full size halfwave dipole is 2.15 dB. Smaller
dipoles have a smaller Gr. For example, a 1/10th
wave dipole has a Gr of about 1.16 dB.

Ae is the same whether the antenna is resonated
or not. Obviously in the 1/2-wave case it is resonant,
but in the 1/10-wave case it is not, yet the effective
aperture is not grossly smaller. A 10 times size
reduction results in less than a 1.26 times reduction
in effective aperture. Resonating the 1/10-wave
antenna *does not* increase its effective aperture
(there is no term for resonance in the equation).
The idea that resonating an antenna increases its
capture area is simply false.

However, the amount of power you can extract
from the antenna does vary greatly depending
on whether it is conjugate matched to the load
or not. In other words, if the antenna has a feedpoint
impedance of Ra + Xa, the load must present the
conjugate of that, Rload - Xload, in order to extract
maximum power from the antenna.

Ra is the sum of the antenna radiation resistance (Rr),
which varies with physical size of the antenna, and the
antenna loss resistance (Rloss), which also varies with
the size and material of the antenna. X is reactance,
capacitive or inductive depending on sign, and Rload is
the load resistance, in the case of a conjugate match,
Ra = Rload and Xa = -Xload.

So whether an antenna is resonant or not doesn't have
anything to do with its effective aperture, but to transfer
the maximum intercepted power to a load, the antenna
must be conjugate matched. This has the effect of
resonating the *system* of antenna, feeder if any, and
load.

Now as mentioned, Rr decreases as antenna size
decreases. For small antennas, Rr becomes very
small (the relationship is not linear, it is nearly square
law when antenna length is much less than half a
wavelength).

Rloss is basically "copper" loss, and depends
on the gauge of wire used to make up an antenna,
the material of the wire, and its length. As antenna
size decreases, Rloss decreases linearly with

decreasing length, and increases to the square
of reduction in wire radius.

The ratio of Rr to Rr+Rloss is a measure of antenna
efficiency. As antenna size decreases below the
1/2-wave length, efficiency falls due to the more
rapid fall of Rr compared to Rloss. So electrically
small antennas generally have poor efficiency.
A halfwave antenna is often better than 90%
efficient, but a 1/10-wave antenna is likely to be
less than 3% efficient.

Now an electron in an orbital around a nucleus
can be considered lossless. So even though Rr
is extremely small, efficiency can be 100%. Thus
the behavior of atoms as antennas isn't the same
as electrically small copper wire antennas.

There's another factor to consider as well. The
ratio of Xa to Ra is called Q. As Q increases,
bandwidth decreases (an alternate expression
for Q is the ratio of the 3 dB bandwidth to the
operating frequency). So electrically small
antennas are very narrowband. This is carried
to an extreme in atoms, which exhibit very very
narrow *spectral absorption lines*.

In electrically small antennas, Q has another
unfortunate effect. As Q increases, the ratio
of circulating energy to available output energy
increases, ie the energy stored in the induction
fields of X become much larger than the energy
expressed across Rr. All of the circulating energy
is expressed across Rloss, however, so antenna
efficiency is further reduced as Q is increased,
due to this circulating current loss.

You can't win, you can't even break even.
The rules of the game are stacked in favor
of the house, and the intent of the house
is to maximize entropy.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

2000. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <37fef055.524983685@news.atl.bellsouth.net>
Source record: 67880
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

On Tue, 17 Aug 1999 05:26:55 GMT, Science Hobbyist <bbeaty@microscan.com> wrote:
>In article <37cc091b.203597371@news.atl.bellsouth.net>,
>>
>> HA HA HA HA!
>>
>> Best laugh I've had today.
>
>Watch out, I may have the last laugh!
>
>What will happen is that everyone will realize that
>this "energy sucking" stuff is entirely conventional.
>It's just like sticking a resistor in a constant-current
>conductor path and having the resistor get hot.
>The high-ohms resistor "sucked energy" from the system,
>whereas the lo-ohms wire did not. A tuned circuit
>acts like a resistor, whereas an untuned circuit has
>inductive or capacitive reactance only, and cannot
>absorb much energy even if a resistve load is
>attached to it. Simple stuff. Don't know why it
>took me this long to notice it. But then, nobody else
>noticed it either.

That's probably because we aren't dealing with
constant current sources, or constant voltage
sources either. What we have in the field PD
is a constant *power* source, and that's a very
different matter indeed. To extract maximum
energy from a constant power source, we have
to present it with a conjugate match.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

2001. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: Science Hobbyist <bbeaty@microscan.com>
Message-ID: <7pf3fqfom1@nnrp1.deja.com>
Source record: 67881
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

In article <37B9D14F.CDAAF9ED@mmm.com>,
rbmccammon@mmm.com wrote:
> Science Hobbyist wrote:
> >
> > In article <37B957A5.721724AC@mmm.com>,
> > rbmccammon@mmm.com wrote:
> > > Take a series R, L, C circuit. Drive it with a constant
> > > current sinusoidally alternating source.
> > > It will absorb the same amount of energy whether
> > > the L and C resonate with the source or not.
> >
> > Do the same for a parallel RLC circuit as shown in the
> > ASCII art in my "energy sucking" article.
>
> Oh that one we drive with a constant voltage.

If you do so, you will miss the cool effects. Just what does
occur if we drive a parallel LC circuit with a constant
current at the resonant frequency? Analogy of an analogy:
it's like driving a capacitor with a constant current. The
stored enery increases, and the voltage across the components
increases, but the incoming current does not. Watts is VxI,
so the input power is increasing! Hang a large resistor
across that parallel resonant circuit, and you can extract
power, but hang a much larger resistor across it, and the
power absorbed by the resistor goes up. Even if the
constant current source is very feeble, the voltage across
the LC circuit is only limited by the Q. Because the available
power depends upon the voltage that has built up across
the resonator, we can design for extremely high Q and let the
V build up to an enormous value, which also cranks the output
power up to an enormous value.

In three dimensions, any analysis would discover that the
small LC circuit is pulling in energy from a vast region around itself.
If we didn't know what was going on, we would be very
confused by a small LC circuit which apparantly has broken into
oscillation all by itself, and which is not quenched even if we
use the thing to light up a lightbulb. (Hey, there's a good idea
for a "free energy" hoax. Maybe Joe Newman accidentally
has built himself a 60Hz resonant "energy sucker")

>
> At this point I'm not challenging your conclusions,

> but I think the analogies may not be stiff.

True. The circuit in my article is a one-dimensional analogy for a 3D phenomenon. In practice, even an infinite-Q superconductor circuit would reach a limit on its voltage when the AC e-field surrounding the resonator became so large that the distant transmitter could no longer send any energy in that direction. Or, if the resonator was outside the transmitter's nearfield region, then the resonator voltage would finally stop rising when the surrounding e-fields became so large that most of the power in the nearfield region was being intercepted. If the e-field is the "antenna", then that "antenna" can only grow until it's around 1/4-wave at the very most.

At long wavelengths and significant transmitter power levels this would be a very, VERY intense local e-field, since it essentially has to affect all the "incoming" e-fields at the "surface" of the nearfield region. What's the nearfield region at 10KHz? Something like 20,000ft diameter? Yow! Nikola Tesla claimed to have lit a large bank of incandescent bulbs (hundreds of watts) at a distance of 60 miles from his transmitting tower. If he used a big, heavy, hi-Q circuit connected to a capacitive antenna, and if the ionosphere was keeping his (10khz???) transmissions localized to the planet Earth, then perhaps his claim is not as bogus as everyone seems to assume.

An ideal "energy sucker" a few inches across in theory might be able to swallow most of the output of something like Voice of America, but in practice it would probably be shorted out by massive corona discharge-arcs long before it reached that level of operation. Therefore, wind it on a big coil form while thinking in terms of high voltage and corona losses. Put a large sphere on the tip of its antenna. Extract the energy via a coupling loop around the coil . We end up with something that looks exactly like a Tesla coil, but instead of a power supply, it has a bank of light bulbs (or perhaps a high-speed rectifier and a bank of batteries.) It's really just a great big atom that's hoping to intercept any passing photon which happens to match its resonant frequency. An "Atomic Energy" technology? :)

If Tesla had his way, our current civilization might look just like those 1930s visions of the future, with gigantic high-voltage coils and sphere-antennas springing up everywhere, and making all our cities resemble the innards of a radio transmitter. Me, I just want my own RF-powered personal jetpack. (And hope that the main transmitter doesn't blow a fuse!)

++

PLEASE NOTE: I�ve recently started an email list for amateur science experimentation. It only has about 50 subscribers so far, so traffic is light. For info on how to join, see http://www.amasci.com/sci-list/sci-list.html, or check out the

current messages at http://www.escribe.com/science/sciclub/
++

((((((((((((((((((((((((O)))))))))))))))))))))))
William J. Beaty SCIENCE HOBBYIST website
billb@eskimo.com http://www.amasci.com
EE/programmer/sci-exhibits science projects, tesla, weird science
Seattle, WA 206-781-3320 freenrg-L taoshum-L vortex-L webhead-L

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2002. Re: Solder battery case?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: Clif Holland <clif@avvid.com>
Message-ID: <37BAFFFA.7FF5@avvid.com>
Source record: 67882

Jack Taylor wrote:
>
> The lithium battery in my TS-440 has gone away. This is a little guy about
> the size of a quarter and has a couple of leads bonded to each polarity.
> Found a similar one at Wall Mart but without the leads. Is there a
> preferred technique for soldering leads onto the battery case?
>
> 73 de Jack

Don't. It has a habit of damaging the battery.
--
Clif Holland, KA5IPF
Owner of AVVid, an Authorized Kenwood and Icom Service Center
For more info click on the following
http://www.avvid.com/
or call 1-800-214-5779

2003. Re: $20.00 GPS Project Complete w/Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: terry02@ibm.net
Message-ID: <7pf6ud$ih6$1@nnrp1.deja.com>
Source record: 67883
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.swap

Now, remember, I'm not a programmer (I don't even play one on
television!), but it seems to me that the Basic Stammp II has 2 serial
ports. Could maybe some real clever software type write a program to
read from this gps on one serial port and send out NMEA on the other
serial port ??????

Terry, N6MON

In article <37b90446.14274115@news.jps.net>,
kyrrin@my-deja.com wrote:
> On Tue, 17 Aug 1999 05:27:36 GMT, John Plemons <john@mavin.com> wrote:
>
> >>Check out http://mavin.com/slickitems.html for info on the
Electro
> >>Mavin GPS project, a brand new complete unit including active
antenna.
>
> <snip>
>
> I took the liberty of examining one of these units, and the
included
> documentation, at John's booth at the Bay Area's Foothill swap meet
back
> in July.
>
> Although I can see that the boards are clearly useful for some
> applications, be aware that they do NOT put out NMEA-compliant data
> bursts. The output format is most definitely proprietary (though it is
> thoroughly documented in the links referenced on John's web page).
>
> In any case, this means that the receivers cannot be directly
used
> with some popular mapping software packages, such as Chicago Map's
> 'Precision' CD, or with DeLorme's Street Atlas, that expect
NMEA-compliant
> data streams. I suppose it's possible to construct some sort of format
> converter if one wanted to go to all the effort.
>
> Caveat GPS...
>
> -=-=-=-=-=-=-=-=-
> Bruce Lane, Owner and head honcho,
> Blue Feather Technologies -- kyrrin (at) bluefeathertech [dot] com
> Web: http://www.bluefeathertech.com

> "...No matter how we may wish otherwise, our science can only describe
an object,
> event, or living thing in our own human terms. It cannot possibly
define any of them..."
>

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2004. Help Plse: trying to find circuit from 73 mag several years ago...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-18 00:00:00 UTC
From: Victoria Welch <vikki@oz.net>
Message-ID: <7pevql$ho0$0@216.39.144.179>
Source record: 67884

Hi all and thanks in advance,

I've looked around the net for 73 magazine but with no luck, I can't imagine that old "on top of everything" Wayne Green isn't out there, but who knows. If there is a URL for it, I'd apreciate knowing. Assuming it still exists...

A number of years ago, 73 published a schematic for a "blood purifier" or something along those lines that might have / did / could "cure" diseases using around 27V going though something like an "H-bridge" using 4N38 opto-isolators a couple of transistors and some miscellaneous parts. I'm working on something that needs that basic functionality. All my 73 magazines have been left behind in moving so I do not have the article anymore :-(.

If anyone has this, I'd like to get the circuit. Appreciate any help, circuit diagrams, descriptions of it or pointers.

Thanks & take care, Vikki.
--
Victoria Welch, WV9K, DoD#-13, Net/Sys/WebAdmin SeaStar.org,
vikki.oz.net
"Walking on water and developing software to specification are
easy as long as both are frozen" - Edward V. Berard.
Do not unto others, that which you would not have others do unto you.

2005. FS: Icom IC 735

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: barbizilla@aol.com
Message-ID: <19990819181004.11098.00001233@ng-bh1.aol.com>
Source record: 67685

Like new condition, works perfect, non-smoker. Comes with two mikes: hand (Icom) & desk top (Astatic 1104), & operation manual. Location near Philadelphia, PA. Can bring radio to this Sunday's, Aug 22, hamfest in South Jersey. $625.

2006. Re: 3 pin regs in parallel?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: Doug Smith <nospam@nospam.org>
Message-ID: <Ew%u3.14701$gO1.485748@news2.giganews.com>
Source record: 67686

Weathrship wrote in message
<19990819160156.08476.00001610@ng-fa1.aol.com>...
>I am wondering if I can use 3 pin regulators properly heatsinked in
parallel
>to increase the output current capability assuming the input current is
>available?

Is it practical to split the load? That may be easier than trying to
parallel things or boost them with external transistors.

If you're trying to power an existing piece of commercial gear, ignore this
message<g>.

2007. Re: Another DDS question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: Dave <k4de@hotmail.com>
Message-ID: <7pi48jln1@nntp1.atl.mindspring.net>
Source record: 67687

Try buying a TSSOP to DIP package from EDI Corporation. Phone number
702-735-4997. They have a web site too. This is what I did with my ad9850
chip.

Rafael Pinto <rgcpp@telemar-rj.com.br> wrote in message
news:7pe31n$i5a$1@nobel2.pacific.net.sg...
>
> Cool, I'll try it... But what I meant was:
>
> "How are you dudes making the PCB??". It's not that easy to make a .1
in
> track using marker pens! I had problems using silk too... I'm trying to
use
> the silk-screen emulsion directly over the PCB but I still can't find the
> right exposure time...
>
>
> Thank anyway,
>
> Rafael Pinto
>
>
> Robert M. Ganter escreveu na mensagem
> <37bb7c56.166369296@news.hasler.ascom.ch>...
> >On Tue, 17 Aug 1999 16:58:08 -0300, "Rafael Pinto"
> ><rgcpp@telemar-rj.com.br> wrote:
> >
> >> How are you guys dealing with the TSSOP package of the Analog
> Devices'
> >> DDSs ??? Silk??
> >
> >No, solder...8-)
> >Seriously. I use solder flux (e.g. alpha-metals write flux). Solder
> >the corner pins (does not matter , if You hit two pins). THis is
> >easier and IMHO better than glueing the chip onto the PCB. Then apply
> >solder flux and solder in one movement from the other corner. If two
> >pins were connected, chances are good, that the solder will be sucked
> >out again due to the flux. If not, reapply flux and use solder wick to
> >get rid of the excessive solder. If You get more and more experienced,
> >You will get results looking as good as if it were processed in a
> >reflow station. The most important thing is to avoid too much solder.
> >
> >Have fun
> >

> >Robert M. Ganter HB9DNN
>
>

2008. Re: Another DDS question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7pi6colro1@news1.fast.net>
Source record: 67688

-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

Dave <k4de@hotmail.com> wrote in message
news:7pi48jln1@nntp1.atl.mindspring.net...
> Try buying a TSSOP to DIP package from EDI Corporation. Phone number
> 702-735-4997. They have a web site too. This is what I did with my
ad9850
> chip.

I would be inclined to advise against this approach. Using such an
adaptor will add lead inductance which could adversely affect
the performance of the device. As has been pointed out, TSSOPs
can be solderd by hand, with care and the right technique.

However, solder paste and hot air reflow are the best way to
deal with SMT components.

73,

- --
Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI
Fellow, Radio Club of America
Senior Member, IEEE
Member, ARRL
Join NCI - Hams for the 21st Century!
Help modernize ham radio and assure its future survival!
http://www.nocode.org

-----BEGIN PGP SIGNATURE-----
Version: PGP for Personal Privacy 5.5.3

iQA/AwUBN7yciZe+N6+q84HiEQKMwQCeI6xCf2PoZ2YqP6kzl5mDEsRzFVgAnjWi
p0OHW2KaJYrkzCBgx/MrHxgn
=f8a2
-----END PGP SIGNATURE-----

2009. Re: 3 pin regs in parallel?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: "Harry T. Hurst" <hhurst@delaware.infi.net>
Message-ID: <7pi6cp$77e$1@nw003t.infi.net>
Source record: 67689

I built a power supply for my Argosy back in '82 that uses 2 LM338k and an LM741 to supply 5-18 volts at 8 amps. I took the circuit out of some application notes from National. The power supply has been used on many radios, and is still the main power for the shack. It also has helped me get the car started on occasion. The op amp is used as a comparator balancing the load between the two chips. Needless to say, it works very well!

So, the answer is a qualified yes. You can, but it takes a bit of additional circuitry.

Weathrship wrote in message <
>Hello,
>I am wondering if I can use 3 pin regulators properly heatsinked in parallel
>to increase the output current capability assuming the input current is
>available?
>

2010. look...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: NI4L <ni4l@bellsouth.net>
Message-ID: <37BCB166.BB7B0D7C@bellsouth.net>
Source record: 67690

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=149094061

2011. FS:4CX1500B

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: dennis <bigd422@earthlink.net>
Message-ID: <7phoelpbu1@oak.prod.itd.earthlink.net>
Source record: 67691
Cross-posted to:
alt.ham-radio.marketplace,alt.radio.cb.skip,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.cb,rec.radio.swap

FS:4CX1500B PULL EX CON +S.H.

2012. Re: lower cost RF design software ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: Xjshillw6ivw@earthlink.net
Message-ID: <37bc2434.820401@news.earthlink.net>
Source record: 67692

It runs ok on my Dell XPS M200s , a 200 MHz Pentium computer using
Windows 95 version 4.00.950B. However, I had some problems with QST
View (CD's providing back issues of QST). I couldn't read all of the
instructions without computer problems. I contacted the ARRL and their
fix didn't work. No problems looking at the QST data, however. I guess
you shouldn't purchase ARRL computer products if your purchase
approach doesn't provide a method for money back returns.
73's Jim, jshillw6ivw@earthlink.net

On Sun, 08 Aug 1999 17:07:18 GMT, jim@rst-engr.com (Jim Weir) wrote:

>reberhardt@nospam.org (Russell Eberhardt)
>shared these priceless pearls of wisdom:
>
>->On Wed, 07 Jul 1999 21:51:10 GMT, emr01@ms19.hinet.net (Oliver Huang)
>->wrote:
>
>->Have a look at ARRL Radio Designer, available from ARRL for about
>->$150. It is a cut down version of SuperCompact.
>
>The program is OK. The support sucks. The damned thing requires a certain
>level video card, a certain level operating system, and will jam HARD any
>computer that isn't exactly to it's liking.
>
>Jim
>Jim Weir, VP Eng. RST Eng. WX6RST
>A&P, CFI, and other good alphabet soup

Delete the X before using my e-mail address.
The X was added to stop spam.

2013. Re: Solder battery case?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: Robert Mozeleski <moz@ncx.com>
Message-ID: <B5EB408D003DF858.24851EF8B54685BF.83EBE9FD645D1B16@lp.airnews.net>
Source record: 67693

they do make a conductive epoxy...who they are i dont know...

Jack Taylor <n7oo@theriver.com> wrote in message
news:NkAu3.11309$gO1.419159@news2.giganews.com...
> The lithium battery in my TS-440 has gone away. This is a little guy
about
> the size of a quarter and has a couple of leads bonded to each polarity.
> Found a similar one at Wall Mart but without the leads. Is there a
> preferred technique for soldering leads onto the battery case?
>
> 73 de Jack
>
>
>

2014. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <7piimv$eok@dfw-ixnews16.ix.netcom.com>
Source record: 67694
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

In article <7pcbn0$ec5$1@nnrp1.deja.com>, <bbeaty@microscan.com> wrote:
>In article <37B97D0B.794AFB@mmm.com>, > rbmccammon@mmm.com wrote:
>> Science Hobbyist wrote:
>> > All I'm saying is that resonant electromagnetic systems behave
>> > electrically larger than non-resonant EM systems.
>> I guess I'll just have to ask; what is the electrical
>> size of a non-resonent EM system?
>
>Good question. Let's see. If the EM system is being
>"illuminated" with propagating EM waves, and the
>waves have a certain power density P/(meter^2), then
>an ideal quarter-wave dipole antenna with an impedance-
>matched resistive load would intercept X watts, and we could
>calculate the "absorbtion cross-sectional area" of that antenna
>from X/P,

This brings up the question: What happens to a resonant antenna
when the illumination stops? Or starts?

The effective size of the antenna would be indicated by how fast the
energy in the resonant circuit builds up over time, not what its
steady state value ends up being.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

2015. Re: AMP TUNING??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: Leon Snider <leons@worldnet.att.net>
Message-ID: <7pimfi$h4l$1@bgtnsc03.worldnet.att.net>
Source record: 67695

Thanks for all the replies. The first one received did the trick. Once again,thanks. Leon

2016. Re: Help Plse: trying to find circuit from 73 mag several years ago...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: Paul <pmartin@bright.net>
Message-ID: <37BBF595.F6E73D0C@bright.net>
Source record: 67755

I know I've got the article around here somewhere..I'll look for it tonght.
If you have a fax # I can send it in the morning. Otherwise send me a postal
address and I'll make a copy for you. 73
Paul N8ULS
pmartin@bright.net

Victoria Welch wrote:

> Hi all and thanks in advance,
>
> I've looked around the net for 73 magazine but with no luck, I can't
> imagine that old "on top of everything" Wayne Green isn't out there, but
> who knows. If there is a URL for it, I'd apreciate knowing. Assuming
> it still exists...
>
> A number of years ago, 73 published a schematic for a "blood purifier"
> or something along those lines that might have / did / could "cure"
> diseases using around 27V going though something like an "H-bridge"
> using 4N38 opto-isolators a couple of transistors and some miscellaneous
> parts. I'm working on something that needs that basic functionality.
> All my 73 magazines have been left behind in moving so I do not have the
> article anymore :-(.
>
> If anyone has this, I'd like to get the circuit. Appreciate any help,
> circuit diagrams, descriptions of it or pointers.
>
> Thanks & take care, Vikki.
> --
> Victoria Welch, WV9K, DoD#-13, Net/Sys/WebAdmin SeaStar.org,
> vikki.oz.net
> "Walking on water and developing software to specification are
> easy as long as both are frozen" - Edward V. Berard.
> Do not unto others, that which you would not have others do unto you.

2017. Homebrew tube 10 Meter Amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: radiodoc37@aol.com
Message-ID: <19990818220430.22444.00000614@ng-cp1.aol.com>
Source record: 67756

Homemade 10 meter amplifier, made from a military radio PA section. uses three
6159 tubes (24 volt versions of the 6146). Low drive delivers over 200 watts.
Open Chassis design, AM/SSB switch, adjustable Bias, SWR input adj,
Meter, etc...
See Pic at: http://hometown.aol.com//radiodoc37/homebrew.html
$150.00

2018. PC templates for recent QST or Handbook projects??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: John Mock <kd6pag@qsl-nojunk.net>
Message-ID: <87iu6cw8xo.fsf@mongrel.kd6pag.ampr.org>
Source record: 67757

Last year, i designed and fabricated my own PC card, and just recently discovered i needed a level shifter (TTL <-> RS-232) to control a Yaesu transciever. So i checked the current ARRL handbook, a good project, but no artwork! Checked a QST recent article and same deal. I tried the ARRL FTP and WWW sites; there was PIC code (some source, some binary) and a modest amount of other technical information. But no PC artwork. Have i simply been looking in the wrong place? Or has the trend toward 'appliance operators' and a focus on HF operation really impacting taken its toll in terms of homebrewing within the ARRL? Is it really the case one now needs to order PC cards from a commercial vendorts and that this artwork is no longer readily available? (Except possibly via the U.S. postal service at the cost that to non-members at least, is no longer worth the time and trouble to make one's own PC cards for reasonable current projects.) Please someone tell me i'm wrong and the data is on-line. And what is happening to homebrewing these days??

Oh, well. I'll wire up the darn thing by hand. *Sigh* Too bad i don't have a wire-wrap gun handy; no good for RF, but fine for TTL and some ECL with a decent prototype board. *Sigh* Oh, well. Such is life.

-- KD6PAG (Networking Old-Timer, "RF newbie")

2019. Re: Help Plse: trying to find circuit from 73 mag several years ago...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: John Mock <kd6pag@qsl-nojunk.net>
Message-ID: <87g11gw8kb.fsf@mongrel.kd6pag.ampr.org>
Source record: 67758

Search around this site a little and you should find what you are looking for:

http://www.waynegreen.com/

When i looked there, i didn't find any technical information. But maybe i was looking in the wrong places.

-- KD6PAG (Networking Old-Timer, "RF newbie")

2020. Re: voltage regulators

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <uAOu3.5194$ok3.1273@news.rdc1.il.home.com>
Source record: 67759

> I'm designing a piece of gear that will be used off the mains supply
> and portable 12v. I have put a diode in series with the output pin to
> prevent external volts going into the IC, but this means a 0.7v drop,
> which varies slightly with the load, occurring when used off the mains
> with the IC in use, making the regulation poorer than if it were
> omitted!

The preferred method (covered in AofE) is to put a diode across the reg such that it is reverse biased when the input is powered up. When the input is down, the diode charges the input caps and prevents the current from flowing through the reg. No extra voltage drop involved.

I just retrofitted our 2M repeater for this, they take the battery to the output side of a 7812 through a single diode (to keep the 7812 from trying to charge the battery), which puts it in the same condition you describe if the AC line input is dead.

2021. Re: Solder battery case?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <AwOu3.5193$ok3.1324@news.rdc1.il.home.com>
Source record: 67760

> Aw come on! use a little common sense! There is no way that any battery
> can "explode" unless you are totally careless with application of heat.
> Any jerk that cooks a solder connection needs a facefull of electrolyte.
> Usual care is just fine for most applications. Cliff K7RR

If you break down the internal current limiting, you'll be mightily suprised.
I've seen them go, Thionyl Chloride is NOT something you want to be in the same room with.

It's not possible to get the surface of the battery case up to soldering temp without damaging the battery. Use a holder, or get a battery shop (batteries plus or similar) to weld on some tabs for you. The welder has enough dTemp/dTime to do it without problems.

2022. Re: Help Plse: trying to find circuit from 73 mag several years ago...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <hEOu3.5195$ok3.1410@news.rdc1.il.home.com>
Source record: 67761

> I just happen to have a bunch of 4N38s and am looking for a cheap way
> (yes, I am a ham :) to be able to make a cheap H-bridge type thing for a
> little robot I am playing with :-), modified servos seem to leave
> something to be desired, too much overhead for the processor I am using
> doing PWM. More time and oddball parts than money these days :-). I
> originally saved the schematic for that thing just for this purpose
> "just in case" and now I have some time (and no money :) and "just in
> case" has arrived :-).

PBL3717 (Ericcson or Unitrode) chips make a nice current-regulated H bridge, one chip per bridge, 600mA or so, depending on heatsinking. Making an H yourself is a bit tricky, when you consider shoot-through. Can be done though, you have to watch that the "A" pair is completely off under all conditions before the "B" pair turns on.

National has an H bridge too, but not so much functionality on the chip, and it's $

2023. Re: WTB: looking for a dead HP86290B p.i.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: eenajp@sun.leeds.ac.uk
Message-ID: <37BBB629.5FEDB1D7@sun.leeds.ac.uk>
Source record: 67762
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,uk.radio.amateur
Body handling: HTML body converted to readable text

rm wrote:

> what's a 86290B?? I see lots of HP printers and stuff at my goodwill
> store.....
>
> "ik1osg" wrote:
>
> >.. to fix the one I have!
> >(in case, I'd be interested in just some minor parts)
> >Please e-mail me your offer.
> >
> >ik1osg
> >
> >b.sacco@rai.it

It is a 2.0-18.6 GHz sweeper plugin for
the HP8620 series mainframe sweep oscillator.

Andy

2024. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: sbharris@ix.netcom.com
Message-ID: <7pgoc2$apj@dfw-ixnews5.ix.netcom.com>
Source record: 67763
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

In <7pf3fqfom1@nnrp1.deja.com> Science Hobbyist
<bbeaty@microscan.com> writes:
>
>In article <37B9D14F.CDAAF9ED@mmm.com>,
> rbmccammon@mmm.com wrote:
>> Science Hobbyist wrote:
>> >
>> > In article <37B957A5.721724AC@mmm.com>,
>> > rbmccammon@mmm.com wrote:
>> > > Take a series R, L, C circuit. Drive it with a constant
>> > > current sinusoidally alternating source.
>> > > It will absorb the same amount of energy whether
>> > > the L and C resonate with the source or not.
>> >
>> > Do the same for a parallel RLC circuit as shown in the
>> > ASCII art in my "energy sucking" article.
>>
>> Oh that one we drive with a constant voltage.
>
>If you do so, you will miss the cool effects. Just what does
>occur if we drive a parallel LC circuit with a constant
>current at the resonant frequency? Analogy of an analogy:
>it's like driving a capacitor with a constant current. The
>stored enery increases, and the voltage across the components
>increases, but the incoming current does not. Watts is VxI,
>so the input power is increasing! Hang a large resistor
>across that parallel resonant circuit, and you can extract
>power, but hang a much larger resistor across it, and the
>power absorbed by the resistor goes up. Even if the
>constant current source is very feeble, the voltage across
>the LC circuit is only limited by the Q. Because the available
>power depends upon the voltage that has built up across
>the resonator, we can design for extremely high Q and let the
> V build up to an enormous value, which also cranks the output
>power up to an enormous value.
>
>In three dimensions, any analysis would discover that the
>small LC circuit is pulling in energy from a vast region around
itself.
>If we didn't know what was going on, we would be very
>confused by a small LC circuit which apparantly has broken into
>oscillation all by itself, and which is not quenched even if we
>use the thing to light up a lightbulb.

But it would be, of course. The large currents which flow in a driven tank circuit are simply energy sloshing back and forth between E and B fields. Hook a light bulb across and that energy is used up and disipated (no differently than if you'd charged a big capacitor to max voltage and with a small current limited voltage source, and then used it to briefly light a high watt bulb: yout tank circuit using the same size capacitor will store exactly that much energy and no more).

Practical superconductive tank circuits are limited in storage energy by the amount of voltage the capacitor can take, and what its capacitance is (E = 1/2CV62), and by how much current (I) a superconductive inductor can take (E = 1/2LI^2) and not quench and go resistive. These things don't suck energy from anywhere except their own fields. They can store energy from trickle AC sources of sufficient voltage but limited current, but then so can a simple rectifier and capacitor.

2025. Re: Help Plse: trying to find circuit from 73 mag several years ago...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: Clinton <cpeebles@netidea.com>
Message-ID: <37BBF3CF.77B4@netidea.com>
Source record: 67764

Dave VanHorn wrote:
>
> > I just happen to have a bunch of 4N38s and am looking for a cheap way
> > (yes, I am a ham :) to be able to make a cheap H-bridge type thing for a
> > little robot I am playing with :-), modified servos seem to leave

I missed the original post, but are you talking about the
bioelectrifier?
http://www.bioelectrifier.com/

--
Kill the MAI

Remove _nospam_ to reply

Clinton Peebles VE7KNL DN19ie
Salmo, B.C. Canada
E-Mail: cpeebles@netidea.com

2026. Re: voltage regulators

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: Eamon Skelton <nospam@oceanfree.net>
Message-ID: <7pgs6ebno1@fu-berlin.de>
Source record: 67765

Ian Liston-Smith <ian@wireless-sparks.freeserve.co.uk> wrote:

> Hello All,
>
> Three pin 1 A voltage regulators: If a 12v regulator gets 12 volts on
> its output pin, while it has nothing on its input, will it come to any
> harm? Do they have protection if they find themselves being used the
> 'wrong way' around?

Some do, some don't.

> I'm designing a piece of gear that will be used off the mains supply
> and portable 12v. I have put a diode in series with the output pin to
> prevent external volts going into the IC, but this means a 0.7v drop,
> which varies slightly with the load, occurring when used off the mains
> with the IC in use, making the regulation poorer than if it were
> omitted!
>
> Thanks,
>
> G4JQT

Put a rectifier diode between the input and output pins. Connect the
cathode to the input (pin1,) connect the anode to the output (pin3.)

The diode will limit the maximum reverse voltage to 0.7V.

73, Ed. EI9GQ.

--
Eamon 'Ed' Skelton EI9GQ
Cork, Ireland.

My e-mail address really is:
nospam@oceanfree.net

Home brew radio page
http://www.qsl.net/ei9gq

2027. Re: Solder battery case?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <37BBFC78.328FCBBE@erols.com>
Source record: 67766

You're totally wrong on this one, Cliff. I've seen videos of tests done
by a battery testing house for the Gov't on various sized lithium cells.
You'll get a lot more than a face full of electrolyte - try a face full
of flames! That's one reason you can't legally transport a "D" sized
lithium on a pasenger aircraft. In addition, the gasses from a venting
lithium cell can close your airway in a matter of seconds - bad news if
you're in a confined space and can't get out. A shorted lithium cell can
have the same result - that's why the newer types have internal fuses.

Clifford Buttschardt wrote:
>
> Aw come on! use a little common sense! There is no way that any battery
> can "explode" unless you are totally careless with application of heat.
> Any jerk that cooks a solder connection needs a facefull of electrolyte.
> Usual care is just fine for most applications. Cliff K7RR
>
> On Wed, 18 Aug 1999, Bob Lewis wrote:
>
> > You are right, heat can make a lithium battery explode. It probably
> > won't be much with a little watch battery but don't try it with a "D"
> > cell unless your insurance policy is paid up.
> >
> > Victoria Welch wrote:
> > >
> > > Clif Holland wrote:
> > > >
> > > > Jack Taylor wrote:
> > > > >
> > > > > The lithium battery in my TS-440 has gone away. This is a little guy about
> > > > > the size of a quarter and has a couple of leads bonded to each polarity.
> > > > > Found a similar one at Wall Mart but without the leads. Is there a
> > > > > preferred technique for soldering leads onto the battery case?
> > > > >
> > > > > 73 de Jack
> > > > >
> > > > Don't. It has a habit of damaging the battery.
> > > >
> > > I can't confirm this, having never tried it and never knowing anyone who
> > > did, but I have seen warnings that soldering to these kinds of batteries
> > > can cause them to "explode". Not sure just what that means or what the
> > > results of such would spread around inside a piece of (expensive)
> > > equipment. The ones I have seen like this look to me like the wires
> > > have been "spot welded" in place.
> > >

> > > Hope this helps in some way. Be safe :-) and kind to expensive
> > > equipment ;-).
> > > --
> > > Victoria Welch, WV9K, DoD#-13, Net/Sys/WebAdmin SeaStar.org,
> > > vikki.oz.net
> > > "Walking on water and developing software to specification are
> > > easy as long as both are frozen" - Edward V. Berard.
> > > Do not unto others, that which you would not have others do unto you.
> >
> >

2028. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: Roy McCammon <rbmccammon@mmm.com>
Message-ID: <37BC046B.3C9A2912@mmm.com>
Source record: 67767
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

"Steven B. Harris" wrote:

> Practical superconductive tank circuits are limited in storage
> energy by the amount of voltage the capacitor can take, and what its
> capacitance is (E = 1/2CV62), and by how much current (I) a
> superconductive inductor can take (E = 1/2LI^2) and not quench and go
> resistive.

By the way, superconductors are zero resistance only for DC.
For AC they have a small positive resistivity that is frequency
dependent.

2029. Re: voltage regulators

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: drmarc@wwa.com
Message-ID: <0AUu3.248$db5.2203@ord-read.news.verio.net>
Source record: 67768

In article <37bb147a.85787874@news.freeserve.net>,
ian@wireless-sparks.freeserve.co.uk (Ian Liston-Smith) wrote:
>Hello All,
>
>Three pin 1 A voltage regulators: If a 12v regulator gets 12 volts on
>its output pin, while it has nothing on its input, will it come to any
>harm? Do they have protection if they find themselves being used the
>'wrong way' around?
>
>I'm designing a piece of gear that will be used off the mains supply
>and portable 12v. I have put a diode in series with the output pin to
>prevent external volts going into the IC, but this means a 0.7v drop,
>which varies slightly with the load, occurring when used off the mains
>with the IC in use, making the regulation poorer than if it were
>omitted!
>
>Thanks,
>
>G4JQT
>===
>ian@wireless-sparks.freeserve.co.uk

****

I cannot give the technical advice given by others to your question ----
but --- as far as your concern about the .6V diode drop you can put in
another diode parallel and cut the loss in half.

Marc Schneider, Psy.D.
e-mail to: <drmarc@wwa.com>
(call sign: W4NVY)

2030. Re: voltage regulators

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <liVu3.5262$ok3.1591@news.rdc1.il.home.com>
Source record: 67769

> I cannot give the technical advice given by others to your question ----
> but --- as far as your concern about the .6V diode drop you can put in
> another diode parallel and cut the loss in half.

How do you figure that? It's a junction loss (quantum effects) not a
resistive loss.

2031. Re: Solder battery case?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: Bruce Richardson <w9fzw9fz@ix.netcom.com>
Message-ID: <7ph91p$fj9@dfw-ixnews17.ix.netcom.com>
Source record: 67770

Go to Batteries Plus. Surely there is one of their stores in your area.
Get the right battery from them and they cold-weld tabs on at any angle that
you want. They've got the right equipment for the job.

Bruce W9FZ

2032. Re: voltage regulators

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <37BC2726.24C76C3F@erols.com>
Source record: 67771

> as far as your concern about the .6V diode drop you can put in
> another diode parallel and cut the loss in half.
>

No you can't. Diodes don't work like resistors. Put 10 diodes in
parallel and you still have .6V drop. The diode with the lowest drop
will set the voltage and the others will not conduct.

2033. Re: Solder battery case?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <38073225.607380084@news.atl.bellsouth.net>
Source record: 67772

On Wed, 18 Aug 1999 19:15:50 -0700, Clifford Buttschardt <cbuttsch@slonet.org> wrote:
>Aw come on! use a little common sense! There is no way that any battery
>can "explode" unless you are totally careless with application of heat.
>Any jerk that cooks a solder connection needs a facefull of electrolyte.
>Usual care is just fine for most applications. Cliff K7RR

I have a three quarter inch hole through a circuit board and a metal case
that says you're wrong. The lithium button cells *can* explode. What happens
is that the heating from soldering causes the cell to fail internally shorted.
All those joules stored in the cell are then released all at once. Very
pyrotechnic.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

2034. Re: PC templates for recent QST or Handbook projects??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: Zack Lau <zlau@arrl.org>
Message-ID: <37BC3894.BBE45A77@arrl.org>
Source record: 67773

There are templates on page 30.62 of the 1999 ARRL Handbook for the
interface projects in chapter 22.--Zack W1VT

John Mock wrote:

> Last year, i designed and fabricated my own PC card, and just recently
> discovered i needed a level shifter (TTL <-> RS-232) to control a Yaesu
> transciever. So i checked the current ARRL handbook, a good project,
> but no artwork! Checked a QST recent article and same deal. I tried the
> ARRL FTP and WWW sites; there was PIC code (some source, some binary)
> and a modest amount of other technical information. But no PC artwork.
> Have i simply been looking in the wrong place? Or has the trend toward
> 'appliance operators' and a focus on HF operation really impacting taken
> its toll in terms of homebrewing within the ARRL? Is it really the case
> one now needs to order PC cards from a commercial vendorts and that this
> artwork is no longer readily available? (Except possibly via the U.S.
> postal service at the cost that to non-members at least, is no longer
> worth the time and trouble to make one's own PC cards for reasonable
> current projects.) Please someone tell me i'm wrong and the data is
> on-line. And what is happening to homebrewing these days??
>
> Oh, well. I'll wire up the darn thing by hand. *Sigh* Too bad i don't
> have a wire-wrap gun handy; no good for RF, but fine for TTL and some ECL
> with a decent prototype board. *Sigh* Oh, well. Such is life.
>
> -- KD6PAG (Networking Old-Timer, "RF newbie")

2035. L.O.S.A Contribution Form

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: cjX@hth.com
Message-ID: <37bc381b.16290588@news.sverige.net>
Source record: 67774
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

```
List Of Stamp Applications (L.O.S.A for short)
==============================================

If you have done something (big or small) with the BASIC Stamp
that you are willing to tell others please use the form below and
write a short description, nothing fancy is needed just a simple
explanation. If you have source code to share that's even better but
it's not necessary.

Then e-mail the form to:

cj@hth.com

With the following as the subject:

L.O.S.A Contribution

Or you could point your Web-browser to the following URL and fill in
the L.O.S.A form on the Web-page...

http://www.hth.com/losa.htm

The latest version of L.O.S.A is always available at the above
mentioned both in ASCII and in ZIP-file format for easy download.
An index of L.O.S.A is posted to the following mailing lists and
news groups, I will update it approx. once a month.

Mailing lists:

BASIC Stamp Mailing List

News groups:

comp.robotics.misc
comp.home.automation
sci.electronics
sci.electronics.misc
rec.radio.amateur.homebrew

FTP-site:

ftp://ftp.parallaxinc.com/pub/text/losa.txt

You can also find the latest version on the following URL...

http://www.hth.com/losa.htm

[--- cut ---]
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```
================================================================================
- L.O.S.A Contribution Form -
================================================================================
New Contribution [ ] Update [ ]
--------------------------------------------------------------------------------

Title :
Author: Date:

E-mail: (optional)
--------------------------------------------------------------------------------

Stamp model : BASIC Stamp/BS1-IC/BS2-IC/BS2SX-IC
Code available: YES/NO
Filename : (optional)
URL : (optional)
--------------------------------------------------------------------------------
Description : (5-50 rows describing your application)

================================================================================

[--- cut ---]

Regards,

/Christer

[NOTE: Clear the "X" from my e-mail address if you want to e-mail me]

-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
Send and receive serial data over the power lines... For more info
about the PLM-24 Power Line Modem go to http://www.hth.com/plm-24/
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2036. Radio communications underwater!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: Steve H <director@scotia-technologies.co.uk>
Message-ID: <19990819180525859l1@scotia-technologies.co.uk>
Source record: 67775

Can anyone give me some info on sending radio waves through water.
TIA
Steve H

2037. Re: Radio communications underwater!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: mike@corn2.freeserve.co.uk
Message-ID: <37bc3fb6.1120799@news.freeserve.net>
Source record: 67776

use VLF rf, or ultrasonic audio, or even a submerged waterproof audio speaker with an audio amp on the surface

. On Thu, 19 Aug 1999 18:05:25 +0100, Steve H <director@scotia-technologies.co.uk> wrote:

>Can anyone give me some info on sending radio waves through water.
>TIA
>Steve H
>

2038. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37BC4705.5CF91382@teleport.com>
Source record: 67777
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

Roy McCammon wrote:
>
> "Steven B. Harris" wrote:
>
> > Practical superconductive tank circuits are limited in storage
> > energy by the amount of voltage the capacitor can take, and what its
> > capacitance is (E = 1/2CV62), and by how much current (I) a
> > superconductive inductor can take (E = 1/2LI^2) and not quench and go
> > resistive.
>
> By the way, superconductors are zero resistance only for DC.
> For AC they have a small positive resistivity that is frequency
> dependent.

The resistivity at any frequency besides DC is also temperature dependent. The newer high-temperature superconductors have to be cooled way below their critical temperatures to keep RF losses low. Of course, the resistivity of ordinary metals is also temperature dependent, and copper's resistivity is very low at cryogenic temperatures. I haven't followed this for some years, but the earlier high-temperature superconductors had a hard time beating copper. I'm sure they do it pretty handily now, though, since they've greatly improved the grain structure which was a major cause.

Roy Lewallen, W7EL

2039. Re: Radio communications underwater!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37BC4969.D1775D5F@teleport.com>
Source record: 67778

Your problem is attenuation. For pure fresh water, the attenuation is about 0.2 dB per meter for just about any frequency above about 250 kHz. Below that frequency, it will begin decreasing about in proportion to the square root of the frequency. Salt water is a different story. In salt water, the attenuation is large and rises as the square root of the frequency up to about 1 GHz, where it finally stabilizes at a very high value. Here's the attenuation at a few frequencies:

Freq (MHz) Atten per meter (dB)
0.1 12
1 39
10 121
100 369

You get the drift. This is why VLF is used for submarine communications.

I don't have any idea what you might encounter for a typical pond, lake, or river, if that's your interest. Unless it's extremely pure, it would probably be much lossier than the pure fresh water value.

You might consider communication with sound waves (sonar), which propagate with much less loss in water.

Roy Lewallen, W7EL

Steve H wrote:
>
> Can anyone give me some info on sending radio waves through water.
> TIA
> Steve H

2040. TTL project book?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: angell@northernnet.com
Message-ID: <angell-1908991452470001@ts3-12.bemidji.spacestar.net>
Source record: 67779

I am teaching a class this fall and part of the lab time is spend working
with TTL, but nothing the students can build. Does anyone know of a book
that is in print we could use in the class? Thanks

73,
"VC"

2041. 3 pin regs in parallel?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: weathrship@aol.com
Message-ID: <19990819160156.08476.00001610@ng-fa1.aol.com>
Source record: 67780

Hello,
I am wondering if I can use 3 pin regulators properly heatsinked in parallel to increase the output current capability assuming the input current is available?

How would each regulator compete against one another to set the output voltage? I've used a common current and voltage source and several parallel regulators of differing voltage ratings to get a multiple voltage supply, but never
used more than one regulator for a particular voltage.

Thanks in advance.

2042. Re: 3 pin regs in parallel?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <37BC6575.32DCFBB7@erols.com>
Source record: 67781

No, but you can use an external transistor to handle the excess current.
Most of the regulator mfgs. have tech notes on how to do this. The ARRL
handbook also has some info on this. Basically, for a positive regulator
it is using an NPN transistor with the collector to the regulator input,
the base to the regulator output and the emitter to your load.

Weathrship wrote:
>
> Hello,
> I am wondering if I can use 3 pin regulators properly heatsinked in parallel
> to increase the output current capability assuming the input current is
> available?
>
> How would each regulator compete against one another to set the output
> voltage? I've used a common current and voltage source and several parallel
> regulators of differing voltage ratings to get a multiple voltage supply, but
> never
> used more than one regulator for a particular voltage.
>
> Thanks in advance.

2043. HELP!! broken RCI 2950 display

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: "Rodrigo E. Rodriguez R. - CE6NUG" <rod@rdc.cl>
Message-ID: <37BC6C51.B84C4DC4@rdc.cl>
Source record: 67782
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

'lo ppl.
Does anyone knows where can I get a new Ranger RCI 2950 LCD display???
Mine is broken so I can't use the transceiver anymore 'till I change it
for a good one.
Thanks in advance for your help.

Rodrigo E. Rodriguez (Rod.)
CE 6 NUG

2044. Re: TTL project book?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: Victoria Welch <vikki@oz.net>
Message-ID: <7phrkhpuu0@216.39.144.179>
Source record: 67783

"V.C. Angell" wrote:
>
> I am teaching a class this fall and part of the lab time is spend working
> with TTL, but nothing the students can build. Does anyone know of a book
> that is in print we could use in the class? Thanks

I have no idea of the level of the class, but assuming it is fairly low,
Rat Shack puts out the Engineer's Mini-Notebooks by Forrest Mimms III,
which have some interesting projects scattered about that don't get too
complex :-). Might be worth a look - quick - simple, fairly cheap and
available.

Hope this helps in some way.

Take care es 73, Vikki.
--
Victoria Welch, WV9K, DoD#-13, Net/Sys/WebAdmin SeaStar.org,
vikki.oz.net
"Walking on water and developing software to specification are
easy as long as both are frozen" - Edward V. Berard.
Do not unto others, that which you would not have others do unto you.

2045. Re: Radio communications underwater!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-19 00:00:00 UTC
From: "Al, N2NKB"
Message-ID: <7phv1phvh1@bgtnsc02.worldnet.att.net>
Source record: 67784

Optical is the way to go. Blue LEDs.
Al

Steve H wrote in message <19990819180525859l1@scotia-technologies.co.uk>...
>Can anyone give me some info on sending radio waves through water.
>TIA
>Steve H
>

2046. Re: 3 pin regs in parallel?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-20 00:00:00 UTC
From: cbush10383@aol.com
Message-ID: <19990819200218.14372.00001473@ng-fr1.aol.com>
Source record: 67696

A more relianle approach to increasing the output current of three pin regs (i.e. the 78XX series) would be to use an external "Pass" transistor. You don;t say how much current you need but 5 to 6 amps are easily achieved with the addition of a single transistor and a couple of resistors. Need more current? Just parallel more transistors. A note of caution if you choose the latter option...it is recommended that one use emitter ballasting resistors to ensure propper current sharing in the case of multiple parallel pass elements. It is also possible with the addition of a couple more components to retain over current shutdown protection. I have used this approach for applications of upto 30 to 40 amps.

As a source of info I would suggest National Semiconductors' applications notes or their apps manuals it yhey are available to you. If you are unable to locate these sources I can probably find a copy and scan it if necessary.

Good luck,

Bob

2047. Re: Radio communications underwater!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-20 00:00:00 UTC
From: Steve H <director@scotia-technologies.co.uk>
Message-ID: <19990820012307859l1@scotia-technologies.co.uk>
Source record: 67697

I maybe should give some more info....

The range required to be covered would normally be 600 - 700 metres.
I require to send data from various sensors upto around 100 metres
down, i would like a high a data rate as possible so as to send new
data at least once per second.
The data per sensor is 6 bytes long and there will be 6 - 8 sensors,
the whole lot being read by a microcontroller which in turn will
transmit the data to the surface receiver via, now i know the
attenuation figures, a vlf link.

Next question is, what frequencies can i use that i can get parts
(i.e the transducers) for fairly cheaply. I would really like the
transmitter / receiver sections to cost under £60 if possible
(keeping the whole package under £250).

I am an experienced electronics technician so building and testing
these units is not a problem, though i admit to knowing absolutely
nothing about underwater communications.

Thanks for the info so far

PLEASE keep it coming!

Steve H

2048. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-20 00:00:00 UTC
From: Bobby Atkinson <bobbys@prodigy.net>
Message-ID: <01beeaa3$7b76baa0$0100a8c0@ZTU>
Source record: 67698
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

As soon as you do they of course realize that they are missing out selling
you
product and shut you and the farmers who's fences made fine 60Hz antennas
down. Bobby

Mark Fergerson <mfergerson1@home.com> wrote in article
<37B7B312.2C30703C@home.com>...
>
>
> John Woodgate wrote:
> >
> > <7p7crl$856$1@bgtnsc03.worldnet.att.net>, Al, N2NKB
<n2nkb@n2nkb.?.world
> > net.att.net> inimitably wrote:
> > >You have discovered one of my life-long fantasies. You can
> > >set up an array of antennas, rectify the energy, and power all of your
> > >house-hold appliances.
> > >Al
> > Yes, you can. You need a lot of antennas, and the regulatory
authorities
> > would take a very dim view of your activity, but it is possible. There
> > were cases in the 1920s in Britain, when the Daventry transmitter 5XX
> > (200 kHz) first went on-air. Using neon lamps, no rectification was
> > necessary.
>
> Why would they care? Don't commercial transmitter operators take a tax
> loss for "unavoidable signal absorption"? They certainly ought to. No
> real antenna can be sited for perfect radiation. Any signal lost heating
> a mountainside (or my home) doesn't help get the ads out, which pay the
> rent (and taxes). Don't electric utility companies do it? That 60 Hz
> heats a lot of ground... If a power company has to pay "cancer taxes" in
> California, could they sue for unpaid-for absorbed power from the
> "victims"?
>
> Mark L. Fergerson
>

2049. Re: AMP TUNING??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-20 00:00:00 UTC
From: Constantine <wa1wla@juno.com>
Message-ID: <7piclarmt1@nnrp1.deja.com>
Source record: 67699

In article <7pc7jv$1du$1@bgtnsc03.worldnet.att.net>,
"Leon Snider" <leons@worldnet.att.net> wrote:
> I have a homwbrew amp with three adjustable controls: LOAD,PLATE and
> INDUCTOR. I've never been really sure how to tune the INDUCTOR. Anyone
have
> any simple solutions,or comments? Thanks for any help. Leon KE4GG

What "Q" are you shooting for? and how are you going to keep it there
with a tunable inductor?
C Thomas

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2050. Re: Solder battery case?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-20 00:00:00 UTC
From: jadney@vwtype3.org
Message-ID: <37bb62ff.48177054@news.doit.wisc.edu>
Source record: 67700

"Jack Taylor" <n7oo@theriver.com> wrote:

>The lithium battery in my TS-440 has gone away. This is a little guy about
>the size of a quarter and has a couple of leads bonded to each polarity.
>Found a similar one at Wall Mart but without the leads. Is there a
>preferred technique for soldering leads onto the battery case?

Soldering to it will destroy it. These are normally spot welded. Look
for a place that specializes in batteries; around here there is a
"Battery Mart" which can do all of these spot welds.

In the worst case they can tear off the tabs from your old cell and
reuse them on a new one.

Jim
-

Jim Adney jadney@vwtype3.org
Madison,Wisconsin USA

2051. Microwave 1N23 Diodes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-20 00:00:00 UTC
From: WB <willyacht@yahoo.com>
Message-ID: <4_2v3.5243$O_1.35694@ozemail.com.au>
Source record: 67701

Does anyone know who makes these, microwave 1N23 diodes, i used to buy them from NTE but they no longer make them. I use these a lot in my home brew projects. The newer diodes are so small you cant solder them, most are now designed for automated manufacture. If anyone has a source for leaded microwave diodes i would like to know about them. Micorwave associates seem to have an impressive catalogue, but getting parts from them is like pulling teeth. Micorwave alarm manufacturers must be getting theres from somewhere. Any advice?

Thanks
Will

2052. Icom Sm 20 Mic

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-20 00:00:00 UTC
From: John Woolem <jwoolem@flash.net>
Message-ID: <37BCC5A1.706E4940@flash.net>
Source record: 67702

I have a nice Sm 20 Mic for 150 and I ship

--
Amateur Radio Station N5TKG

2053. Re: Microwave 1N23 Diodes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-20 00:00:00 UTC
From: quatsein@island.net
Message-ID: <37bcd9fc.5430238@news.cr.island.net>
Source record: 67703

Check with your local marine radar repair depot. Steve Carlisle

On Fri, 20 Aug 1999 12:20:32 +1000, "WB" <willyacht@yahoo.com> wrote:

>Does anyone know who makes these, microwave 1N23 diodes, i used to buy them
>from NTE but they no longer make them. I use these a lot in my home brew
>projects. The newer diodes are so small you cant solder them, most are now
>designed for automated manufacture. If anyone has a source for leaded
>microwave diodes i would like to know about them. Micorwave associates seem
>to have an impressive catalogue, but getting parts from them is like pulling
>teeth. Micorwave alarm manufacturers must be getting theres from somewhere.
>Any advice?
>
>Thanks
>Will
>
>

2054. Re: 4E27's in grounded Grid operation

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-20 00:00:00 UTC
From: Ray Garcia <jetronix@earthlink.net>
Message-ID: <37BCFC47.B4B8BB99@earthlink.net>
Source record: 67704

"William L. Fuqua III" wrote:
>
> I would like to hear from those of you that have
> used 4E27's in grounded grid operation. I found a
> military amplifier for 70 to 100 MHz that had the
> tank coils removed, but most of it is still there.
> And it would be easy to make an HF amplifier from it.
> I'd put in 813's but I would have to replace the
> filament transformer. And not enough head room for the
> taller tubes.
> If you have some useful information please let me
> know. Especially if you had problems.
>

I didn't know you could still get 4E27s. The Japanese audio guys are on
to them in a big way now...

2055. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-20 00:00:00 UTC
From: Science Hobbyist <bbeaty@microscan.com>
Message-ID: <7pj78n$e75$1@nnrp1.deja.com>
Source record: 67705
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

In article <7piimv$eok@dfw-ixnews16.ix.netcom.com>,
mzenier@netcom.com (Mark Zenier) wrote:

> This brings up the question: What happens to a resonant antenna
> when the illumination stops? Or starts?
>
> The effective size of the antenna would be indicated by how fast the
> energy in the resonant circuit builds up over time, not what its
> steady state value ends up being.

A good point, especially if the resonant circuit has
no load (infinite Q). On the other hand, if the Q
is finite, then the effective size should depend on
the intercepted energy. If I can coax my antenna into
intercepting more energy per second, then that antenna
has a larger effective size. The energy stored in the
resonant system is besides the point.

--
((((((((((((((((((((((O)))))))))))))))))))))
William Beaty bbeaty@microscan.com
Software Engineer http://www.microscan.com
Microscan Inc., Renton, WA 425-226-5700 x1135

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2056. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-20 00:00:00 UTC
From: Science Hobbyist <bbeaty@microscan.com>
Message-ID: <7pj847euf1@nnrp1.deja.com>
Source record: 67706
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

In article <7pgoc2$apj@dfw-ixnews5.ix.netcom.com>,
sbharris@ix.netcom.com(Steven B. Harris) wrote:
> In <7pf3fqfom1@nnrp1.deja.com> Science Hobbyist
> <bbeaty@microscan.com> writes:
>
> >If we didn't know what was going on, we would be very
> >confused by a small LC circuit which apparantly has broken into
> >oscillation all by itself, and which is not quenched even if we
> >use the thing to light up a lightbulb.
>
> But it would be, of course. The large currents which flow in a
> driven tank circuit are simply energy sloshing back and forth between E
> and B fields.

Obviously true.

>Hook a light bulb across and that energy is used up and
> disipated (no differently than if you'd charged a big capacitor to max
> voltage and with a small current limited voltage source,

Not so obvious. Yes, if the tank circuit was not connected to
an antenna, then the only available energy would be in the
tank circuit. When the antenna is connected and energy
is being received, something very odd occurs: the received
energy depends on the voltage/current which has built up
in the tank circuit.

Please refer again to the ASCII diagrams in this article:

http://www.amasci.com/tesla/tesceive.html

As a voltage-mode receiver (capacitive antenna, not loop antenna)
we find that, as the voltage builds up across the tank circuit, the
current being injected into the antenna does not fall fast enough,
and so the total energy coming into the tank circuit is higher when
the voltage across the tank circuit is higher. Very strange effect,
unless we imagine the incoming radiation to be a constant-current
source. When any load is connected to a constant current source,
the amount of received energy is larger when the voltage across the
load is larger.

Yes, we might expect that when the voltage builds up across the
tank circuit, the incoming current should fall equally, and the incoming
power should remain constant. As far as I can see, this is NOT what
actually occurs. (Yes, I do need more evidence than just some

physics papers which support the concepts.)

> Practical superconductive tank circuits are limited in storage
> energy by the amount of voltage the capacitor can take, and what its
> capacitance is (E = 1/2CV62), and by how much current (I) a
> superconductive inductor can take (E = 1/2LI^2) and not quench and go
> resistive.

Very true. A worthwhile device might take the form of a thin
superconductive pipe wound into a very large coil, and using
the turn-to-turn spacing as its capacitor. Very expensive to
build and maintain!

>These things don't suck energy from anywhere except their
> own fields.

Please track down the Bohren paper and the paper in that
Russian physics journal. Don't believe me, go and see what
the physicists say about this. They show that resonance
can increase the area of EM wave interception of small
"antennas" by unexpectedly large amounts.

As long as I sit on my butt and theorize, and don't build
any actual equipment, all this stuff is a matter of belief
versus disbelief. If you are dead certain that a tank circuit
cannot make a small antenna "suck energy", then that is
irrelevant, since only an experiment can demonstrate whose
beliefs are accurate and whose are faulty.

(((((((((((((((((((((((O)))))))))))))))))))))))
William Beaty bbeaty@microscan.com
Software Engineer http://www.microscan.com
Microscan Inc., Renton, WA 425-226-5700 x1135

Sent via Deja.com http://www.deja.com/
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2057. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-20 00:00:00 UTC
From: Science Hobbyist <bbeaty@microscan.com>
Message-ID: <7pj892$ev0$1@nnrp1.deja.com>
Source record: 67707
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

In article <37BC046B.3C9A2912@mmm.com>,
rbmccammon@mmm.com wrote:
> "Steven B. Harris" wrote:

> By the way, superconductors are zero resistance only for DC.
> For AC they have a small positive resistivity that is frequency
> dependent.

Now THAT's good to know about. Might you know the
mechanism behind this resistivity? If it involves flux-pinning,
then it probably only applies to type-II SC materials.
(We'd have to build an 'ideal' resonator from lead and
use liquid helium as coolant.)

--
((((((((((((((((((((((O)))))))))))))))))))))
William Beaty bbeaty@microscan.com
Software Engineer http://www.microscan.com
Microscan Inc., Renton, WA 425-226-5700 x1135

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2058. Re: 3 pin regs in parallel?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-20 00:00:00 UTC
From: Arjen Raateland <Arjen.Raateland@vyh.fi>
Message-ID: <37BD539B.E88@vyh.fi>
Source record: 67708

Bob Lewis wrote:
>
> No, but you can use an external transistor to handle the excess current.
> Most of the regulator mfgs. have tech notes on how to do this. The ARRL
> handbook also has some info on this. Basically, for a positive regulator
> it is using an NPN transistor with the collector to the regulator input,
> the base to the regulator output and the emitter to your load.

I don't think the way described above is the best way to do it, or even advisable.

A PNP transistor is commonly used with the collector to the (positive) regulator output, the base to the regulator input and the emitter to the raw voltage from the reservoir caps.

Better look it up in a good book for all the details.

The original question was describing a very strange way of handling regulators.... Parallelling regulators ... with different design voltages? I think it's unsound design practice to even connect regulators in parallel that have the same design voltage. I would have to re-read the original message to appreciate it fully.

cheerio,
--
Arjen Raateland
Finnish Environment Institute
SAS Support
phone +358 9 4030 0350

2059. Auction

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-20 00:00:00 UTC
From: Bob Grosse N9KXG <Auction@NoSpamquality-enterprises.com>
Message-ID: <37BD69F1.E262813B@NoSpamquality-enterprises.com>
Source record: 67709

The Online Hamfest Classifieds has expanded it's service to the Amateur Radio Community with the addition of the Online Hamfest Auction. The service is FREE for all to use and enjoy.

http://quality-enterprises.com/tcrg/onlinefest/

2060. Ham Radio Swap

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-20 00:00:00 UTC
From: "Danny (ko6oy) OR Linda (ad6lt)" <ko6oy@jetlink.net>
Message-ID: <37BD7052.F1194FCF@jetlink.net>
Source record: 67710

Due to circumstances beyond our control...
The SMRA Ham Radio Swap Page has moved to...
http://www.jetlink.net/~ko6oy/swapage4.htm

Stop by for a visit ..
For Sale, Wants & Trades !!
List your items for FREE !!!
Thanks,
73 Danny ko6oy

2061. Re: Radio communications underwater!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-20 00:00:00 UTC
From: "D.Pearce" <depearce@netscape.net>
Message-ID: <37BD7122.FAB85EC4@netscape.net>
Source record: 67711

There were plans about 30 years ago for a radio controlled submarine that could be used in a swimming pool. You used a standard 11 meter band radio control unit with I believe an antenna wire laid into the water. Today, I see occasionally articles in ship modeling magazines of model ships and submarines being used on large ponds. You might try the local magazine shop to also get leads from people that have actual experience.

2062. Re: Solder battery case?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-20 00:00:00 UTC
From: Jack Taylor <n7oo@theriver.com>
Message-ID: <ZIfv3.15526$gO1.521807@news2.giganews.com>
Source record: 67712

Thanks for all the usefull input! We've decided to not attempt to solder the Wal Mart lithium battery (Although we've soldered to nicad battery cases in the past). Someone suggested Mouser as a source and indeed they have no minimum and only charge actual UPS costs. They have CR2450 leaded versions (not an exact replacement) for $2.20 and holders for the non-leaded version for 86 cents. We've ordered both, so we're well covered :-)

73 de Jack

Jim Adney wrote in message <37bb62ff.48177054@news.doit.wisc.edu>...
>"Jack Taylor" <n7oo@theriver.com> wrote:
>
>>The lithium battery in my TS-440 has gone away. This is a little guy
about
>>the size of a quarter and has a couple of leads bonded to each polarity.
>>Found a similar one at Wall Mart but without the leads. Is there a
>>preferred technique for soldering leads onto the battery case?
>
>Soldering to it will destroy it. These are normally spot welded. Look
>for a place that specializes in batteries; around here there is a
>"Battery Mart" which can do all of these spot welds.
>
>In the worst case they can tear off the tabs from your old cell and
>reuse them on a new one.
>
>Jim
>-
>--
> Jim Adney jadney@vwtype3.org
> Madison,Wisconsin USA
>--

2063. Re: voltage regulators

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-20 00:00:00 UTC
From: ian@wireless-sparks.freeserve.co.uk
Message-ID: <37bd87e6.3314029@news.freeserve.net>
Source record: 67713

On Wed, 18 Aug 1999 20:24:58 GMT, ian@wireless-sparks.freeserve.co.uk
(Ian Liston-Smith) wrote:

>Hello All,
>
>Three pin 1 A voltage regulators: If a 12v regulator gets 12 volts on
>its output pin, while it has nothing on its input, will it ...Blahh, blahh

Thank you everyone for the replies to this post. Very helpful.

73,
Ian

===
ian@wireless-sparks.freeserve.co.uk

2064. Re: TTL project book?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-20 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <37BD8484.65A3850F@midwestmicro-tek.com>
Source record: 67714

Don Lancaster's TTL cook book might do. Depending on the level of the class.

V.C. Angell wrote:

> I am teaching a class this fall and part of the lab time is spend working
> with TTL, but nothing the students can build. Does anyone know of a book
> that is in print we could use in the class? Thanks
>
> 73,
> "VC"

2065. Re: Radio communications underwater!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-20 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <37BD8417.D592B8B2@midwestmicro-tek.com>
Source record: 67715

Hi Steve,

Don't know if this is the way you want to go but a few years ago I help
a company doing about the same thing that your trying to do. They want
to get information from the bottom of a 4000 ft drop in the Atlantic
They eventually wound up using an RS-485 link. The only problem with
that is ofcourse that it is a wire link and not a radio link. Most
RS-485 Stuff is good for up to 5000 ft or about 1600 metes. I don't know
if you can use a "teathered" link but it would certainly be more
reliable and keep the cost down.

Steve H wrote:

> I maybe should give some more info....
>
> The range required to be covered would normally be 600 - 700 metres.
> I require to send data from various sensors upto around 100 metres
> down, i would like a high a data rate as possible so as to send new
> data at least once per second.
> The data per sensor is 6 bytes long and there will be 6 - 8 sensors,
> the whole lot being read by a microcontroller which in turn will
> transmit the data to the surface receiver via, now i know the
> attenuation figures, a vlf link.
>
> Next question is, what frequencies can i use that i can get parts
> (i.e the transducers) for fairly cheaply. I would really like the
> transmitter / receiver sections to cost under ï¿½60 if possible
> (keeping the whole package under ï¿½250).
>
> I am an experienced electronics technician so building and testing
> these units is not a problem, though i admit to knowing absolutely
> nothing about underwater communications.
>
> Thanks for the info so far
>
> PLEASE keep it coming!
>
> Steve H

2066. High voltage transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-20 00:00:00 UTC
From: Tony Baldwin <baldwint@amsat.org>
Message-ID: <7pk3mdper1@fraggle.esatclear.ie>
Source record: 67716

Hi, is it possible to run a pair of identical mains transformers to get a
higher secondary voltage ?

In other words, can I run a pair of 0 -- 350v transformers to give me
350 -- 0 -- 350.
Reason ? High voltage transformers are like hens teeth in Ireland :(

73 de Tony, EI2FSB

2067. Re: High voltage transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-20 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <37BD96A5.846421D9@erols.com>
Source record: 67717

Sure, as long as you get the polarities correct.

Tony Baldwin wrote:
>
> Hi, is it possible to run a pair of identical mains transformers to get a
> higher secondary voltage ?
>
> In other words, can I run a pair of 0 -- 350v transformers to give me
> 350 -- 0 -- 350.
> Reason ? High voltage transformers are like hens teeth in Ireland :(
>
> 73 de Tony, EI2FSB

2068. Re: HELP! Tube Guru's Advice Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-20 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <37BDB614.6BC49930@corecomm.net>
Source record: 67718

Rick Haub wrote:
> I finished building a CW, 75 watt, 80m transmitter last night. I uses
> the 1625 final and it is crystal controlled at 3.710MHz. I got the
> design from the 1967 ARRL Radio Amatuer Handbook. I've never built a
> tranmitter before and I have some questions about its operation.

Oldest Handbook I have is 1969 and it's not in there. Any chance of you
scanning the schematic and putting it on a web site, or posting it in an
appropriate place such as alt.binaries.schematics.electronic?

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+

2069. Re: Solder battery case?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-20 00:00:00 UTC
From: Dave Shrader <dshrader@earthlink.net>
Message-ID: <37BDAFE7.687A6985@earthlink.net>
Source record: 67719

Ablestik makes conductive epoxy!!

Robert Mozeleski wrote:

> they do make a conductive epoxy...who they are i dont know...
>
> Jack Taylor <n7oo@theriver.com> wrote in message
> news:NkAu3.11309$gO1.419159@news2.giganews.com...
> > The lithium battery in my TS-440 has gone away. This is a little guy
> about
> > the size of a quarter and has a couple of leads bonded to each polarity.
> > Found a similar one at Wall Mart but without the leads. Is there a
> > preferred technique for soldering leads onto the battery case?
> >
> > 73 de Jack
> >
> >
> >

2070. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-20 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <OKZAPIBIgav3Ew9i@jmwa.demon.co.uk>
Source record: 67720
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

<7pj847euf1@nnrp1.deja.com>, Science Hobbyist <bbeaty@microscan.com>
inimitably wrote:
> Very strange effect,
>unless we imagine the incoming radiation to be a constant-current
>source.

Capacitive antennas normally *are* current sources. For example, a wire
antenna with capacitance of 50 pF at 1 MHz is 3.2 kohms reactance,
whereas the resistive part is a few ohms.
--
Regards, John Woodgate, OOO - Own Opinions Only.
Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
Did you hear about the hungry genetic engineer who made a pig of himself?
PLEASE DO ****NOT**** MAIL COPIES OF NEWSGROUP POSTS TO ME!!!!

2071. Re: FS:4CX1500B

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-20 00:00:00 UTC
From: Shitface <yankmycrank@hotmail.com>
Message-ID: <K%lv3.2728$aa.1330@insync>
Source record: 67721
Cross-posted to:
alt.ham-radio.marketplace,alt.radio.cb.skip,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.cb,rec.radio.swap

How much?

--Shitface

dennis <bigd422@earthlink.net> wrote in message
news:7phoelpbu1@oak.prod.itd.earthlink.net...
> FS:4CX1500B PULL EX CON +S.H.
>
>
>

2072. Re: Solder battery case?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-20 00:00:00 UTC
From: PHILIPSABATKA@webtv.net
Message-ID: <7113-37BE005B-68@newsd-272.iap.bryant.webtv.net>
Source record: 67722

JACK
RADIO SHACK HAS A HOLDER FOR THAT BATT.

THANKS PHIL

2073. Re: Radio communications underwater!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-20 00:00:00 UTC
From: Spam Bin <nospam@scotia-technologies.co.uk>
Message-ID: <19990820215039859 11@scotia-technologies.co.uk>
Source record: 67723

The message <37BD8417.D592B8B2@midwestmicro-tek.com>
from Rick Haub <rhaub@midwestmicro-tek.com> contains these words:

> Hi Steve,

> Don't know if this is the way you want to go but a few years ago I help
> a company doing about the same thing that your trying to do. They want
> to get information from the bottom of a 4000 ft drop in the Atlantic
> They eventually wound up using an RS-485 link. The only problem with
> that is ofcourse that it is a wire link and not a radio link. Most
> RS-485 Stuff is good for up to 5000 ft or about 1600 metes. I don't know
> if you can use a "teathered" link but it would certainly be more
> reliable and keep the cost down.

Thanks for the reply. Unfortunately i MUST use a radio link, not a wire link.
I am going to try amplyfing the signal from our signal generator upto
around 1 watt and using a shortwave RX to test attenuation per metre
according to frequency.
We have a lot of sea lochs up here in the western isles, so finding a
quite sheltered spot will be easy.

Regards
Steve H

2074. Do Power Inverters Make a Lot of RFI?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-21 00:00:00 UTC
From: Bill Youse <byouse@home.com>
Message-ID: <37BF00AC.FED8B5A8@home.com>
Source record: 67635

I'm thinking about buying a 500 watt inverter for running a computer and maybe a small refrigerator for emergency use. Will it make a lot of RFI on the HF bands? Whistler, Statpower and Cherokee are the brands I'm considering. If anyone has experience with these for field day, etc. I'd would like to know how much radio noise they make.

Thanks, Bill
N6DZS

2075. Re: Favorite tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-21 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37BF03B1.334FD18D@teleport.com>
Source record: 67636

For audio output, you really need a metal 6L6 (better yet, a pair) to learn the true meaning of "hot". It also gives a pretty good idea of "loud". A metal 6V6 could be used, but REAL MEN use 6L6s. You can't see 'em glow, but there's no problem convincing yourself that they are.

Roy Lewallen

Bob Liesenfeld wrote:
>
> Hi gang,
> I'm thinking of building some "glowing" rigs. If you had to pick just
> a few tubes for HF recieving purposes, ie, RF amp, IF, audio, etc, what
> would your choices be?
>
> 72
>
> Bob 'POQ
> --
> Genuine E-mail From the Land of the Everlasting Icicle...
> Bob Liesenfeld
> wb0poq@visi.com

2076. WTD battery pack BP-84 or

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-21 00:00:00 UTC
From: kable guy minn <n0mnb@minn.net>
Message-ID: <7pn69j$4k4$1@news.minn.net>
Source record: 67637
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,slac.rec.ham_radio

need icom w2a battery pack. the one that u can use alkline batteries with

n0mnb@minn.net

2077. Radio HELP!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-21 00:00:00 UTC
From: nathan_c_harris@worldnet.att.net
Message-ID: <37c222bf.28110140@netnews.worldnet.att.net>
Source record: 67638

I have to replace the LCD in my HT Alinco DJ-G5 and I have the replacement LCD and the LCD rubbers (they are what the LCD sits on and are what are actually attached to the board). Anyway, when I was disassembling the radio the LCD was firmly attached to the rubbers (which have a conductive center) but neither the LCD nor the rubbers came with any type of adhesive! So is there some kind of conductive adhesive out there for me to use or what?!?

Any, ANY help is greatly appreciated.

Nate
N5VSH

2078. Re: Radio HELP!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-21 00:00:00 UTC
From: The Ronneys <pronney@sprynet.com>
Message-ID: <7pngipadr1@nntp2.atl.mindspring.net>
Source record: 67639

Hi Nate.
Don't panic. The "conductive elastomeric connectors" (I think that's the name) are designed to just be squashed between the PC board and the conductors on the LCD glass. At work, we purchase LCD glass and use this type connector to make the electrical connection to the board we make. No adhesive should be used. There should be a bezel or some other type of hold-down to keep the pressure on the sandwich of the LCD, connector(s) and the PC board.

Note that the connector is actually a series of conductive and non-conductive layers standing up on end, so that any conductive adhesive would short the conductors together and the LCD would not work.

Martin Ronney, WB6YMI

Nate Harris wrote in message <37c222bf.28110140@netnews.worldnet.att.net>...
>I have to replace the LCD in my HT Alinco DJ-G5 and I have the
>replacement LCD and the LCD rubbers (they are what the LCD sits on and
>are what are actually attached to the board). Anyway, when I was
>disassembling the radio the LCD was firmly attached to the rubbers
>(which have a conductive center) but neither the LCD nor the rubbers
>came with any type of adhesive! So is there some kind of conductive
>adhesive out there for me to use or what?!?
>
>Any, ANY help is greatly appreciated.
>
>Nate
>N5VSH
>

2079. Re: Radio HELP!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-21 00:00:00 UTC
From: "Al, N2NKB"
Message-ID: <7pni6c$n60$1@bgtnsc03.worldnet.att.net>
Source record: 67640

Martin is correct. I have also seen the phenomenon which you
mentioned, "the LCD was firmly attached to the rubbers".
Without being scientific about this, sometimes materials that are compressed
against each other for a long time stick to each other.
I have seen this happen with rubber quite often.... oil filter grommets,
old car radio clutches for the tuning assembly, etc.
I'm not sure if it is due to molecule migration, but the "zebra strips"
(or conductive elastomeric connectors) are held in place only by
compression.

Nate, did your original LCD crack? Just curious what the failure
mechanism was.
Al Rooney (one character away from Ronney!)

>(which have a conductive center)
The Ronneys wrote in message <7pngipadr1@nntp2.atl.mindspring.net>...
>Hi Nate.
> Don't panic. The "conductive elastomeric connectors" (I think that's
>the name) are designed to just be squashed between the PC board and the
>conductors on the LCD glass. At work, we purchase LCD glass and use this
>type connector to make the electrical connection to the board we make. No
>adhesive should be used. There should be a bezel or some other type of
>hold-down to keep the pressure on the sandwich of the LCD, connector(s) and
>the PC board.
>
>Note that the connector is actually a series of conductive and
>non-conductive layers standing up on end, so that any conductive adhesive
>would short the conductors together and the LCD would not work.
>
>Martin Ronney, WB6YMI
>
>Nate Harris wrote in message
<37c222bf.28110140@netnews.worldnet.att.net>...
>>I have to replace the LCD in my HT Alinco DJ-G5 and I have the
>>replacement LCD and the LCD rubbers (they are what the LCD sits on and
>>are what are actually attached to the board). Anyway, when I was
>>disassembling the radio the LCD was firmly attached to the rubbers
>>(which have a conductive center) but neither the LCD nor the rubbers
>>came with any type of adhesive! So is there some kind of conductive
>>adhesive out there for me to use or what?!?
>>
>>Any, ANY help is greatly appreciated.
>>
>>Nate
>>N5VSH

>>
>
>

2080. Miniature Metal Lathe, Attachments

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-21 00:00:00 UTC
From: James Parsons <k5rov@earthlink.net>
Message-ID: <37BF4D63.DE490032@earthlink.net>
Source record: 67641

I have an Emco Unimat-3 metal lathe complete with most accessories. I bought this new some years ago and became ill shortly after. I put some use on it but not much. I have kept it sprayed with WD-40.

Some attachments have not been used. The attachments include three jaw chuck, four jaw chuck, thread cutting attachment with three of the most HAM used followers (others available from retail outlets), milling table, faceplate, steady rest, taper turner, power feed attachment, vertical milling attachment, vertical fine feed attachment, dividing attachment, spare cutting tools, and more....

I also have the original manual and some applicable manuals. Also included is a vertical/horizontal metal cutting saw, Professional quality micrometer, combination square, inside and outside calipers, dial test indicator, dial vernier, and more...

I have three or four boxes of steel stock, aluminum stock, and there may be some brass stock also, but I have not looked.

I have 2200 dollars in the lathe and accessories alone. Of course, now they are used. My health will not allow use of these tools, so it is time to get rid of them.

I would like to work out a trade for an Icom 756, or I might sell. But here is the problem...it must be picked up only. Its small, but heavy when the stock is included. And, I would not be able to pack it. I live in San Angelo, Texas.

I have to go to the hospital every week for chemo, and may not answer right away. I am here on weekends but usually gone during the middle of the week.

Best 73,

Jim, K5ROV
--

James (Jim) Parsons, K5ROV USAF, Ret. Ham for 58 yrs.
k5rov@earthlink.net QCWA, NWQRP, Fists, ARRL
EX: W1RLA, K5FBB, K4FEO, SV0WN (CRETE), SV0WN (RHODES),
DL4NC, DL4JP, KA2FC (JAPAN), KA2JP (JAPAN).
JOHN 3:16

2081. Test Equipment FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-21 00:00:00 UTC
From: Ken Simpson <W8EK@usa.net>
Message-ID: <Ojnv3.3815$1B5.261453@monger.newsread.com>
Source record: 67724

Test Equipment FS:

Keithley 169 Digital Multimeter, Lab type, but powered
by 6 "C" cells, so can be used in the field, if desired.
Nice large LCD display. $ 125

Heath IM-2400 Frequency Counter. Good to over 500 MHz.
Handheld unit. $ 60

Heath low voltage power supply. It is the Heath IP-27. It is a
low voltage power supply, fully adjustable from about 0.5 Volts to 50
Volts. It also has current limiting that is built in and adjustable
from a couple ma up to 1.5 amps. There is also a nice large meter for
measuring current or voltage. The supply is "floating", so can be
used for either plus or minus supplies. It is the "Heath Brown"
color. Manual included. $100

Prices do not include shipping from Florida.

E-mail to W8EK@fdt.net

Thanks.

73,

Ken, W8EK

Ken Simpson
E-Mail to W8EK@fdt.net or W8EK@juno.com
Voice Phone (352) 732-8400

2082. FOR SALE OR BUY - CHECK THIS OUT!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-21 00:00:00 UTC
From: compcnsult@aol.com
Message-ID: <19990821004029.24744.00001663@ng-cj1.aol.com>
Source record: 67725

Visit the new online Hamfest:

http://www.ehamfest.com

All ads placed free until 10/1/99

What do you have to lose!

2083. --LQQK-- Equipment 4 Sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-21 00:00:00 UTC
From: radiodoc37@aol.com
Message-ID: <19990821022042.05311.00001909@ng-fe1.aol.com>
Source record: 67726

Dentron MT2000 legal limit antenna tuner, very good condition. $150.00 Plus shipping

National NC-46 Receiver, Excellent condition inside, Repainted cabinet is so..so,
with manual $100.00 plus shipping

SBE 6 tube linear base amplifier, uses six 6LQ6 tubes, 15-80 meters
Easy 600 watts peak output $250.00 plus shipping

Johnson Viking Mdl 1 AM/CW transmitter, plate modulated 6146's
good condition with manual $150.00 plus shipping, pick up in So. Cal. $150.00

Alan CTE RMS watt meter, 10/100/1000 watts $25.00

Uniden Force, commercial 36 channel mobile transceiver, tuned and programmed for 6 meters, With spare Eproms and manual $140.00 plus shipping

Siltronics Mdl 90 VFO, -6 model, very good condition $60.00 Plus shipping

Siltronics, 1011C transceiver with manual, Not tested, receives $100.00 Plus shipping

ElectroVoice 664 desk mic, beautiful desk mic $100.00 Plus shipping Sold

Yaesu FT101EE, great condition, original NEC tubes working to full output, Stock mic, AC/DC cord, Manual $320.00 Plus shipping

Yaesu FL2100B amplifier, 10-80 meters, Uses a pair of 572Bs, Great condition, Full output, Manual $380.00 Plus shipping Sold

Gonset GSB-101 amplifier, Uses three 811 tubes, Clean condition,
with manual $225.00 Pick up in SO. Cal

JAZZ, 1Gb SCSI Drive, New In Box with one cartridge (New), cable manual, mounting kit etc. $150.00 Shipped SOLD

Home Brew 10 meter amplifier, Uses three 24 volt version of the 6146 tube, Made from a military PA deck, Homebrew supply, open chassis construction, RF sensing, Meter, Bias adjust, plate/load controls etc. $100.00 Plus shipping

Messenger 250 Classic 23 channel 11 meter radio, 50th anniversary, Brown and gold
beautiful radio with Box, $60.00 SOLD

Amplifier, 10 meter, General Linear System PA deck using two 6LQ6s driving one 3-500Z, This is a 2 Peice amplifier mounted in what looks like a 3 drawer night stand, I call it the "Furniture Amplifier" Very unique $350.00 Pick up in So. Cal.

Tram D201, Good condition, Great AM, weak SSB, Maybe a tube, Manual $210.00

McCormick Commercial mobile radio, programmed with 16 packet frequencies, 40 watts output, great receive, AEA PK88 with manual, Both $170.00 plus shipping

6LQ6 Pulls, good output $20.00 Each

Abandoned Browning MKIII project, 2 receivers, 2 transmitters, One receiver works great, the other fair, New Nuvistors in both receivers, was in the process of making one good transmitter from the two, One transmitter missing knobs and the eagle. SAMs Service Manual, Pick up in So. Ca. area $300.00

Cobra 19 plus with Turner new Turner clone hand power mic $50.00

Uniden Force UHF Desktop repeater, 40 watts, with Uniden COR and PL Board.Currently on 446.875/441.875, with complete manuals and schematics.
Cellwave 6 cavity flat pack Duplexer
MCC RC1000 Full feature controller, Auto patch, CW ID, Remote Base Many programmable feature from your handheld. With manual
Uniden Force 6 Meter Commercial, programmed with 30+ six meter simplex and repeater freqs, spare Eproms, Manual
Radio Shack HTX404 UHF handheld, With manual, Battery packs and charger
Complete package $750.00

All Items shipped upon receipt of MO, Personal checks will need to clear before shippment. References available, Delivered UPS ground or Priority mail.
Pics available upon request

Mike
(805) 526-5487

2084. Re: High voltage transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-21 00:00:00 UTC
From: lctupac@aol.com
Message-ID: <19990821030424.23593.00002089@ng-fs1.aol.com>
Source record: 67727

If you want to hook them up as a 350 - 0 - 350, there should be no problem. Just pay attention to the phasing.

If you hooked them up as a 0 - 350 - 700 you would have to worry about the primary to secondary breakdown voltage.

2085. Re: (none)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-21 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <38159b72.755322632@news.atl.bellsouth.net>
Source record: 67728

On 17 Aug 99 06:35:30 GMT, luke@trio.COM.AU (Luke Enriquez) wrote:
>Hi Bert,
>
>>Date: Sun, 15 Aug 1999 21:38:58 -0500
>>From: "Bert Douglas" <bertdNOSPAM@bellsouth.net>
>>Subject: lower cost RF design software ?
>
>>ARRL radio designer software works for me on a Win95A machine, but not on
>a Win95B (OSR2) machine.
>
>I have exactly the same problem. It crashes Win95b hard (ie: Hardware Reset
>Required)!!!

Works fine on the OSR2 machine.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

2086. Re: Radio communications underwater!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-21 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <38169c72.755578898@news.atl.bellsouth.net>
Source record: 67729

On Fri, 20 Aug 1999 01:23:07 +0100, Steve H <director@scotia-technologies.co.uk> wrote:
>I maybe should give some more info....
>
>The range required to be covered would normally be 600 - 700 metres.
>I require to send data from various sensors upto around 100 metres
>down, i would like a high a data rate as possible so as to send new
>data at least once per second.
>The data per sensor is 6 bytes long and there will be 6 - 8 sensors,
>the whole lot being read by a microcontroller which in turn will
>transmit the data to the surface receiver via, now i know the
>attenuation figures, a vlf link.
>
>Next question is, what frequencies can i use that i can get parts
>(i.e the transducers) for fairly cheaply. I would really like the
>transmitter / receiver sections to cost under ï¿½60 if possible
>(keeping the whole package under ï¿½250).
>
>I am an experienced electronics technician so building and testing
>these units is not a problem, though i admit to knowing absolutely
>nothing about underwater communications.

44 kHz ultrasonic transducers are common, used to be standard
for TV remote controls before IR took over. There are special
transmitter and receiver chips to communicate data with these
things available too. As most everyone has told you, RF from the
depths is a serious problem. Ultrasound is a better approach.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

2087. Re: Solder battery case?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-21 00:00:00 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <G6zv3.6901$ok3.1934@news.rdc1.il.home.com>
Source record: 67730

> Thanks for all the usefull input! We've decided to not attempt to solder
> the Wal Mart lithium battery (Although we've soldered to nicad battery
cases
> in the past).

Different chemistry, and it's not good for the nicad either. It just
dosent' immediately destroy the cell, or cause it to explode in your face.

2088. Re: Radio communications underwater!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-21 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <37f9c463.1992620727@news.sci.fi>
Source record: 67731

On Sat, 21 Aug 1999 12:35:14 GMT, ke4zv@bellsouth.net (Gary Coffman)
wrote:

: 44 kHz ultrasonic transducers are common, used to be standard
: for TV remote controls before IR took over. There are special
: transmitter and receiver chips to communicate data with these
: things available too. As most everyone has told you, RF from the
: depths is a serious problem. Ultrasound is a better approach.

While ultrasound certainly is a good alternative to radio
transmissions, there may be problems, if there are layers of water
with different temperature or salinity. The sound might not reach the
surface, but instead, it might be refracted in a similar way as radio
waves are ducted in the troposphere.

On the other hand, the problem with LF/VLF, which propagates to some
degree in the water, is that the antenna has to be quite large to give
reasonable efficiency.

Paul OH3LWR

2089. Re: (none)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-21 00:00:00 UTC
From: Jonesy <jonz@rmi.nospam.net>
Message-ID: <7pmmp5dvi1@news1.rmi.net>
Source record: 67732

Gary Coffman <ke4zv@bellsouth.net> wrote:
...and someone else posted:
>>>ARRL radio designer software works for me on a Win95A machine, but not on
>>a Win95B (OSR2) machine.

> Works fine on the OSR2 machine.

Gary

I wondered about that -- it works Just Fine in a WIN-OS/2 session?
Someday, Real Soon Now, when I get a round tuit, I would like to
check into that software...

Jonesy W3DHJ

--
Marvin L. Jones jonz<AT>rmi.net
Gunnison, Colorado
132 days to go until the Year 2000 -- So what!
498 days to go until the 3rd Millennium of the C.E.

2090. Re: lower cost RF design software ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-21 00:00:00 UTC
From: jim@rst-engr.com
Message-ID: <37bef44e.7906398@news.gv.net>
Source record: 67733

ke4zv@bellsouth.net (Gary Coffman)
shared these priceless pearls of wisdom:

->
->Odd, it runs on all of my plain vanilla systems. I haven't tried it on a real
->antique, of course, but it does run on an old 486 running Win 3.11. That's
->as antique as I have running anymore.
->
->Gary
->Gary Coffman KE4ZV

I'm using it on a K6-233 under Win98. The problem seems to be that I also am running a good video card (Riva TNT) and I can't dumb the board down enough, even in generic VGA mode, to let the software recognize the video mode.

OTOH, I can't use anything slower with my other engineering programs without ordering dinner in between each command.

I asked ARRL about this, and got the standard "Yep, that's been a problem for a while" answer. And, I suspect, why there isn't a play-with demo, even major-crippled, to let us see if the software is usable on our systems.

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

2091. Favorite tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-21 00:00:00 UTC
From: Bob Liesenfeld <wb0poq@visi.com>
Message-ID: <37BEEC04.3C57AE26@visi.com>
Source record: 67734

Hi gang,
I'm thinking of building some "glowing" rigs. If you had to pick just
a few tubes for HF recieving purposes, ie, RF amp, IF, audio, etc, what
would your choices be?

72

Bob 'POQ
--
Genuine E-mail From the Land of the Everlasting Icicle...
Bob Liesenfeld
wb0poq@visi.com

2092. Spice model

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-22 00:00:00 UTC
From: JAMP <gpetrac@tin.it>
Message-ID: <7pn86f$oa5$1@nslave1.tin.it>
Source record: 67642

I'm looking for Spice model for
MRF904 (discontinued device).
Thanks. de IK7QNF

2093. Re: Spice model

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-22 00:00:00 UTC
From: WB <willyacht@yahoo.com>
Message-ID: <t2Jv3.6257$O_1.45413@ozemail.com.au>
Source record: 67643

all the models are on the motorola web site. Or check out the electronic workbench web page, www.interactiv.com they have links there for spice models

JAMP <gpetrac@tin.it> wrote in message news:7pn86f$oa5$1@nslave1.tin.it...
> I'm looking for Spice model for
> MRF904 (discontinued device).
> Thanks. de IK7QNF
>
>
>
>

2094. Need Frequency source for converter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-22 00:00:00 UTC
From: kf5oj@prodigy.net
Message-ID: <37bf6e05.9539340@news.prodigy.net>
Source record: 67644

I'm looking for suggestions on what to use as a LO frequency source for a converter. I need LO output on either 500.0 mHz or 600.0 mHz with at least +7 DBM level.

I was looking for LO boards that have appeared in QST, Ham Radio, 73 or whever, where a board may be available and no exotic components required.

I thought DownEast Microwave might have something, but I haven't been able to contact them.

Any suggestions?

Clifton Turner KF5OJ

.

2095. Re: Need Frequency source for converter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-22 00:00:00 UTC
From: Alan.Peake@dsto.defence.gov.au
Message-ID: <Alan.Peake.107.2364119E@dsto.defence.gov.au>
Source record: 67645

> I'm looking for suggestions on what to use as a LO frequency
>source for a converter. I need LO output on either 500.0 mHz or 600.0
>mHz with at least +7 DBM level.

Have a look at clock oscillators for PCs. For a crystal freq of about 14 MHz, you can get a range of output frequencies. You may not get 500 MHz but a simple multiplier would solve that. Or try a PLL chip from one of the major makers, National, Motorola etc. and use a MiniCircuits VCO. These are only about 15 USD, have low noise and about a 2:1 tuning range and you can get them from 20 MHz up to 2 GHz.

Alan

2096. Re: Radio communications underwater!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-22 00:00:00 UTC
From: Spam Bin <nospam@scotia-technologies.co.uk>
Message-ID: <19990822100013859 11@scotia-technologies.co.uk>
Source record: 67646

The message <37ca036e.42833428@news.dial.pipex.com>
from maad65@dial.pipex.com (Nick) contains these words:

> Commercially there is no systems I am aware of using VLF radio from submerges to
> the surface. It is all surface transmitters to underwater ferrite rod aerials.

> I would suggest using ultrasonic audio, it propagates well under water and the
> transducers are many times more efficient than VLF tx aerials.

Yes, ultrasonics is a possibility, i'll look into that.

> Something around 60kHz would be a good bet for starters. Use transducers
> intended for depth gauges, the small ones are around 150kHz but some of the
> larger depth recorders work around 60k.

Can't use standard echo sounder transducers as they could interfere
with the vessels sounders.
The vesels use 50, 75, 120 & 200 Khz. Sometimes 28Khz too, therefore
the system would have to stay clear of these frequencies.

> Ask you local marine electronics repair depot if they have anything in the scrap
> box you can play with.

We are the local marine electronics repair depot :-)

> Nick

Steve H

2097. Need manual for TELREX 20M326 antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-22 00:00:00 UTC
From: Ed Deringer <ederinger@iop.com>
Message-ID: <rrvt75kgmkf30@corp.supernews.com>
Source record: 67647

I need a copy of the manual for the Telrex 20M326 3el 20 meter monobander.
I am trying to rebuild one. Telrex is no longer in business. I will pay any
copying and shipping costs. Can also use the 20M317 manual, same antenna 17
foot boom. Either will work.
Please contact me at KX2S@qsl.net
Thank You
Ed KX2S

2098. Re: HELP! Tube Guru's Advice Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-22 00:00:00 UTC
From: Dennis Breeden <d.breeden@mci.com>
Message-ID: <37BFF986.E185505C@mci.com>
Source record: 67648

At 1625 is a miltary 12V version of the 807.

2099. WTB: NOS TUBES

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-22 00:00:00 UTC
From: BlueStrat <bluestat@erols.com>
Message-ID: <37BFFA03.C0C829CB@erols.com>
Source record: 67649

Looking for the following NOS (preferably in
original boxes) tubes.

6V6GT, 6L6GC, 5AR4, 5Y3GT, 5R4, 6CA7/EL34, 6BQ5/EL84, 7189A, 7027,
7591A, 7581A, 12AX7A , 5751, 12AY7/6072, 7025, 12AT7, 7199, 5881, 6550,
7868, KT-66,77,88.

Also, octal socket extenders/savers.

Please list brand, price, qty available, and whether in
original box.

Thanks,
Mike
703-430-8713
bluestat@erols.com

2100. Re: Need Frequency source for converter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-22 00:00:00 UTC
From: willard561@aol.com
Message-ID: <19990822105453.06857.00002868@ng-cm1.aol.com>
Source record: 67650

> I'm looking for suggestions on what to use as a LO frequency
>>source for a converter. I need LO output on either 500.0 mHz or 600.0
>>mHz with at least +7 DBM level.
I would suugest Mini Circuits as a starting point.
Bill Higdon
Willard561@aol.com

2101. Re: Another DDS question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-22 00:00:00 UTC
From: Ham <hduff@ica.net>
Message-ID: <37C027DE.48AF1934@ica.net>
Source record: 67651

> > How are you guys dealing with the TSSOP package of the Analog Devices'
> > DDSs ??? Silk??

For the hacker, I think the easiest thing to do is to buy the AD9850 DDS VFO board from Far Circuits. Not the greatest quality but it works. $7.50 for the board.
Wired for a PIC micro. and a rotary encoder. Nothing to say that you couldn't wire an outbord micro to it if you're allergic to PICs.

Hugh VA3TO Toronto

2102. FYI: Lots Of Homebrew Links

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-22 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <37C02885.4B8C@ix.netcom.com>
Source record: 67652

At URL:
http://www.ac6v.com/pagehb.html

AND Kits at URL:
http://www.ac6v.com/pageay.html
--
Keep the iron clean!!!
73 From Rod In San Diego

AC6V INDEX TO DX AND HAM RADIO
FEATURING 88 PAGES, 400 INDEXED TOPICS, AND 3000 LINKS
Over 436,000 visits on the counter
http://www.ac6v.com/pageas.html -- Alphabetical Index
http://www.ac6v.com/ -- Home Page

2103. Re: Radio HELP!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-22 00:00:00 UTC
From: nathan-and-staci@worldnet.att.net
Message-ID: <37c02eec.96763418@netnews.worldnet.att.net>
Source record: 67653

Thanks very much to both of you for the very informative posts. And yes the LCD did crack in shipment. But not because of the USPS, but rather the moron who packed it with the LCD pressed up against an edge of the desktop recharger. Thankfully the parts are cheap. I will try like the dickens to figure out how to get the unit back together and to do so in a way that the contacts are actually in the correct spot on the zebrastrips and the lcd panel. This may be difficult because there were no additional components to hold the lcd panel in place, so you can see my confusion.

Once again, many thanks.

Nate
N5VSH

2104. FS:QST Back Issues $1.00ea.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-22 00:00:00 UTC
From: Andrew <xandrew@tropicom.net>
Message-ID: <37C0340A.80BCADB3@tropicom.net>
Source record: 67654
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.space

I am clearing out the ham shack of all my QST magazines once again. If anyone is interested, I am selling 1992-1998 at $1.00 ea. (you pay shipping costs however you want them shipped) for 1 to 10 issues. If you are interested in over 10 issues or the entire collection, make me an offer. I am willing to ship anywhere on this planet so long as you are willing to pay the actual shipping costs.

Here are the issues that I have:

QST

1992 Jan - April $1.00 ea.
1993 Jan - Dec $1.00 ea.
1994 Jan - Dec $1.00 ea.
1995 Jan - Dec $1.00 ea.
1996 Jan - Dec $1.00 ea.
1997 Jan - Dec $1.00 ea.
1998 Jan - Dec $1.00 ea.
1999 Jan - Current $2.50 ea.

All the issues are in perfect condition with no ripped pages or covers. Sorry I don't have anymore, but the last time I did this in 1993, I sold all my 1989 through my 1992 issues less a few months still available.

--
********** DO NOT AUTOREPLY **********

TO REPLY REMOVE THE TWO 'X' FROM MY EMAIL
ADDRESS. ANTI SPAM MEASURES IN EFFECT

XANDREW@XTROPICOM.NET

****

--
********** DO NOT AUTOREPLY **********

TO REPLY REMOVE THE 'X' FROM MY EMAIL
ADDRESS. ANTI SPAM MEASURES IN EFFECT

XANDREW@TROPICOM.NET

****

2105. F.S./F.T.: Complete PCB design software package

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-22 00:00:00 UTC
From: John Strupat <john.strupat@sympatico.ca>
Message-ID: <37C073C5.97F4A193@sympatico.ca>
Source record: 67655

EE Designer II schematic, PCB and router package with all manuals and printer dongle.

Asking $25 or will swap for solid state grid dip meter or other test equip.

John VE3PCN

2106. Microwave oven transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-22 00:00:00 UTC
From: neil <neil@aade.com>
Message-ID: <37C07421.27721CF3@aade.com>
Source record: 67656

Anybody know any links to pages describing how to use and the
characteristics of, microwave over power transformers for
amateur radio use.

--
Neil
http://www.aade.com
mailto:neil@aade.com
Almost All Digital Electronics
1412 Elm St. SE
Auburn, WA 98092
253-351-9316

2107. WTD UT-89 ENCODER

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-22 00:00:00 UTC
From: kable guy minn <n0mnb@minn.net>
Message-ID: <7pq46fabi1@news.minn.net>
Source record: 67657
Cross-posted to:
rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,slac.rec.ham_radio

```
WANTED UT-89 ENCODER FOR ICOM 2340

THANKS
BILL
N0MNB@MINN.NET
```

2108. Need Elliptical LPF values

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-22 00:00:00 UTC
From: Ham <hduff@ica.net>
Message-ID: <37C09870.9E284A79@ica.net>
Source record: 67658

Does anyone know of a shareware/freeware filter calculation program ?

Alternately, you have access to Eagleware or a similar filter
calculation program
and wouldn't mind...I need the the values for a 5th order elliptical low
pass filter for a DDS signal generator project.

Here's what I need...

Low pass Fc = 42 MHz.
50 ohm impedance in and out
Ripple <1 db
Components optimized to real parts values
I'd also like to know what the attenuation is at 80 MHz.

Please reply by email.
Thanks de Hugh VA3TO

2109. FS: 28VDC/ 50 Amp P/S

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-22 00:00:00 UTC
From: Bob <bmiller@calweb.com>
Message-ID: <37c0be1b@calwebnnrp>
Source record: 67659

For Sale,

28 VDC at 50 amp ccs power supply. From GRC-122 Ratt Van. Excellent condition. 115 or 220 primary. Metered for DC volts and DC amps. Will take massive overloads and dynamotors are no problem. I run my 618T(3) and and my ARC-2 at the same time on the unit without a problem. About 16 Inches cube and will just make the UPS weight limit versapacked, figure 145 lbs.

With schematics. $175 plus UPS from 95827. Or $160 if you pick it up at my QTH in Sacramento. I will pay for Versapacking if by UPS.

tnx for the read

73

Bob, KE6F

2110. FS: Mod. Transformer 21M62A

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-23 00:00:00 UTC
From: Richard Matthews <richard@leedselect.com>
Message-ID: <7psbh6$4p2$1@bgtnsc02.worldnet.att.net>
Source record: 67585

Thordarson 21M62A new, in original (albeit worn) box - $125.00

Johnson #250 shaft couplers - $4.00 each

Richard
Leeds Electronics
http://www.leedselect.com

2111. FS FT8000R

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-23 00:00:00 UTC
From: DiGino <digino@juno.com>
Message-ID: <dWiw3.376$mi7.1112@news.flash.net>
Source record: 67586

For sale, Yaesu dual band mobile radio FT8000R, mint condition. Covers 2M and 70cM with 50W and 35W output respectively. Asking $350. Please reply at: digino@flash.net

Gene

2112. FS: GEN. RADIO ADJ. AIR LINES

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-23 00:00:00 UTC
From: Joe Ship <ve2js@total.net>
Message-ID: <37C1BF63.5A95@total.net>
Source record: 67587

```
--
\\W//
(@ @)
________ooO_(_)_Ooo__________
|Visit Joe Ship's home page at|
| http://www.total.net/~ve2js |
|_____________________________|
```

GENERAL RADIO 874LAL 50 OHM ADJUSTABLE AIR LINE.
Freq. range DC to 7GHz. Adjustment length 15 11/16"
collapsed to 24 1/4" extended. GR type N female
connectors at each end.

These are brand new. I have a quantity of these.
For sale @ (USD) $60. each plus $5. Air Mail to
continental U.S.A.

Joe Ship, VE2JS
ve2js@total.net

Lots more test equipment for sale. See my web page for list.

2113. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-23 00:00:00 UTC
From: tmacinty@ns.sympatico.ca
Message-ID: <37c1c434.252690553@news1.ns.sympatico.ca>
Source record: 67588
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

John Woodgate <jmw@jmwa.demon.co.uk> wrote:

><37c14714.220653434@news1.ns.sympatico.ca>, Tom MacIntyre
><tmacinty@ns.sympatico.ca> inimitably wrote:
>>Rich Grise <offduty@entheosengineering.com> wrote:
>>
>>>Um, isn't a "dipole" typically a half-wave?
>>>
>>>What does an 80-meter photon look like?
>>>
>>>:)
>>>Rich
>>
>>A 60 meter photon on steriods?...
>>
>No. Shorter wavelength equals more photon energy: E = hc/[lambda]. It's
>not funny enough (quite) to be still funny even if wrong.
>
>--
>Regards, John Woodgate, OOO - Own Opinions Only.
>Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
>Did you hear about the hungry genetic engineer who made a pig of himself?
>PLEASE DO ****NOT**** MAIL COPIES OF NEWSGROUP POSTS TO ME!!!!

Oh, well...it was morning, and I'm on vacation...

Tom

2114. Heath SB-220 Band Switch Parts Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-23 00:00:00 UTC
From: Steven Kerns <skerns@ptd.net>
Message-ID: <01beedb9$f90c0600$972fbacc@felix>
Source record: 67589
Cross-posted to: alt.ham-radio,alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hello All,

I am trying to put a Heath SB-220 onto 160M with the
B&W 160M modification kit. I am in need of additional fingers
contacts for the band switch. If you have done the mod and
have switch parts please let me know, I would be interested in
buying a old band switch out of a junked amp if anyone has one
available.

Thanks

Steve N3FTI
skerns@ptd.net

2115. Re: HELP! Tube Guru's Advice Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-23 00:00:00 UTC
From: Bob Liesenfeld <wb0poq@visi.com>
Message-ID: <37C1C47D.59B2BA0C@visi.com>
Source record: 67590

Rick Haub wrote:
>
> Nope. Sorry to say I don't have the facilities to do thoughs thing. I think I may
> have isolated the problem though.
>
> First off I miss calculated the frequency, it is indeed oscillating at the correct
> frequency (I miss counted the hash marks of my scope). I got my watt meter and
> dummy load on friday evening and hooking them up and tuning to maximum output gets
> me about 10-15 watts (should be about 50 watts).
>
> The final stage after the 1625 has some inductors that lead into a
> variable air cap-coil inductor-variable air cap pi network. The first air cap is a
> 140pF used for tuneing the final and the second air cap is used for loading. The
> coil is a hand wound 16 1/2 turn 16 tpi #24 3/4 inch diamature coil with a 2 inch
> piece of half inch diameter ferrite core. While tune last night I would hold the
> key for maybe 10-15 seconds at a time. After tuning and checking plate and grid
> currents for about 20 minutes I heard a dull "thunk" I look at the coil and saw
> that the ferrite core had melted though its plastic container. After applying the
> "wet finger test" I found that the core was boiling hot. Maybe 400 or 500 degrees
> F. It seems too much RF is being wasted in the final tuning coil. While tuning with
> the tuning cap I really never see a resonet "dip".
>
> Based on what I'm seeing and my limited knowledge on the subject I think I need to
> ajust the number of windings on the coil. Is this a reasonable assumption?
>

Hmmmm....why are you using a ferrite core? Do you have any idea what
it's characteristics are? This thing appears to have *high* loss. I
think we just found where most of your power is going ;-) I would
recommend an air core coil. The tank should be able to resonate near
the operating freq, so if you have a grid dip meter you could try this.
I would suggest as a first cut, a coil 3" in diameter, wound with
something like 20 gauge buss wire. Put on as many turns as will fit in
your available lenght, and solder a short clip lead to one end of the
coil to allow changing the inductance.

Then you could try tunning the rig with some or all of the L in
circuit. Made in this form, the coil will have low loss.

>BE CAREFUL< DON'T CHANGE TAP ON COIL WITH B+ APPLIED!!! BE SAFE,
TURN OFF, AND DISCHARGE CAPS!!! IF IN DOUBT...DON'T DO IT!!

(The above is to keep the lawyers at bay)

Let us know how you come out :)

Bob POQ
--

Genuine E-mail From the Land of the Everlasting Icicle...
Bob Liesenfeld
wb0poq@visi.com

2116. Re: $20.00 GPS Project Complete w/Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-23 00:00:00 UTC
From: "Laszlo I. Morocz" <kf4pv@SPAMMENOTlmorocz.com>
Message-ID: <1zlw3.35$Xz1.5041@jump.innerx.net>
Source record: 67591

Alternatively, you could program a PIC 16C58 with the Parallax PIC16Cxx programmer which inserts a copy of the Basic Stamp interpreter (as well as your Basic code) and allows a $5 implementation of a Basic Stamp. Of course, you'd need to develop and debug your code on a Basic Stamp before you permanently burned it into a PIC, but only the $4 chip would be expendable.

An even better solution is to use the Atmel AVR AT90S1200 which has 1K on-board FLASH program memory & 64 bytes EEPROM, as well as the usual timers and stuff. Or, if you want to actually do distance/bearing/speed calculations and waypoints, as well as an NMEA conversion, the AT90S8515 has 8K of FLASH program space, 1/2K EEPROM, 1/2K SRAM, a UART, a hardware SPI, counters, etc. all on-chip. Not to mention that the Atmel AVR series has a much cleaner programming model than the PICs (which translates to faster development and less debugging). The development system is under $50. I've already ordered my GPS units and have started on the code. In fact, so far the biggest hassle is that the neanderthals at NMEA want to charge for their standards documentation instead of putting it on the web as a PDF file. I guess when you have a monopoly you don't have to encourage people to use your standard.

73 de KF4PV/3, Laszlo

--
To reply, remove the text SPAMMENOT from the e-mail address.

2117. Re: GG 813's

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-23 00:00:00 UTC
From: "Peter O. Brackett" <nospam-ab4bc@ix.netcom.com>
Message-ID: <7psojb$cbg@dfw-ixnews15.ix.netcom.com>
Source record: 67592

Yep.

StereoDoc1 wrote in message
<19990822234046.04215.00001186@ng-fi1.aol.com>...
>Question: Is it feasible to run a pair of 813's in grounded grid
>configuration of say 80 or 40 meters?
>
>Bob

2118. Sell "Julieboard" DDS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-23 00:00:00 UTC
From: Ham <hduff@ica.net>
Message-ID: <37C1E821.CA0B7301@ica.net>
Source record: 67593

I have a "Julieboard" DDS board from a 73' construction article a few
years
ago. It is programmed from your PC or can be used standalone by using
thumbwheel switches and a micro as described in a followup 73' article.
The board produces a sinewave output up to 12 MHz. in <1 Hz. steps.
It uses the Harris 45102 28 pin DIP DDS.
I'd like to get $22 for it.
Anyone interested ?

2119. Re: Radio communications underwater!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-23 00:00:00 UTC
From: noone@nowhere.com
Message-ID: <37c6b000.56589611@news.squonk.net>
Source record: 67660

On Sun, 22 Aug 1999 22:08:44 GMT, maad65@dial.pipex.com
(Nick) wrote:

>On Sun, 22 Aug 1999 10:00:13 +0100, Spam Bin <nospam@scotia-technologies.co.uk>
>wrote:
>
>>Can't use standard echo sounder transducers as they could interfere
>>with the vessels sounders.
>>The vesels use 50, 75, 120 & 200 Khz. Sometimes 28Khz too, therefore
>>the system would have to stay clear of these frequencies.
>
>Do all of these have to run at the time you are working??
>
>There is the possibility of making the remote electronics passive until it is
>polled by the surface unit.
>
>If data is embedded on each ping from the surface with a serial number then just
>the addressed remote unit would reply. The whole thing can then run on one
>frequency.
>
What about using the unit's existing transducers to send the
data? If they can hear each other, but not the surface,
they could pass a token to tell each one when to transmit.

>150kHz has transducers manufactured for it, that may be a possibility.
>
>You should be able to close a depth sounder Tx amplifier to give you the couple
>of hundred volts needed to drive the transducer.
>>
>>> Ask you local marine electronics repair depot if they have anything in the scrap
>>> box you can play with.
>>
>>We are the local marine electronics repair depot :-)
>
>You are in the right place then.
>
>What are you actually doing if it is not classified or commercially sensitive.??
>
>You may find RF from the surface into ferrite rod aerials on the under sea units
>interrogating them to respond with ultrasonics one at a time would work.

A goofy suggestion: if the data is all one way, what about
dumping it to serial eeprom, and floating it up to the
surface once in a while?

If it's real time, and you need a high data rate, I think you're going to need a cable. That seems to be the way all the mini robot subs are run. I also seem to remember that the underwater sonar stations the US navy had/has were connected with undersea cable.

>
>Good luck
>
>Nick

Just random thoughts

2120. GG 813's

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-23 00:00:00 UTC
From: stereodoc1@aol.com
Message-ID: <19990822234046.04215.00001186@ng-fi1.aol.com>
Source record: 67661

Question: Is it feasible to run a pair of 813's in grounded grid configuration of say 80 or 40 meters?

Bob

2121. Re: Need Elliptical LPF values

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-23 00:00:00 UTC
From: Dale Parfitt <parinc@bellsouth.net>
Message-ID: <37C0C9B7.A4D13ADD@bellsouth.net>
Source record: 67662

Ham wrote:

> Does anyone know of a shareware/freeware filter calculation program ?
>
> Alternately, you have access to Eagleware or a similar filter
> calculation program
> and wouldn't mind...I need the the values for a 5th order elliptical
> low
> pass filter for a DDS signal generator project.
>
> Here's what I need...
>
> Low pass Fc = 42 MHz.
> 50 ohm impedance in and out
> Ripple <1 db
> Components optimized to real parts values
> I'd also like to know what the attenuation is at 80 MHz.
>
> Please reply by email.
> Thanks de Hugh VA3TO

Hi Hugh,
You did not state the minimum allowable attenuation, so I selected
-30dB.
First shunt cap=128pF
1st Parallel L-C in a series leg= 45.7pF/145.6nH
2nd shunt cap=135pF
2nd Parallel L-C in a series leg= 156pF/73.8nH
3rd shunt cap=83.7 pF

finite zeroes at 46.92MHz and 61.7MHz

I'm leaving on a short vacation in the AM, let me know if you need more
data or wish to shift the zeroes.
Filter calc. w/ Eagleware Genysis + Filter module.

Dale W4OP

2122. Re: Need Elliptical LPF values

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-23 00:00:00 UTC
From: neil <neil@aade.com>
Message-ID: <37C0D86E.992E7C82@aade.com>
Source record: 67663

You can try AADE Filter Design 10 times free and it's only $25 after
that.
http://www.aade.com/filter.htm

--
Neil
http://www.aade.com
mailto:neil@aade.com
Almost All Digital Electronics
1412 Elm St. SE
Auburn, WA 98092
253-351-9316

2123. Re: $20.00 GPS Project Complete w/Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-23 00:00:00 UTC
From: davem@groucho.cs.ubc.ca
Message-ID: <7pr3j8$3ti@groucho.cs.ubc.ca>
Source record: 67664
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.swap

terry02@ibm.net writes:
>Now, remember, I'm not a programmer (I don't even play one on
>television!), but it seems to me that the Basic Stammp II has 2 serial
>ports. Could maybe some real clever software type write a program to
>read from this gps on one serial port and send out NMEA on the other
>serial port ??????

This almost certainly could be made to work. However, doesn't a Basic
Stamp cost many times as much as the GPS receiver in question? That
makes the whole project somewhat less interesting.

If you're willing to program in assembler, you should be able to do
the job with a PIC or similar microcontroller much more cheaply.

Dave

2124. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-23 00:00:00 UTC
From: Rich Grise <offduty@entheosengineering.com>
Message-ID: <37C117EE.1F87@entheosengineering.com>
Source record: 67665
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

Um, isn't a "dipole" typically a half-wave?

What does an 80-meter photon look like?

:)
Rich

Science Hobbyist wrote:
>
> In article <37B97D0B.794AFB@mmm.com>,
> rbmccammon@mmm.com wrote:
> > Science Hobbyist wrote:
> >
> > > All I'm saying is that resonant electromagnetic systems behave
> > > electrically larger than non-resonant EM systems.
> >
> > I guess I'll just have to ask; what is the electrical
> > size of a non-resonent EM system?
>
> Good question. Let's see. If the EM system is being
> "illuminated" with propagating EM waves, and the
> waves have a certain power density P/(meter^2), then
> an ideal quarter-wave dipole antenna with an impedance-
> matched resistive load would intercept X watts, and we could
> calculate the "absorbtion cross-sectional area" of that antenna
> from X/P, and if we assume that this area is circular, then the
> "electrical size" of that antenna is SQRT(X/P/pi)
>
> If we do the same for ANY antenna, we can figure out
> how "large" it is electrically, and compare it to the "size"
> of an ideal quarter-wavelength dipole.
>
> ((((((((((((((((((((((O)))))))))))))))))))))
> William Beaty bbeaty@microscan.com
> Software Engineer http://www.microscan.com
> Microscan Inc., Renton, WA 425-226-5700 x1135
>
> Sent via Deja.com http://www.deja.com/
> Share what you know. Learn what you don't.

2125. Re: Radio communications underwater!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-23 00:00:00 UTC
From: Spam Bin <nospam@scotia-technologies.co.uk>
Message-ID: <19990823085144859 11@scotia-technologies.co.uk>
Source record: 67666

The message <37d57242.136755026@news.dial.pipex.com>
from maad65@dial.pipex.com (Nick) contains these words:

> Do all of these have to run at the time you are working??

We need each sensor to fire data at about once per second.

> There is the possibility of making the remote electronics passive until it is
> polled by the surface unit.

> If data is embedded on each ping from the surface with a serial number then just
> the addressed remote unit would reply. The whole thing can then run on one
> frequency.

Yes that is a possibility i will look into. So long as we can poll
each unit about once per second, that should give each unit around
100mS to respond, the receiver to receive the signal and decode it,
then trigger the next sensor unit.

> 150kHz has transducers manufactured for it, that may be a possibility.

> You should be able to close a depth sounder Tx amplifier to give you the couple
> of hundred volts needed to drive the transducer.

I've not come across 150Khz transducers, i will look into that. We've
some of the old, 'cheap-n-cheerful' echo sounder units in that have
been scrapped. It should be fairly simple to change the signal
generation / amplification side to such a frequency.

> What are you actually doing if it is not classified or commercially sensitive.??

It is commercially sensitive ~ very! Sorry i cannot give more info
just yet, but i will say that should the prototype work o.k then
there are going to be some very sad Marine Electronics companies out there :-)
The unit will retail around 1/2 to 2/3 the price of existing systems.

> You may find RF from the surface into ferrite rod aerials on the under sea units
> interrogating them to respond with ultrasonics one at a time would work.

Whatever system is used, it requires to be fairly small (smaller than
a child's shoebox).

> Good luck

Thanks, we'll need it..

> Nick

Steve H

2126. Re: Radio communications underwater!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-23 00:00:00 UTC
From: Spam Bin <nospam@scotia-technologies.co.uk>
Message-ID: <19990823090243859l1@scotia-technologies.co.uk>
Source record: 67667

The message <37c6b000.56589611@news.squonk.net>
from noone@nowhere.com (KC2FCR) contains these words:

> A goofy suggestion: if the data is all one way, what about
> dumping it to serial eeprom, and floating it up to the
> surface once in a while?

I'm afraid it's not an option. It must be a cable-less data link.

> If it's real time, and you need a high data rate, I think
> you're going to need a cable. That seems to be the way all
> the mini robot subs are run. I also seem to remember that
> the underwater sonar stations the US navy had/has were
> connected with undersea cable.

I cannot say what the unit is for, but it's not a mini-sub or
anything remotely like it. Cable simply isn't an option. It MUST be
an ultrasonic or radio link.

We have looked at the specs again and if using a polling technique,
the data output can be cut down to:-

One Byte for Sensor I.D
Two Bytes for Data 1
One Byte for data 2

Total Four Bytes.
Using 8,N,1 that would be 10.5 bits per byte (including stop bit).
10.5 x 4 = 42 bits.
Maximum number of sensors is 10 = 420 bits of information.
Including processing overhead for tx/rx unit on vessel and also
taking into consideration the speed of sound through water (if thats
the way we go), it may be possible to get away with 1200 baud link.

Thanks All

Steve H

2127. Re: Favorite tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-23 00:00:00 UTC
From: wrt@eskimo.com
Message-ID: <37c1261d.3380028@eskinews.eskimo.com>
Source record: 67668

Bob Liesenfeld <wb0poq@visi.com> wrote:

>Hi gang,
> I'm thinking of building some "glowing" rigs. If you had to pick just
>a few tubes for HF recieving purposes, ie, RF amp, IF, audio, etc, what
>would your choices be?
>
>72
>
>Bob 'POQ

For HF RF/IF amps: 6CB6, 6AU6 were both excellent in their time and there should be tons of them available new or used.

For low-level audio: 12AU7, 12AT7 and 12AX7. These tubes are essentially the same except for the amplification factor.

For audio output: 6V6 for medium power, 6L6 for more. Both of these come with various suffixes denoting whether glass or metal and what shape.

For rectifier: 5Y3 for medium power or 5U4 for high. Again, both come in various suffixes.

Thanks for jogging the memory cells... have fun!!

Bill, W7TI

2128. Re: Radio communications underwater!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-23 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <3805326c.2151860982@news.sci.fi>
Source record: 67669

On Mon, 23 Aug 1999 09:02:43 +0100, Spam Bin
<nospam@scotia-technologies.co.uk> wrote:

: Total Four Bytes.
: Using 8,N,1 that would be 10.5 bits per byte (including stop bit).
: 10.5 x 4 = 42 bits.
: Maximum number of sensors is 10 = 420 bits of information.
: Including processing overhead for tx/rx unit on vessel and also
: taking into consideration the speed of sound through water (if thats
: the way we go), it may be possible to get away with 1200 baud link.

From a previous post:

> The range required to be covered would normally be 600 - 700 metres.

Did you really calculate the polling sequence for this ?

The speed of sound is about 1500 m/s in water, a typical half duplex request/response cycle will thus take about 1 s, so you may have some problems scanning 10 devices within a second. You could of course transmit a single request and put a variable amount of delay, before the sensor responds, thus, the responses would arrive sequentially at the receiver station. This only works, if the sensors are fixed relative to each other and the central station. A sequence of pulses may also generate echoes that might cause false triggering of the sensors.

How large is the bandwidth of the transducers, would it be possible to allocate a slightly different transmission frequency for each sensor (say every 100 Hz) and let the sensors transmit continuously at a very low data rate.

Or how about a spread spectrum transmissions on the same centre frequency with different spreading code, this might help reduce echoes from ships, fish or from the bottom.

Paul OH3LWR

2129. 3 foot rack For Sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-23 00:00:00 UTC
From: Rowdy <captron@one.net>
Message-ID: <37C137E5.75EF531A@one.net>
Source record: 67670

I have a standard 3 foot rack, green in color. Has door in back and lid on top that opens. Located in Cincinnati for pick up or I could possibly deliver in the local area. If interested drop me a line before Wed @ 606-291-2723. Would be great for an HF amp project etc.

73, Ron NR8O

2130. NMT 450/900 standard anyone ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-23 00:00:00 UTC
From: Hans de Bok <hdbok@emt.ie.philips.nl>
Message-ID: <37C14237.74E2A8C@emt.ie.philips.nl>
Source record: 67671

Hi,

Does anyone have the NMT 450/900 (Nordic Mobile Telephone system)
standard
or for me ?

Hans

2131. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-23 00:00:00 UTC
From: tmacinty@ns.sympatico.ca
Message-ID: <37c14714.220653434@news1.ns.sympatico.ca>
Source record: 67672
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

Rich Grise <offduty@entheosengineering.com> wrote:

>Um, isn't a "dipole" typically a half-wave?
>
>What does an 80-meter photon look like?
>
>:)
>Rich

A 60 meter photon on steriods?...

Tom

2132. Re: Radio communications underwater!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-23 00:00:00 UTC
From: Spam Bin <nospam@scotia-technologies.co.uk>
Message-ID: <19990823141802859l1@scotia-technologies.co.uk>
Source record: 67673

The message <3805326c.2151860982@news.sci.fi>
from keinanen@sci.fi (Paul Keinanen) contains these words:

> On Mon, 23 Aug 1999 09:02:43 +0100, Spam Bin
> <nospam@scotia-technologies.co.uk> wrote:

> : Total Four Bytes.
> : Using 8,N,1 that would be 10.5 bits per byte (including stop bit).
> : 10.5 x 4 = 42 bits.
> : Maximum number of sensors is 10 = 420 bits of information.
> : Including processing overhead for tx/rx unit on vessel and also
> : taking into consideration the speed of sound through water (if thats
> : the way we go), it may be possible to get away with 1200 baud link.

> From a previous post:

> > The range required to be covered would normally be 600 - 700 metres.

> Did you really calculate the polling sequence for this ?

Sorry, i'm thinking 'ultrasonics is the way to go' but still thinking
'radio' in some calculations and totally confusing myself!
I'll immediately go out and give myself 10 lashes ;-)

I would love to be able to talk to each sensor individually, but as
you (correctly) pointed out, the propogation of sound in water is
going to limit the speed of polling and receiving info from each unit.
Maybe radio is the way to go and poll each unit individually, or we
may be forced to poll a master unit via ultrasonics and have each
sensor (which is between 2 and 15 metres away) talk to the master
unit via wires or low power radio links.
I think we are going to have sit down and have a good re-think about this.

> Paul OH3LWR
>

Thanks for pointing out the rather stupid miss-steak ;^)

Steve H

2133. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-23 00:00:00 UTC
From: Roy McCammon <rbmccammon@mmm.com>
Message-ID: <37C14CF1.95869EBD@mmm.com>
Source record: 67674
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

Rich Grise wrote:
>
> Um, isn't a "dipole" typically a half-wave?
>
> What does an 80-meter photon look like?
>

Good discussion about this starting up on
sci.physics.electromag titled "just one photon!"

2134. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-23 00:00:00 UTC
From: Roy McCammon <rbmccammon@mmm.com>
Message-ID: <37C14E17.CC6201E9@mmm.com>
Source record: 67675
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

Science Hobbyist wrote:

> Now THAT's good to know about. Might you know the
> mechanism behind this resistivity?

My limited understanding is that it is modeled by saying
that there are two classes of electrons: superconducting
(those that move without dissipation) and ordinary (those
that move with dissipation). At dc, only the first class
are moving, but with ac, dB/dt pushes the other
class into motion also.

2135. Antenna help...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-23 00:00:00 UTC
From: john_mason@mohawkind.COM
Message-ID: <003001beed72$825955e0$1332140a@Mohawk>
Source record: 67676

I have recently come into posession of some 50'-100' lengths of cat 5 twisted pair (4 pairs) cable and would like to use a piece to setup an antenna for QRP operation. I've been thinking about running a length from the apex of the roof to a tree about 75'-100' away (the only sizable tree on the lot). I figure I could use the wire as an end fed antenna with another lead to an 8' grounding rod.

My question is should I bother removing "one" wire from the cable and using it or just solder all 8 wires together at each end and feed the whole cable. The cable appears to be unshielded (no foil) and has CAT 5 printed on the jacket (which is blue).

Thanks in advance,
John... K4JJM
John_Mason@MohawkInd.Com

2136. Re: TDA1085 data required

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-23 00:00:00 UTC
From: Red Mamba <Red_mamba@yahoo.com>
Message-ID: <7ps27ndrl1@nnrp1.deja.com>
Source record: 67677

In article <7p6vnd$li1$1@neptunium.btinternet.com>,
"David Cunningham" <D.L.C@btinternet.com> wrote:
> I am looking for data on this chip, which I assume to be a triac
controller.
>
>

Look on Motoral's HP.

--
Če vas zanimajo razne reči si morte ogledat tole:
Http://www.geocities.com/Area51/Keep/1037
Naslov je občutljiv na velike/male črke!!!

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2137. Re: $20.00 GPS Project Complete w/Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-23 00:00:00 UTC
From: "Gregory M. Wolfe" <kyote@execpc.com>
Message-ID: <7prvo5$jnf@newsops.execpc.com>
Source record: 67678
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.swap

The antenna alone is worth the price...
have you priced an external GPS antenna at all??

Dave Martindale <davem@groucho.cs.ubc.ca> wrote in article
<7pr3j8$3ti@groucho.cs.ubc.ca>...
> terry02@ibm.net writes:
> >Now, remember, I'm not a programmer (I don't even play one on
> >television!), but it seems to me that the Basic Stammp II has 2 serial
> >ports. Could maybe some real clever software type write a program to
> >read from this gps on one serial port and send out NMEA on the other
> >serial port ??????
>
> This almost certainly could be made to work. However, doesn't a Basic
> Stamp cost many times as much as the GPS receiver in question? That
> makes the whole project somewhat less interesting.
>
> If you're willing to program in assembler, you should be able to do
> the job with a PIC or similar microcontroller much more cheaply.
>
> Dave
>

2138. Re: HELP! Tube Guru's Advice Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-23 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <37C17885.87A49391@midwestmicro-tek.com>
Source record: 67679

Nope. Sorry to say I don't have the facilities to do thoughs thing. I think I may have isolated the problem though.

First off I miss calculated the frequency, it is indeed oscillating at the correct frequency (I miss counted the hash marks of my scope). I got my watt meter and dummy load on friday evening and hooking them up and tuning to maximum output gets me about 10-15 watts (should be about 50 watts).

The final stage after the 1625 has some inductors that lead into a variable air cap-coil inductor-variable air cap pi network. The first air cap is a 140pF used for tuneing the final and the second air cap is used for loading. The coil is a hand wound 16 1/2 turn 16 tpi #24 3/4 inch diamature coil with a 2 inch piece of half inch diameter ferrite core. While tune last night I would hold the key for maybe 10-15 seconds at a time. After tuning and checking plate and grid currents for about 20 minutes I heard a dull "thunk" I look at the coil and saw that the ferrite core had melted though its plastic container. After applying the "wet finger test" I found that the core was boiling hot. Maybe 400 or 500 degrees F. It seems too much RF is being wasted in the final tuning coil. While tuning with the tuning cap I really never see a resonet "dip".

Based on what I'm seeing and my limited knowledge on the subject I think I need to ajust the number of windings on the coil. Is this a reasonable assumption?

Clifton T. Sharp Jr. wrote:

> Rick Haub wrote:
> > I finished building a CW, 75 watt, 80m transmitter last night. I uses
> > the 1625 final and it is crystal controlled at 3.710MHz. I got the
> > design from the 1967 ARRL Radio Amatuer Handbook. I've never built a
> > tranmitter before and I have some questions about its operation.
>
> Oldest Handbook I have is 1969 and it's not in there. Any chance of you
> scanning the schematic and putting it on a web site, or posting it in an
> appropriate place such as alt.binaries.schematics.electronic?
>
> --
> +-+
> | Cliff Sharp | "Speech isn't free when it comes postage-due." |
> | WA9PDM | -- Jim Nitchals, founder, FREE |
> +-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+

2139. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-23 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <eVc0YBChCVw3Ew2g@jmwa.demon.co.uk>
Source record: 67680
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

<37c14714.220653434@news1.ns.sympatico.ca>, Tom MacIntyre
<tmacinty@ns.sympatico.ca> inimitably wrote:
>Rich Grise <offduty@entheosengineering.com> wrote:
>
>>Um, isn't a "dipole" typically a half-wave?
>>
>>What does an 80-meter photon look like?
>>
>>:)
>>Rich
>
>A 60 meter photon on steriods?...
>
No. Shorter wavelength equals more photon energy: E = hc/[lambda]. It's
not funny enough (quite) to be still funny even if wrong.

--
Regards, John Woodgate, OOO - Own Opinions Only.
Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
Did you hear about the hungry genetic engineer who made a pig of himself?
PLEASE DO ****NOT**** MAIL COPIES OF NEWSGROUP POSTS TO ME!!!!

2140. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-23 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <j1H7g$BPAVw3Ewzh@jmwa.demon.co.uk>
Source record: 67681
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

<37C117EE.1F87@entheosengineering.com>, Rich Grise <offduty@entheosengin
eering.com> inimitably wrote:
>What does an 80-meter photon look like?
Very, very cool! (;-)
--
Regards, John Woodgate, OOO - Own Opinions Only.
Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
Did you hear about the hungry genetic engineer who made a pig of himself?
PLEASE DO ****NOT**** MAIL COPIES OF NEWSGROUP POSTS TO ME!!!!

2141. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-23 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37C18F31.47C57A69@teleport.com>
Source record: 67682
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

John Woodgate wrote:
> >>. . .
> >>What does an 80-meter photon look like?
> >>
> >>:)
> >>Rich
> >
> >A 60 meter photon on steriods?...
> >
> No. Shorter wavelength equals more photon energy: E = hc/[lambda]. It's
> not funny enough (quite) to be still funny even if wrong.

Ah. An overweight 60 meter photon, then.

Roy Lewallen, W7EL

2142. need info marconi

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-23 00:00:00 UTC
From: mulari@my-deja.com
Message-ID: <7ps9dbjks1@nnrp1.deja.com>
Source record: 67683

Hi to all, i need info about the Marconi TF995a Signal generator
and the
HF1065a Output testset.
ANNY info/photo's or anny info at all is welcome i would be a happy
man if
i found the users manuel of even the service manuel, i tried to find
annythi
ng even the internet but no succes not even a photo or something.
I need to know how to recalibrate the thing, how do i charge the
batary of
the 1065 ? what freq specs does it have ?

Is there annyone out there who can help me ??

HAPPY_MARK@HOTMAIL.com

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2143. Re: $20.00 GPS Project Complete w/Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-23 00:00:00 UTC
From: davem@groucho.cs.ubc.ca
Message-ID: <7ps7ll$58q@groucho.cs.ubc.ca>
Source record: 67684
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.swap

"Gregory M. Wolfe" <kyote@execpc.com> writes:
>The antenna alone is worth the price...
>have you priced an external GPS antenna at all??

Yes, one could buy the thing, discard the GPS receiver, keep the antenna, and it would be a good deal - for someone who needs an antenna. No argument.

But I thought we were talking about whether this would make a good GPS receiver, not just an antenna! So: if you write your own software and can interpret the data coming from the GPS directly, $20 for a receiver and antenna is an extremely good value. If you can program a PIC to translate the data into NMEA, that adds maybe another $5 or $10 to the total cost - still a good value.

However, a Basic Stamp is quite an expensive little beast, and makes the whole project several times as expensive if you use one. That may no longer be a good value, compared to brand-new GPS receiver boards that output NMEA directly. That's all I was trying to point out.

Dave

2144. Re: $20.00 GPS Project Complete w/Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-24 00:00:00 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <CVnw3.9171$ok3.2548@news.rdc1.il.home.com>
Source record: 67594

> An even better solution is to use the Atmel AVR AT90S1200 which has 1K
> on-board FLASH program memory & 64 bytes EEPROM, as well as the usual
timers
> and stuff. Or, if you want to actually do distance/bearing/speed
> calculations and waypoints, as well as an NMEA conversion, the AT90S8515
has
> 8K of FLASH program space, 1/2K EEPROM, 1/2K SRAM, a UART, a hardware

Now you're singing my song. I've been writing code for this chip for the
last two years.
Need some startup code?

2145. Re: High voltage transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-24 00:00:00 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <7ptee3$8nl@nnrp1.farm.idt.net>
Source record: 67595

LCTUPAC wrote in message <19990821030424.23593.00002089@ng-fs1.aol.com>...
> If you want to hook them up as a 350 - 0 - 350, there should be no
problem.
>Just pay attention to the phasing.
>
> If you hooked them up as a 0 - 350 - 700 you would have to worry about
the
>primary to secondary breakdown voltage.

If you can contact the manufacture of the transformers you plan to use, they
should
be able to supply you with the "Hy-Pot" rating for them. In the USA it is
common to
find these "Hy-Pot" spec's to be 2500Vrms for 1 minute, primary to secondary
for
machine control applications.

73's,

Leland C. Scott
KC8LDO

ARRL member
NCI member

"You ask what Morse Code is good for? I'll tell you. Morse
Code is used exclusively by Electronics Based life forms to
communicate amongst themselves using advanced Organic
Digital Signal Processors, running state of the art Artificial
Intelligence Software, to perform the highly complex
transmit encryption, receive decryption and error correction
functions."

2146. Re: HELP! Tube Guru's Advice Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-24 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19990824033515.13949.00002115@ngol04.aol.com>
Source record: 67596

In article <37C17885.87A49391@midwestmicro-tek.com>, Rick Haub
<rhaub@midwestmicro-tek.com> writes:
>
>Nope. Sorry to say I don't have the facilities to do thoughs thing. I think I
>may
>have isolated the problem though.
>
>First off I miss calculated the frequency, it is indeed oscillating at the
>correct
>frequency (I miss counted the hash marks of my scope). I got my watt meter
>and
>dummy load on friday evening and hooking them up and tuning to maximum output
>gets
>me about 10-15 watts (should be about 50 watts).

Yep, 50 watts is about right
>
>The final stage after the 1625 has some inductors that lead into a
>variable air cap-coil inductor-variable air cap pi network.

The little inductor that is 7 turns of #20 wound on a 47 ohm 1 watt carbon resistor that has one end on the 1625 plate cap is a parasitic suppressor. The other inductor is the plate RF choke - book calls for a National R-100U, 2.5 mH at 125 mA. Both can cause all sorts of trouble if they are not the right component for the job.

> The first air cap
>is a
>140pF used for tuneing the final and the second air cap is used for loading.

Yep. A Hammarlund HF-140 and a 3 section BC capacitor. There are also fixed capacitors that are connected into the circuit on the 3.5 MHz band because the air caps alone aren't big enough to do the job on 80. 100 pF on the plate side and 470 pF on the loading. Note that these should be mica, not ceramic, and rated at least 1000 volts.

>The
>coil is a hand wound 16 1/2 turn 16 tpi #24 3/4 inch diamature coil with a 2
>inch
>piece of half inch diameter ferrite core.

Just like the book. They used the ferrite core to avoid having to use a much bigger coil.

> While tune last night I would hold
>the

>key for maybe 10-15 seconds at a time. After tuning and checking plate and
>grid
>currents for about 20 minutes I heard a dull "thunk" I look at the coil and
>saw
>that the ferrite core had melted though its plastic container. After applying
>the
>"wet finger test" I found that the core was boiling hot. Maybe 400 or 500
>degrees
>F. It seems too much RF is being wasted in the final tuning coil. While
>tuning with
>the tuning cap I really never see a resonet "dip".

There's at least part of the problem - the core is not meant for that sort of use. They used a Lafayette BC loopstick core - characterisitics unknown. The dip with no load on the rig should be really deep and sharp.

For the core to get hot enough to melt plastic in just 10-15 seconds, it must be dissipating a couple dozen watts of RF!
>
>Based on what I'm seeing and my limited knowledge on the subject I think I
>need to
>ajust the number of windings on the coil. Is this a reasonable assumption?
>
You need to either try a different ferrite rod material, or use a coil that does not use a ferrite core at all. I'd recommend the latter.

The coils originally specified in this rig are made from B&W Miniductor mounted inside molded polystyrene coil forms. These were once a common item but are now quite rare. The plate coils used are somewhat small for the RF power level - I'd use something on the order of 1-1/4 to 1-1/2 inches in diameter, wound with at least #18 wire.

What size should the plate coil be? That's a question easily answered by flipping to page 157 of the 1967 Handbook and using the charts.

First step is to determine the output impedance of the 1625. This is determined by the ratio of plate current to plate voltage. This rig operates the 1625 at 680 plate volts and 110 ma, so the ratio is about 6. From the charts, and using a loaded Q of 15, the plate tuning capacitor should have about 200 ohms reactance, the coil about 225 ohms reactance, and the loading capacitor about 30 ohms reactance. We'll do the whole drill to demonstrate the process.

Next we have to figure the inductance and capacitance values that correspond to the above values. There is no reason to go beyond about three significant figures in these calculations, because the components are just not that precise. There is also the factor of stray inductance and capacitance, and the output capacitance of the tube..

Capacitive reactance is given by the formula

Xc = 1/(2*pi*f*C)

Rearranging for C, we get:

C = 1/(2*pi*f*Xc)

or, more simply,

C = 1/(6.28*f*Xc)

This formula works, but it requires the frequency in Hz and gives the answer in farads.

So for a reactance of 200 ohms at 3.7 MHz, we get

C = 1/(6.28*3,700,000*200) = .000000000215 F = 215 pF

However, we can rewrite the equation to use MHz and pF. It works out to be:

C = 159,000/(F*Xc)

so

C = 159,000/(3.7*200) = 215 pF

which gives 215 pF directly. This is the total capacitance needed for the plate tuning. The 1625 has an output capacitance of 7 pF, and stray capacitances will amount to at least 3 pF. That leaves 205 pF to be supplied by the 140 pF tuning capacitor and the 100 pF mica padder.

For the loading capacitor, we use 30 ohms for Xc and get:

C = 159,000/(3.7*30) = 1432 pF.

These are within the range of the capacitors used.

Now for the inductor. The formula for inductive reactance is:

XL = 2*pi*f*L

Rearranging for L, we get:

L = XL/(2*pi*f)

or, more simply,

L = XL/(6.28*f)

This formula works, but it requires the frequency in Hz and gives the answer in henries.

So for a reactance of 225 ohms at 3.7 MHz, we get

L = 225/(6.28*3,700,000) = .00000967 H = 9.67 uH

However, we can rewrite the equation to use MHz and uH. It works out to be:

L = (.159*XL)/F

so

L = (.159*225)/3.7 = 9.67 uH

If you've followed this far, you can see that with the charts and some simple math, we can design pinets for almost any frequency and tube output impedance.

Finally, we need to figure out how to wind a (#!%&/!) 9.67 uH coil. This is the toughest part, because there are many variables. One formula for inductance of a single layer solenoid aircore coil is:

L = (a*a*n*n)/([9*a]+[10*b])

where a = coil radius, b = coil length, n = number of turns, and L is in uH.

Let's say we use a 1-1/2 inch coil form and a winding 2 inches long. Looking at the above formula, we find that

(a*a)/([9*a]+[10*b]) is a constant. Plugging in .75 for a and 2 for b, we get a constant of .021

That is, L = n*n*.021 for a 1-1/2 inch diameter coil 2 inches long. Using 21 turns, we get L = 9.26 uH, which is pretty close. It's better to be a little low than a little high, because there will be stray inductance in the wiring.

You can rearrange the equation to solve directly for n and get:

n = Square root of [L*([9*a] + [10*b])]/(a*a)

which looks pretty awful, mainly because I'm trying to express math formulas without using too many symbols.

Any questions so far?

A word about tuneup: This rig has a 3 position "cal - op - tune" switch. You tune it up by first setting the grid current in the "tune" position, then switching to "op", closing the key, and doing the "dip the plate, adjust the load, dip the plate" sequence. Some pointers on this game:

1) Don't hold the key closed any more than 10-15 seconds during tuneup. Once you get the hang of it, tuning up takes a few seconds at most.

2) Go back and recheck the grid current after tuning up the plate circuit. The grid current is often affected by plate tuning.

3) The last adjustment should always be dipping the plate.

4) Log the settings of the various controls once you determine them. Makes retuning really easy.

5) Watch the plate and grid current meters, not the output. You may be tempted to tune for maximum output, and you may get more than by following the tuning sequence in the book. But that's because you will be running the tube beyond its ratings.

73 de Jim, N2EY

2147. Re: HELP! Tube Guru's Advice Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-24 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19990824033516.13949.00002116@ngol04.aol.com>
Source record: 67597

In article <37BADF60.AED359A3@midwestmicro-tek.com>, Rick Haub
<rhaub@midwestmicro-tek.com> writes:
>
>I finished building a CW, 75 watt, 80m transmitter last night. I uses
>the 1625 final and it is crystal controlled at 3.710MHz. I got the
>design from the 1967 ARRL Radio Amatuer Handbook. I've never built a
>tranmitter before and I have some questions about its operation.

If I'm not mistaken, this one uses a 12BY7 to drive a 1625, with a solid state
"economy" bridge rectifier supply.
>
>After turning it on and then turning it off and installing the VR tubes
>so it would work properly then turning it back on again, I went through
>the tuning procedure described in the article. I used a 40 watt light
>bulb for the dummy antenna. After tuning around a bit I found that I
>could get the light bulb to light, but very dimmly. I guess that I had
>always assumed that the light should be very brite, is something amiss?

Sounds like it. That power supply should produce almost 700 volts on the 1625
plate under load. With 3.5 mils of grid current an 100 mils of plate current, a
properly opeerating Class C 1625 will produce more than enough RF to light a 40
watter to full brilliance.

>I think I have two probelms but they are probaly from the same error.
>First, the voltage output may be alright but maybe I'm not getting
>enough current? Second, how am I pulling a 3.710MHz crystal to 4.44MHz?
>Any help would be great.

There are several possibilities:

1) Power supply troubles, such as too low plate or screen voltage
2) Mistuning
3) Problems in the tuned circuits
4) Bad tube or other component.

More to come!

73 de Jim, N2EY

>

2148. Re: HELP! Tube Guru's Advice Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-24 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <37C24FA3.A8FE531@corecomm.net>
Source record: 67598

Rick Haub wrote:
> First off I miss calculated the frequency, it is indeed oscillating at the correct
> frequency (I miss counted the hash marks of my scope).

That's NEVER EVER EVER happened to me. Honest. :-)

> It seems too much RF is being wasted in the final tuning coil. While tuning with
> the tuning cap I really never see a resonet "dip".

In view of the excellent tips others have already posted, let me add only
that it might be a learning experience to run the final tuning circuit
(presumably a pi network) through Spice and look at what's happening in
that coil.

If the coil is the right value (and I have my doubts based on the quote
I left above) *under the actual working conditions of the circuit*, then
most likely you're not wasting too much RF there. Just remember that a
1 mH coil isn't always a 1 mH coil under all operating conditions. :-)
For example, a saturated core changes things. Or you might wind uninsulated
wire tightly at 25 degrees C, then run the coil in -40 degrees and have
the dimensional changes be enough to short turns. Or... well, imagination
is never as rich as experience. :-)

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

2149. Re: Antenna help...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-24 00:00:00 UTC
From: Harry SM0VPO <harryvpo@hotmail.com>
Message-ID: <37C2577F.FCA4FFCC@hotmail.com>
Source record: 67599

John Mason wrote:

> I have recently come into posession of some 50'-100' lengths of cat 5
> twisted pair (4 pairs) cable ...
>
> My question is should I bother removing "one" wire from the cable and using
> it or just solder all 8 wires together at each end and feed the whole cable.

If you can support it then use all 8 wires. Lower losses due to the increased surface area and all that stuff. One thing you could do is to cut them to slightly different lengths which will have the effect of increasing the bandwidth if used as a resonant dipole.

Harry
http.//sm0vpo.8m.com

2150. Re: HELP! Tube Guru's Advice Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-24 00:00:00 UTC
From: troglodite@aol.com
Message-ID: <19990824090734.23592.00003818@ng-fs1.aol.com>
Source record: 67600

>
>There are several possibilities:
>
>1) Power supply troubles, such as too low plate or screen voltage
>2) Mistuning
>3) Problems in the tuned circuits
>4) Bad tube or other component.
>

Could be his oscillator isn't, but his amplifier IS.

Doug Moore KB9TMY

2151. RX Noise Bridge Schmatic

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-24 00:00:00 UTC
From: Dennis Breeden <d.breeden@mci.com>
Message-ID: <37C29FEC.3223B34E@mci.com>
Source record: 67601
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

I am looking for a schmatic for a RX Noise bridge. I perfer with R and C/L, similar to the Palomer(?). Can be solid state or tube. I will pay for shipping and copying. Please include a parts list, if necessary. Since some may do this for free, please contact me first before doing anything. Many thanks.

Dennis WB3KUM/9

d.breeden@mci.com

2152. Re: $20.00 GPS Project Complete w/Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-24 00:00:00 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <UEyw3.9402$ok3.2195@news.rdc1.il.home.com>
Source record: 67602

Dave VanHorn <dvanhorn@cedar.net> wrote in message
news:CVnw3.9171$ok3.2548@news.rdc1.il.home.com...
>
> > An even better solution is to use the Atmel AVR AT90S1200 which has 1K
> > on-board FLASH program memory & 64 bytes EEPROM, as well as the usual
> timers
> > and stuff. Or, if you want to actually do distance/bearing/speed
> > calculations and waypoints, as well as an NMEA conversion, the AT90S8515
> has
> > 8K of FLASH program space, 1/2K EEPROM, 1/2K SRAM, a UART, a hardware

512 bytes of ram too. :) and a $199 ICE announced today.
I've been working with the ice for several months as a beta, it's sweet!

2153. gps au 12500 gps made matsushita

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-24 00:00:00 UTC
From: kable guy minn <n0mnb@minn.net>
Message-ID: <7puo40$k4p$1@news.minn.net>
Source record: 67603
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.video.satellite.dbs,sci.electronics.equipment,slac.rec.ham_radio

hello
looking for out side gps antenna this antenna was sold at dayton ham fest'
can any tell where to get them..

thanks
n0mnb@minn.net

2154. Re: High voltage transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-24 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7puqsa$l15$1@plutonium.btinternet.com>
Source record: 67604

Tony Baldwin <baldwint@amsat.org> wrote in message
news:7pk3mdper1@fraggle.esatclear.ie...
> Hi, is it possible to run a pair of identical mains transformers to get a
> higher secondary voltage ?
>
> In other words, can I run a pair of 0 -- 350v transformers to give me
> 350 -- 0 -- 350.
> Reason ? High voltage transformers are like hens teeth in Ireland :(
>
> 73 de Tony, EI2FSB
>
> If a single transformer can source enough power you could just use a
voltage doubler based around a bridge rectifier.

2155. Re: GG 813's

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-24 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <37C30130.257A@ixpres.com>
Source record: 67605

StereoDoc1 wrote:
>
> Question: Is it feasible to run a pair of 813's in grounded grid
> configuration of say 80 or 40 meters?
>
> Bob

Bob OM,

Many have been built; popular design. I have a copy of the GE Ham
News Nov-Dec 1959 article featuring a GG pair of 813's. I built and
used this amp for many years, when I was handling NTS CW traffic. It is
probably one of the simpler designs you can build.
If you are interested in a copy, just send me an E-Mail at
W6JL@ixpres.com, and I will be happy to send you a copy. Be advised
there are many others that have been built, including a later version of
this particular amp.

73,
Don, W6JL

2156. Wanted:Sams MHF manuals!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-24 00:00:00 UTC
From: mjzuccaro@aol.com
Message-ID: <19990824174655.09306.00003025@ng-ca1.aol.com>
Source record: 67606

Guys:
Am looking for a complete set of these 70's stereo manuals.Anyone have a set?
Please email back.
Thanks,
Mike Zuccaro

2157. OT: Re: $20.00 GPS Project Complete w/Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-24 00:00:00 UTC
From: Stephen David Hodgkinson <scotia-technologies@zetnet.co.uk>
Message-ID: <19990824225247859l1@zetnet.co.uk>
Source record: 67607

The message <UEyw3.9402$ok3.2195@news.rdc1.il.home.com>
from "Dave VanHorn" <dvanhorn@cedar.net> contains these words:

> 512 bytes of ram too. :) and a $199 ICE announced today.
> I've been working with the ice for several months as a beta, it's sweet!

We currently use the PICSTART programmer for the PIC's, but we are
willing to give the AVR a shot (the PIC's are too limited IMOH).
Is the ICE windows based? I've seen some of the cheaper ICE's for
PIC's that are DOS based (YUK!).

2158. Re: Re: $20.00 GPS Project Complete w/Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-24 00:00:00 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <OeFw3.9701$ok3.2221@news.rdc1.il.home.com>
Source record: 67608

> We currently use the PICSTART programmer for the PIC's, but we are
> willing to give the AVR a shot (the PIC's are too limited IMOH).
> Is the ICE windows based? I've seen some of the cheaper ICE's for
> PIC's that are DOS based (YUK!).

Windows, a very nice job. You can pick up the SW from their web site,
www.atmel.com The AVR assembler, Studio (the simulator and ice) are both
free downloads. The Ice looks just like the simulator.

2159. Re: TS 440S Info Search.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-24 00:00:00 UTC
From: will Herzog <herzog@frontiernet.net>
Message-ID: <37C3557D.3D6C@frontiernet.net>
Source record: 67609
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur,rec.ham-radio

Adelmo De Santis wrote:
>
> Hi All,
> thank you for reading this NON COMMERCIAL message.
>
> I'm looking for info about TS 440 S like follows:
>
> -mods and improvements you have personally experienced or heard about;

http://www.qth.com/ and it's links.
arrl.org index of old articles.

Dig enough in these and you'll find mods, I did, but haven't done any.
The one for LF coverage was tempting, but too much noise here.

>
> -troubleshooting or problems you managed to solve on your own.

I blew the ts430s driver transistors, and replaced them.
I'd overdriven them while tuning.
>
> All this info will help me to create a web page about ts-440s .
> Please help me to make this site as complete as possible.

Soon the memory battery will cease, and I don't know how to replace
it!!!
ONly one ts440? not TS430s too, boo ho.
> The site will be free access and the information will NOT be used for
> commercial porpouses but only for electronic experimentation.
>
I'd like to know when it is done/up.

> Please, if you have some info, just send me an e-mail to :
> dcl@ascu.unian.it.
> Just send me a short summary of what you experinced. I'll chech this info
> and, if what you sent is something new, I'll beg you to send me the
> complete description of your experince. This procedure avoids to have a
> lot of articles dealing with the same matter.
>
> Thank you and 73.
>
> ***DE SANTIS ADELMO****** FM:ascu
> Ancona www.gulliver.unian.it/irgp 44.134.240.82

--
Will; Amateur Radio call K 2 L B ; Rochester, New York, USA
e-mail <herzog@frontiernet.net>

2160. Re: RX Noise Bridge Schmatic

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-24 00:00:00 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <7pvjd1$t3a$1@news1.alltel.net>
Source record: 67610
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

The plans for a duplicate of a palomar appears in the ARRL handbook, or at least it is in the 1977 (My Newest) version.
if you can't find it in the handbook, drop me a line and I will scan in the info.
73's
Fred W4JLE
http://w4jle.com

Dennis Breeden <d.breeden@mci.com> wrote in message news:37C29FEC.3223B34E@mci.com...
> I am looking for a schmatic for a RX Noise bridge. I perfer with R and
> C/L, similar to the Palomer(?). Can be solid state or tube. I will pay
> for shipping and copying. Please include a parts list, if necessary.
> Since some may do this for free, please contact me first before doing
> anything. Many thanks.
>
> Dennis WB3KUM/9
>
> d.breeden@mci.com
>

2161. Re: Antenna help...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-24 00:00:00 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <7pvk5e$17$1@news1.alltel.net>
Source record: 67611

I woud solder all the ends together. Better yet I would make a dipole, In a dipole the more wires, the less the ohmic loss. Therefore the efficiency increases.

John Mason <john_mason@mohawkind.COM> wrote in message news:003001beed72$825955e0$1332140a@Mohawk...
> I have recently come into posession of some 50'-100' lengths of cat 5
> twisted pair (4 pairs) cable and would like to use a piece to setup an
> antenna for QRP operation. I've been thinking about running a length from
> the apex of the roof to a tree about 75'-100' away (the only sizable tree on
> the lot). I figure I could use the wire as an end fed antenna with another
> lead to an 8' grounding rod.
>
> My question is should I bother removing "one" wire from the cable and using
> it or just solder all 8 wires together at each end and feed the whole cable.
> The cable appears to be unshielded (no foil) and has CAT 5 printed on the
> jacket (which is blue).
>
>
> Thanks in advance,
> John... K4JJM
> John_Mason@MohawkInd.Com
>
>

2162. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-24 00:00:00 UTC
From: Rich Grise <offduty@entheosengineering.com>
Message-ID: <37C3604F.57F6@entheosengineering.com>
Source record: 67612
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

Tom MacIntyre wrote:
>
> John Woodgate <jmw@jmwa.demon.co.uk> wrote:
>
> ><37c14714.220653434@news1.ns.sympatico.ca>, Tom MacIntyre
> ><tmacinty@ns.sympatico.ca> inimitably wrote:
> >>Rich Grise <offduty@entheosengineering.com> wrote:
> >>
> >>>Um, isn't a "dipole" typically a half-wave?
> >>>
> >>>What does an 80-meter photon look like?
> >>>
> >>>:)
> >>>Rich
> >>
> >>A 60 meter photon on steriods?...
> >>
> >No. Shorter wavelength equals more photon energy: E = hc/[lambda]. It's
> >not funny enough (quite) to be still funny even if wrong.
> >
> >--
> >Regards, John Woodgate, OOO - Own Opinions Only.
> >Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
> >Did you hear about the hungry genetic engineer who made a pig of himself?
> >PLEASE DO ****NOT**** MAIL COPIES OF NEWSGROUP POSTS TO ME!!!!
>
> Oh, well...it was morning, and I'm on vacation...
>
> Tom

Well, I laughed, FWIW.

:-)
Rich

2163. LSC4165 chip

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-24 00:00:00 UTC
From: Jay Sissom <jsissom@indiana.edu>
Message-ID: <37C3665D.F1980512@indiana.edu>
Source record: 67613

Does anyone know where I can find some documentation on the LSC4165 chip? This is a 16 pin DIP phased locked loop. It is used in the Radio Shack weather radio. I would like to tune this radio to my 2m repeater frequency, but this chip is used as the local oscillator and I can't find any info on it.

Thanks
Jay

2164. F.S. HP8551 Spectrum analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-25 00:00:00 UTC
From: Vincent Coppola <vinyc@snet.net>
Message-ID: <37C49661.36E@snet.net>
Source record: 67485

HP 8551 Spectrum analyzer, range 10mhz-40 ghz, in working condition. It is an unmodified BWO model and I also have a spare working BWO. It includes the 851B display unit.

I live in the northeast (Connecticut), and would really prefer not having to pack and ship the thing. Buyer would have to assume the costs if that were the case.

Asking $300

Vince

2165. WTB Kenwood TR-2600A Parts/Accessories

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-25 00:00:00 UTC
From: Amach <sugarsmack@ficom.net>
Message-ID: <37c4a1bd.0@news.isdn.net>
Source record: 67486
Cross-posted to: alt.ham-radio.fm,alt.ham-radio.vhf-uhf,rec.ham-radio.swap,rec.radio.amateur.homebrew

Looking for PL tone chip for my old Kenwood TR-2600A handie-talkie radio. Also, a mobile charger and/or a dead battery pack for it.
Please reply at ramacher@ficom.net

Thanks -
Rod
KG4BOO

2166. Re: Capacitor Breakdown Voltage

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-25 00:00:00 UTC
From: Joe Dubner <dubner@earthlink.net>
Message-ID: <37C4CB55.EC415D47@earthlink.net>
Source record: 67487

Jon,

In a word: "no".

The capacitors are marked with a "Working Voltage DC", a value somewhat lower than the 12V max surge voltage (probably 10V in this case). A good rule of thumb for conservative operation and long component life is to derate the capacitor to no more than about 80 percent of its WVDC. In this case, you shouldn't exceed (except very briefly) 8 VDC on those particular capacitors.

And depending where you're connected (e.g. ahead of a regulator or dropping resistor), the actual voltage you're applying in your "13.8 volt power supply system" may greatly exceed 13.8V.

You probably want a 25 WVDC capacitor for your application. If you're bound and determined to use those capacitors (hey, this is "amateur" radio, not "professional" radio :-), you could put a couple of 'em in series (equalizing resistors recommended).

73,
Joe "still having nightmares about my years as an H-P component engineer :-)" Dubner

---
Joe Dubner K7JD | P.O. Box 98 | dubner@earthlink.net
| Liberty Lake, WA 99019 | +1 509 255-1102

LL2363 wrote:
>
> Have some 160000uf caps and would like to use them in a 13.8 volt power
> supply system. They have a max surge of 12 volts. Can this be safely exceeded?
>
> Thanks
>
> Jon in Michigan

2167. TS 440S Info Search.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-25 00:00:00 UTC
From: Adelmo De Santis <dcl@ascu.unian.it>
Message-ID: <Pine.LNX.4.02A.9908250050380.9078-100000@ascu.unian.it>
Source record: 67614
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur,rec.ham-radio

Hi All,
thank you for reading this NON COMMERCIAL message.

I'm looking for info about TS 440 S like follows:

-mods and improvements you have personally experienced or heard about;

-troubleshooting or problems you managed to solve on your own.

All this info will help me to create a web page about ts-440s .
Please help me to make this site as complete as possible.

The site will be free access and the information will NOT be used for
commercial porpouses but only for electronic experimentation.

Please, if you have some info, just send me an e-mail to :
dcl@ascu.unian.it.
Just send me a short summary of what you experinced. I'll chech this info
and, if what you sent is something new, I'll beg you to send me the
complete description of your experince. This procedure avoids to have a
lot of articles dealing with the same matter.

Thank you and 73.

DE SANTIS ADELMO*** FM:ascu
Ancona www.gulliver.unian.it/irgp 44.134.240.82

2168. Re: Microwave 1N23 Diodes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-25 00:00:00 UTC
From: Bobby Atkinson <bobbys@prodigy.net>
Message-ID: <01beee8e$1971aec0$0100a8c0@ZTU>
Source record: 67615

Try the usual places like Jameco, Gateway surplus, or pick up a copy of
Nuts & Volts.

Steve Carlisle <quatsein@island.net> wrote in article
<37bcd9fc.5430238@news.cr.island.net>...
> Check with your local marine radar repair depot. Steve Carlisle
>
> On Fri, 20 Aug 1999 12:20:32 +1000, "WB" <willyacht@yahoo.com> wrote:
>
> >Does anyone know who makes these, microwave 1N23 diodes, i used to buy
them
> >from NTE but they no longer make them. I use these a lot in my home brew
> >projects. The newer diodes are so small you cant solder them, most are
now
> >designed for automated manufacture. If anyone has a source for leaded
> >microwave diodes i would like to know about them. Micorwave associates
seem
> >to have an impressive catalogue, but getting parts from them is like
pulling
> >teeth. Micorwave alarm manufacturers must be getting theres from
somewhere.
> >Any advice?
> >
> >Thanks
> >Will
> >
> >
>
>

2169. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-25 00:00:00 UTC
From: tmacinty@ns.sympatico.ca
Message-ID: <37c36655.58938636@news1.ns.sympatico.ca>
Source record: 67616
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

Rich Grise <offduty@entheosengineering.com> wrote:

>Tom MacIntyre wrote:
>>
>> John Woodgate <jmw@jmwa.demon.co.uk> wrote:
>>
>> ><37c14714.220653434@news1.ns.sympatico.ca>, Tom MacIntyre
>> ><tmacinty@ns.sympatico.ca> inimitably wrote:
>> >>Rich Grise <offduty@entheosengineering.com> wrote:
>> >>
>> >>>Um, isn't a "dipole" typically a half-wave?
>> >>>
>> >>>What does an 80-meter photon look like?
>> >>>
>> >>>:)
>> >>>Rich
>> >>
>> >>A 60 meter photon on steriods?...
>> >>
>> >No. Shorter wavelength equals more photon energy: E = hc/[lambda]. It's
>> >not funny enough (quite) to be still funny even if wrong.
>> >
>> >--
>> >Regards, John Woodgate, OOO - Own Opinions Only.
>> >Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
>> >Did you hear about the hungry genetic engineer who made a pig of himself?
>> >PLEASE DO ****NOT**** MAIL COPIES OF NEWSGROUP POSTS TO ME!!!!
>>
>> Oh, well...it was morning, and I'm on vacation...
>>
>> Tom
>
>Well, I laughed, FWIW.
>
>:-)
>Rich

Thanks, Rich...

Tom

2170. GPS $20.00 Project Comes Throught The Rollover AOK

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-25 00:00:00 UTC
From: John Plemons <john@mavin.com>
Message-ID: <37C3852C.9ADE5319@mavin.com>
Source record: 67617
Cross-posted to: sci.geo.satellite-nav,alt.ham-radio.mods,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.packet,alt.ham-radio.packet,alt.ham-radio.marketplace

The $20.00 Electro Mavin GPS Project Came through the rollover without a problem, feedback from end users is that it didn't skip a beat, and is working just fine. For you who have picked up the unit, we have new info just posted to our web site with a Windows program and documentation to get the unit working in short order.

http://mavin.com/slickitems.html

I'm going to try to have one up and working this weekend at the TRW Swap Meet, check us out at spaces G-27

Thanks,
John Plemons
800-421-2442

2171. Re: High voltage transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-25 00:00:00 UTC
From: Mike Willis <M.J.Willis@rl.ac.uk>
Message-ID: <37C3B498.C2324CFB@rl.ac.uk>
Source record: 67618

David Cunningham wrote:

> Tony Baldwin <baldwint@amsat.org> wrote in message
> news:7pk3mdper1@fraggle.esatclear.ie...
> > Hi, is it possible to run a pair of identical mains transformers to get a
> > higher secondary voltage ?
> >
> > In other words, can I run a pair of 0 -- 350v transformers to give me
> > 350 -- 0 -- 350.
> > Reason ? High voltage transformers are like hens teeth in Ireland :(
> >

Depends. Some transformers have enough insulation, some don't. Do a test with a high voltage "portable mains equipment " tester, modern ones will go to 4kV. It might be a problem in Ireland with it being so damp. Otherwise, get a 700V transformer. They are not so rare over here. Proper high power EHTs transformers giving 2-4kV are much harder to find.

If you wanted 2-3kV at 500VA, it is easy to do with microwave oven transformers. They cost very little new (30-60 pounds) and you can buy a complete oven new for 50 pounds to build the amp into.

2172. Re: High voltage transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-25 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <VoHmRAAjM5w3Ew0m@ifwtech.demon.co.uk>
Source record: 67619

David Cunningham wrote:
>
>Tony Baldwin <baldwint@amsat.org> wrote in message
>news:7pk3mdper1@fraggle.esatclear.ie...
>> Hi, is it possible to run a pair of identical mains transformers to get a
>> higher secondary voltage ?
>>
>> In other words, can I run a pair of 0 -- 350v transformers to give me
>> 350 -- 0 -- 350.
>> Reason ? High voltage transformers are like hens teeth in Ireland :(
>>
>> 73 de Tony, EI2FSB
>>
>> If a single transformer can source enough power you could just use a
>voltage doubler based around a bridge rectifier.
>
>
Unfortunately the performance of a transformer in a voltage doubler
circuit isn't simply about the power (VA) capability. DC output voltage
regulation from a doubler is very poor unless the secondary resistance
is extremely low - much lower than you'd find in an ordinary transformer
that has not specially designed for doubler service.

A lot of people have learned the hard way that if you require
significant output current and good voltage regulation, ordinary
transformers don't work well in voltage doubler circuits.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

2173. FS: Nuvistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-25 00:00:00 UTC
From: Marty <marty-k2@snet.net>
Message-ID: <37C3E787.3260F7C5@snet.net>
Source record: 67620
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,res.radio.swap

Somebody was looking for Nuvistors? I have 2- 6CW4's and 3- 6DS4's that were used a long time ago in some homebrewed 2M equipment, all working when last used.

I can't guarantee their condition now because I have no way of testing them, but if you're up to taking a chance, I'll ship all 5, plus 3 sockets, for $40.

Marty K1FHR

2174. ICOM memory board

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-25 00:00:00 UTC
From: Nardo' Roberto <nardo@pv.infn.it>
Message-ID: <37C3EF5F.6301@pv.infn.it>
Source record: 67621

Hello DR OM
I'm Roberto IK2RND , I have realized a replacement board for EX-314
MEMORY BOARD installed in these Icom rigs :
IC-745 IC-751 IC-751/A ICR-71A/E IC-271A/E IC-471A/E IC-1271.
My board called EPROM/RAMBOARD definitely solve the problem related
to the lithium battery fails. When battery fails the rig stop to work
and you need to send your radio or EX-314 board to the Icom service
center to replace battery and reprogram the memory.
Data in the my board are stored in an EPROM chip the RAM is used only
to store the 32 memory channels.

73, Roberto IK2RND

for more info pse mailto:nardo@pv.infn.it
you can see photo http://www.pv.infn.it/~nardo/epromram.jpg

2175. Re: Do Power Inverters Make a Lot of RFI?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-25 00:00:00 UTC
From: Andrew Bachler <Andrew_Bachler-WLAB00@email.mot.com>
Message-ID: <7q0rf9$abk5@nntp.cig.mot.com>
Source record: 67622

Bill,

I use a Statpower ProWatt 1500 for emergency power for the house. I also use a Statpower Portawatt 1000 for "portable" power. I had a Whistler 500, but it completely failed. I also have a Whistler 300, but it's too small for most applications. (Surge power demand for motors etc. can be very high). I highly recommend Statpower. The quality is better than some of the others (but the price seems to be higher also). Statpower definately includes RFI circuitry. My installation has NO RF interference using the Statpower units. However, the antennas are in the clear, separated by distance from the ac power, and fed with hardline which reduces RFI pick-up. I have noticed a little "buzz" on low cost AM broadcast radios plugged into the inverter's ac power.

I strongly suggest you contact http://www.skingco.com/ They carry several lines of power inverters and can make comparisons and recommendations. I think that they were also planning to do some comparison RFI testing.

Andy N9AB

Bill Youse wrote in message <37BF00AC.FED8B5A8@home.com>...
>I'm thinking about buying a 500 watt inverter for running a computer and
>maybe a small refrigerator for emergency use. Will it make a lot of
>RFI on the HF bands? Whistler, Statpower and Cherokee are the brands
>I'm considering. If anyone has
>experience with these for field day, etc. I'd would like to know how
>much radio noise they make.
>
>Thanks, Bill
>N6DZS
>

2176. Re: RX Noise Bridge Schmatic

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-25 00:00:00 UTC
From: Dennis Breeden <d.breeden@mci.com>
Message-ID: <37C3F699.A1D11DF@mci.com>
Source record: 67623
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

None of mine do, there is a impeadance meter but it requires a low lower RF source (5V RF). If this is different, please send it to me. Thanks.

Dennis WB3KUM/9

2177. Re: FS: Nuvistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-25 00:00:00 UTC
From: Marty <marty-k2@snet.net>
Message-ID: <37C3F2D6.583ACBF2@snet.net>
Source record: 67624
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,res.radio.swap

Marty wrote:
> Somebody was looking for Nuvistors? I have 2- 6CW4's and 3- 6DS4's that
> were used a long time ago in some homebrewed 2M equipment, all working
> when last used.
> I can't guarantee their condition now because I have no way of testing
> them, but if you're up to taking a chance, I'll ship all 5, plus 3
> sockets, for $40.
.
.
.
I should have mentioned that I did check that none of the filaments are
open and there are no inter-electrode shorts.

2178. Re: FS: Nuvistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-25 00:00:00 UTC
From: Marty <marty-k2@snet.net>
Message-ID: <37C3F31F.648E4AD0@snet.net>
Source record: 67625
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,res.radio.swap

Marty wrote:
> Somebody was looking for Nuvistors? I have 2- 6CW4's and 3- 6DS4's that
> were used a long time ago in some homebrewed 2M equipment, all working
> when last used.
> I can't guarantee their condition now because I have no way of testing
> them, but if you're up to taking a chance, I'll ship all 5, plus 3
> sockets, for $40.
.
.
.
I should have mentioned that I did check that none of the filaments are
open and there are no inter-electrode shorts.

2179. Re: FS: Nuvistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-25 00:00:00 UTC
From: Marty <marty-k2@snet.net>
Message-ID: <37C3F454.FDDCC48D@snet.net>
Source record: 67626
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,res.radio.swap

Marty wrote:
> Somebody was looking for Nuvistors? I have 2- 6CW4's and 3- 6DS4's that
> were used a long time ago in some homebrewed 2M equipment, all working
> when last used.
> I can't guarantee their condition now because I have no way of testing
> them, but if you're up to taking a chance, I'll ship all 5, plus 3
> sockets, for $40.
.
.
.
I should have mentioned that I did check that none of the filaments are
open and there are no inter-electrode shorts.

2180. Re: HELP! Tube Guru's Advice Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-25 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <37C40F08.321A158F@midwestmicro-tek.com>
Source record: 67627

Thanks for the help Jim. You and Blake and the others have really help me get a handle on this stuff. So here is what happend last night.

I read the many measages posted and e-mailed to me on determining the proper size coil for the tuning coil (thanks guys!) and decided that I'd start out by wrapping about 30 coils of standard solid hookup wire around a 1 1/4 inch form and then unwrapping one coil at a time and re-tuning the rig. Oh by the way, before starting with the new coil, when tuning with the light bulb I showed @25 watts output but when tuning with the 50 ohm dummy load I showed about 5 watts out, much smaller resistance on the light bulb?

To start, I took out the old coil and put in the new one and started tuning. I unwrapped about 7 coils, each time I got a few more watts on the meter. I started with about 2-3 watts and by the time I got to 23 turns I was showing @25 watts. But here is the puzzler, I could use the tuning capacitor to tune the coil in and out of resonance but once I tuned it in, adjusting the *loading* capacitor made so changes. In affect the loading capacitor didn't seem to be influencing the pi circuit at all. I should think that it would at least cause the resonant circuit to go out of resonance, but it didn't. Anyway after reaching a peak of 25 watts I then started lossing ground as I unwound more coils. Then I hit another peak of about 20 watts when I reached 19 turns. The watts then again fell off and at 10 turns I stopped the experiment. I'm not sure but I'm guessing that the second peak was probably the 40m harmonic.

Okay, heres the kicker, besides the loading cap seeming to be ineffectual, at no time did I ever see the "resonant dip". Accourding to the tune up proccedure, to find the dip you set the mode switch to TUNE and set the meter switch to read plate current. (When I did this I saw about 5 mA on the meter is this reasonable?). Then, with the loading cap at full, you tune the tuning cap untill you see a dip on the meter, thus indicating resonance. I never *once* saw a dip. Not even when I got 25 watts out of the rig. And I got the same 5 mA reading whether the tuning coil was installed or not. At least with the old coil I saw a slight dip when the tuning cap reached it's mimimun setting.

An idea here, maybe that first peak was actually the 40m harmonic and the second was the 20m harmonic and I should try the same experiment but with say 40 coils to begin with. Is this a reasonable ussumption?

So I'm looking at three variables here.

1. Is the 5 mA plate current reasonable and should the coil being disconnected affect that reading? It would think it should.

2. Why is the loading coil not making any difference (checked the wiring
and it is sound).

3. Is the coil still too small?

I'm going to try the experiment with a larger coil tonight. I also have
a 40m crystal and I've built the 40m coils as well so I think I'll try
tuning with the 40m stuff as well.

Thanks for all the help!

Rick

N2EY wrote:

> In article <37C17885.87A49391@midwestmicro-tek.com>, Rick Haub
> <rhaub@midwestmicro-tek.com> writes:
> >
> >Nope. Sorry to say I don't have the facilities to do thoughs thing. I think I
> >may
> >have isolated the problem though.
> >
> >First off I miss calculated the frequency, it is indeed oscillating at the
> >correct
> >frequency (I miss counted the hash marks of my scope). I got my watt meter
> >and
> >dummy load on friday evening and hooking them up and tuning to maximum output
> >gets
> >me about 10-15 watts (should be about 50 watts).
>
> Yep, 50 watts is about right
> >
> >The final stage after the 1625 has some inductors that lead into a
> >variable air cap-coil inductor-variable air cap pi network.
>
> The little inductor that is 7 turns of #20 wound on a 47 ohm 1 watt carbon
> resistor that has one end on the 1625 plate cap is a parasitic suppressor. The
> other inductor is the plate RF choke - book calls for a National R-100U, 2.5 mH
> at 125 mA. Both can cause all sorts of trouble if they are not the right
> component for the job.
>
> > The first air cap
> >is a
> >140pF used for tuneing the final and the second air cap is used for loading.
>
> Yep. A Hammarlund HF-140 and a 3 section BC capacitor. There are also fixed
> capacitors that are connected into the circuit on the 3.5 MHz band because the
> air caps alone aren't big enough to do the job on 80. 100 pF on the plate side
> and 470 pF on the loading. Note that these should be mica, not ceramic, and
> rated at least 1000 volts.
>
> >The
> >coil is a hand wound 16 1/2 turn 16 tpi #24 3/4 inch diamature coil with a 2

> >inch
> >piece of half inch diameter ferrite core.
>
> Just like the book. They used the ferrite core to avoid having to use a much
> bigger coil.
>
> > While tune last night I would hold
> >the
> >key for maybe 10-15 seconds at a time. After tuning and checking plate and
> >grid
> >currents for about 20 minutes I heard a dull "thunk" I look at the coil and
> >saw
> >that the ferrite core had melted though its plastic container. After applying
> >the
> >"wet finger test" I found that the core was boiling hot. Maybe 400 or 500
> >degrees
> >F. It seems too much RF is being wasted in the final tuning coil. While
> >tuning with
> >the tuning cap I really never see a resonet "dip".
>
> There's at least part of the problem - the core is not meant for that sort of
> use. They used a Lafayette BC loopstick core - characterisitics unknown. The
> dip with no load on the rig should be really deep and sharp.
>
> For the core to get hot enough to melt plastic in just 10-15 seconds, it must
> be dissipating a couple dozen watts of RF!
> >
> >Based on what I'm seeing and my limited knowledge on the subject I think I
> >need to
> >ajust the number of windings on the coil. Is this a reasonable assumption?
> >
> You need to either try a different ferrite rod material, or use a coil that
> does not use a ferrite core at all. I'd recommend the latter.
>
> The coils originally specified in this rig are made from B&W Miniductor mounted
> inside molded polystyrene coil forms. These were once a common item but are now
> quite rare. The plate coils used are somewhat small for the RF power level -
> I'd use something on the order of 1-1/4 to 1-1/2 inches in diameter, wound with
> at least #18 wire.
>
> What size should the plate coil be? That's a question easily answered by
> flipping to page 157 of the 1967 Handbook and using the charts.
>
> First step is to determine the output impedance of the 1625. This is determined
> by the ratio of plate current to plate voltage. This rig operates the 1625 at
> 680 plate volts and 110 ma, so the ratio is about 6. From the charts, and using
> a loaded Q of 15, the plate tuning capacitor should have about 200 ohms
> reactance, the coil about 225 ohms reactance, and the loading capacitor about
> 30 ohms reactance. We'll do the whole drill to demonstrate the process.
>

> Next we have to figure the inductance and capacitance values that correspond to
> the above values. There is no reason to go beyond about three significant
> figures in these calculations, because the components are just not that
> precise. There is also the factor of stray inductance and capacitance, and the
> output capacitance of the tube..
>
> Capacitive reactance is given by the formula
>
> Xc = 1/(2*pi*f*C)
>
> Rearranging for C, we get:
>
> C = 1/(2*pi*f*Xc)
>
> or, more simply,
>
> C = 1/(6.28*f*Xc)
>
> This formula works, but it requires the frequency in Hz and gives the answer in
> farads.
>
> So for a reactance of 200 ohms at 3.7 MHz, we get
>
> C = 1/(6.28*3,700,000*200) = .000000000215 F = 215 pF
>
> However, we can rewrite the equation to use MHz and pF. It works out to be:
>
> C = 159,000/(F*Xc)
>
> so
>
> C = 159,000/(3.7*200) = 215 pF
>
> which gives 215 pF directly. This is the total capacitance needed for the plate
> tuning. The 1625 has an output capacitance of 7 pF, and stray capacitances will
> amount to at least 3 pF. That leaves 205 pF to be supplied by the 140 pF tuning
> capacitor and the 100 pF mica padder.
>
> For the loading capacitor, we use 30 ohms for Xc and get:
>
> C = 159,000/(3.7*30) = 1432 pF.
>
> These are within the range of the capacitors used.
>
> Now for the inductor. The formula for inductive reactance is:
>
> XL = 2*pi*f*L
>
> Rearranging for L, we get:
>

> L = XL/(2*pi*f)
>
> or, more simply,
>
> L = XL/(6.28*f)
>
> This formula works, but it requires the frequency in Hz and gives the answer in
> henries.
>
> So for a reactance of 225 ohms at 3.7 MHz, we get
>
> L = 225/(6.28*3,700,000) = .00000967 H = 9.67 uH
>
> However, we can rewrite the equation to use MHz and uH. It works out to be:
>
> L = (.159*XL)/F
>
> so
>
> L = (.159*225)/3.7 = 9.67 uH
>
> If you've followed this far, you can see that with the charts and some simple
> math, we can design pinets for almost any frequency and tube output impedance.
>
> Finally, we need to figure out how to wind a (#!%&/!) 9.67 uH coil. This is the
> toughest part, because there are many variables. One formula for inductance of
> a single layer solenoid aircore coil is:
>
> L = (a*a*n*n)/([9*a]+[10*b])
>
> where a = coil radius, b = coil length, n = number of turns, and L is in uH.
>
> Let's say we use a 1-1/2 inch coil form and a winding 2 inches long. Looking at
> the above formula, we find that
>
> (a*a)/([9*a]+[10*b]) is a constant. Plugging in .75 for a and 2 for b, we get a
> constant of .021
>
> That is, L = n*n*.021 for a 1-1/2 inch diameter coil 2 inches long. Using 21
> turns, we get L = 9.26 uH, which is pretty close. It's better to be a little
> low than a little high, because there will be stray inductance in the wiring.
>
> You can rearrange the equation to solve directly for n and get:
>
> n = Square root of [L*([9*a] + [10*b])]/(a*a)
>
> which looks pretty awful, mainly because I'm trying to express math formulas
> without using too many symbols.
>
> Any questions so far?

>
> A word about tuneup: This rig has a 3 position "cal - op - tune" switch. You
> tune it up by first setting the grid current in the "tune" position, then
> switching to "op", closing the key, and doing the "dip the plate, adjust the
> load, dip the plate" sequence. Some pointers on this game:
>
> 1) Don't hold the key closed any more than 10-15 seconds during tuneup. Once
> you get the hang of it, tuning up takes a few seconds at most.
>
> 2) Go back and recheck the grid current after tuning up the plate circuit. The
> grid current is often affected by plate tuning.
>
> 3) The last adjustment should always be dipping the plate.
>
> 4) Log the settings of the various controls once you determine them. Makes
> retuning really easy.
>
> 5) Watch the plate and grid current meters, not the output. You may be tempted
> to tune for maximum output, and you may get more than by following the tuning
> sequence in the book. But that's because you will be running the tube beyond
> its ratings.
>
> 73 de Jim, N2EY

2181. Re: TS 440S Info Search.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-25 00:00:00 UTC
From: Jack Taylor <n7oo@theriver.com>
Message-ID: <sHVw3.20947$gO1.771556@news2.giganews.com>
Source record: 67628
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur,rec.ham-radio

I just replaced the lithium battery in my TS-440. This is a CR-2032 3 Volt coin cell and is available in horizontal PC mount configuration from Mouser electronics for $1.43. Actually what I did was to use the slightly larger CR-2450 (available from Wal Mart) and soldered in the matching button cell battery holder. This was a good match to the battery leads extending up out of the CONTROL ckt board. There is a metal shield covering the CONTROL board which allowed sufficient clearance for the CR-2450 and socket. But to be safe, I applied a couple strips of black tape to the shield to guard against accidental shorts to the battery.

The most time consuming portion of the project was simply to find the location of the battery. The service manual didn't address battery replacement. The instruction manual suggests having the battery replaced at a service center. However it did have an unidentified sketch of the battery on page 29 where it discusses installation of the IC-10 interface kit. The procedure to access the battery is given on the same page under 6-3-1. Installation, which explains how to open up the front panel. Replacement is fairly straight forward and afterwards, reset the CPU by pressing A=B along with the POWER ON switch. The rig should then power up on 14.000 MHz.

As a TS-440 owner, I'd be supportive of a site that documents problems and solutions. I do have the service manual but it's written on the assumption one has already attended a course in theory and repair :-(

73 de Jack

Adelmo De Santis wrote in message ...
>Hi All,
>thank you for reading this NON COMMERCIAL message.
>
>I'm looking for info about TS 440 S like follows:
>
>-mods and improvements you have personally experienced or heard about;
>
>-troubleshooting or problems you managed to solve on your own.
>
>All this info will help me to create a web page about ts-440s .
>Please help me to make this site as complete as possible.
>
>The site will be free access and the information will NOT be used for
>commercial porpouses but only for electronic experimentation.
>
>Please, if you have some info, just send me an e-mail to :

>dcl@ascu.unian.it.
>Just send me a short summary of what you experinced. I'll chech this info
>and, if what you sent is something new, I'll beg you to send me the
>complete description of your experince. This procedure avoids to have a
>lot of articles dealing with the same matter.
>
>
>Thank you and 73.
>
> ***DE SANTIS ADELMO****** FM:ascu
> Ancona www.gulliver.unian.it/irgp 44.134.240.82
>

2182. Wanted: Norcal Paddles

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-25 00:00:00 UTC
From: "Carel, PA0CMU" <cmulder@casema.net>
Message-ID: <37C43A1E.5DCEDE87@casema.net>
Source record: 67629
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,alt.ham-radio.hf,alt.ham-radio.morse

I'am searching for constructiondetails and/or measures
from the Norcal Paddles or, even better, a not used set of the
brass parts. Homebrewing is easy when you can use machines
and not only a saw and file?
I already have enough JPEG/GIFF pictures!

Any info is welcome.

73, Carel PA0CMU

2183. Re: High voltage transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-25 00:00:00 UTC
From: paul <apollo_six@btinternet.com>
Message-ID: <0Eq91NAsREx3EwLs@btinternet.com>
Source record: 67630

In article <37C3B498.C2324CFB@rl.ac.uk>, Mike Willis
<M.J.Willis@rl.ac.uk> writes
>
>
>David Cunningham wrote:
>
>> Tony Baldwin <baldwint@amsat.org> wrote in message
>> news:7pk3mdper1@fraggle.esatclear.ie...
>> > Hi, is it possible to run a pair of identical mains transformers to get a
----------CUT----------
>> > Reason ? High voltage transformers are like hens teeth in Ireland :(
>> >
>
>Depends. Some transformers have enough insulation, some don't. Do a test with a
----------CUT----------
>complete oven new for 50 pounds to build the amp into.
>
>
ILP, if they're still in existence and based in the UK, used to
manufacture "made to measure" transformers at what was quite a
reasonable cost.

Toroidal, with whatever ip/op you want. Compact, small and less likely
to breakdown than something that's been lying around for years.

Been running 3 of these in a voltage doubler with 4KV o/p at 1amp for
several years. Though I would agree that doublers/triplers are best
avoided.

Paul

--

To try and not succeed is better than not to try at all (Anon)

2184. Re: GPS $20.00 Project Comes Throught The Rollover AOK

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-25 00:00:00 UTC
From: Yan <yan.ellis@zeronet.co.uk>
Message-ID: <37c45817@news.intensive.net>
Source record: 67631
Cross-posted to: sci.geo.satellite-nav,alt.ham-radio.mods,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.packet,alt.ham-radio.packet,alt.ham-radio.marketplace

John Plemons wrote in message <37C3852C.9ADE5319@mavin.com>...
>The $20.00 Electro Mavin GPS Project Came through the rollover without a
>problem, feedback from end users is that it didn't skip a beat, and is
>working just fine. For you who have picked up the unit, we have new
>info just posted to our web site with a Windows program and
>documentation to get the unit working in short order.
>
>http://mavin.com/slickitems.html
>
>I'm going to try to have one up and working this weekend at the TRW Swap
>Meet, check us out at spaces G-27
>
>
>Thanks,
>John Plemons
>800-421-2442
>
>
My Garmin III ate it up n spat it out, no problems
73
Yan

2185. Bird 43 2500H 50Mhz element wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-25 00:00:00 UTC
From: G0JJL <john@monsoon.freeuk.com>
Message-ID: <L_Yw3.647$fl2.11090@nnrp4.clara.net>
Source record: 67632
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hello does anyone have a 2500H element for 50MHz they wish to sell

Email: john@monsoon.freeuk.com

Cheers

John, G0JJL

2186. Re: Bird 43 2500H 50Mhz element wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-25 00:00:00 UTC
From: Martin John Hallsworth <Martin@g1gyc.demon.co.uk>
Message-ID: <935619879.5417.0.nnrp-11.9e98acde@news.demon.co.uk>
Source record: 67633
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Try Aspen Electronics
they are the agents for Bird in the UK

G0JJL wrote in message ...
>Hello does anyone have a 2500H element for 50MHz they wish to sell
>
>Email: john@monsoon.freeuk.com
>
>Cheers
>
>John, G0JJL
>
>
>
>

2187. Re: HELP! Tube Guru's Advice Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-25 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.SOL.4.10.9908251841540.25349-100000@Ocean.CAM.ORG>
Source record: 67634

Here are a few things to keep in mind.

While it may seem more complicated, think of the output pi network (the coil, the tuning capacitor and the loading capacitor) as a simple LC parallel tuned circuit. It might be more obvious if you imagined putting a short across the loading capacitor. Then you'd just have the tuning capacitor in parallel with the coil. Vary the tuning capacitor and it will put the circuit in resonance at some point, provided you have a a coil of suitable value.

The loading capacitor is just a means of getting the RF out of the LC circuit, in such a way that it matches the antenna. Instructions for tuning pi networks say to set the loading capacitor to maximum. This in effect puts the capacitor as close to a short as it will come, since when two capacitors are in series (and the tuning and loading capacitors are in series, across the coil), the much higher value has less effect.

So you set the loading capacitor to maximum, and then deal with tuning the LC circuit to resonance. There should be a definite peak, and the peak should take place somewhere in the middle of the range of the variable capacitor. If resonance comes at minimum or maximum capacitance, the coil needs adjusting (more turns if the capacitance is at maximum, less turns if at mimimum). Otherwise, you can't be sure that you have reached actual resonance, or are simply close to it.

Once you have the tuned circuit to resonance, then you have to deal with getting power out of that tuned circuit and into the antenna. So you start adjusting the loading capacitor. And yes, as you decrease that loading capacitor, it will affect the resonance of the tuned circuit, since there will be less capacitance across the coil. So you will have to readjust the tuning capacitor. And that's why there will be a back forth between loading and tuning, because each time you adjust loading to get optimum power to the antenna, you have to go back and get the circuit back in resonance.

Light bulbs are not good dummy loads. They are not shielded, so your signal will radiate to some extent. They are not a standard impedance, so if you tune for brightest light, that doesn't mean the transmitter is set for optimum use with a 50 ohm antenna (or any antenna for that matter). And the resistance of the bulb will vary as it receives more power, adding another variable to the mix and creating more back and forth between the tuning controls.

Ligthbulbs were promoted back in the days when test equipment wasn't readily available, and presumably a lot of people building the equipment had little money. However, a lightbulb may be good for your purpose, because you are still trying to get the feel for the transmitter and a lightbulb may be easier to follow than a wattmeter for experimenting purposes.

I gather you have a wattmeter? If so, the reading will change if you switch from dummy load to lightbulb, since they won't be the same impedance and the wattmeter will not be reading right with the bulb.

The meter in the transmitter is used for three things, as Jim pointed out.

One position is to measure the voltage going to the oscillator and the final screen. That position will not be used much during operation of the transmitter. That switch position could be removed, since you could do the same with an external voltmeter to make sure that voltage is correct.

Another position is for measuring the grid current of the final. You need that to make sure the tube is getting enough drive from the oscillator. The instructions even say to put it into that position, and tune the plate of the oscillator, with C2 the 100pF variable. It says to tune for 2 to 4mA.

Something tells me you may have the switch in that position (assuming you built the transmitter exactly as shown, and wired it correctly), because of your comment about no dip and "5mA".

The third position for the meter is to measure the cathode current of the final amplifier. This is the one that's going to dip as you bring the output to resonance. That might be your problem of seein no dip.

Also, if you don't have the key pressed, this position will not show much reading, if any.

The more I think about it, the more I think the meter switch position might be your problem at this point. It sounds like when you wound a new coil, and as you removed turns, you did get a coil that resonated in the 80 meter band. 23 turns might be about right, since you are using a slightly smaller coil form than the original design called for (which was 19.5 turns on 1 1/2 inch form. And you did get maximum output at that point.

Try getting the switch in the right position, and see if that coil doesn't now dip.

If you think about that 5mA reading, if you multiply it by the plate voltage, it is extremely low input power to the amplifier. Say the plate voltage is 400 volts. 400 times 0.005A is 2 watts input, and output power will be less. That doesn't seem right. Even the instructions say the cathode current should be 90 to 100mA.

Michael VE2BVW

On Wed, 25 Aug 1999, Rick Haub wrote:

> Thanks for the help Jim. You and Blake and the others have really help me get a
> handle on this stuff. So here is what happend last night.
>
> I read the many measages posted and e-mailed to me on determining the
> proper size coil for the tuning coil (thanks guys!) and decided that I'd
> start out by wrapping about 30 coils of standard solid hookup wire
> around a 1 1/4 inch form and then unwrapping one coil at a time and
> re-tuning the rig. Oh by the way, before starting with the new coil,
> when tuning with the light bulb I showed @25 watts output but when
> tuning with the 50 ohm dummy load I showed about 5 watts out, much
> smaller resistance on the light bulb?
>
> To start, I took out the old coil and put in the new one and started
> tuning. I unwrapped about 7 coils, each time I got a few more watts on
> the meter. I started with about 2-3 watts and by the time I got to 23
> turns I was showing @25 watts. But here is the puzzler, I could use the
> tuning capacitor to tune the coil in and out of resonance but once I
> tuned it in, adjusting the *loading* capacitor made so changes. In
> affect the loading capacitor didn't seem to be influencing the pi
> circuit at all. I should think that it would at least cause the resonant
> circuit to go out of resonance, but it didn't. Anyway after reaching a
> peak of 25 watts I then started lossing ground as I unwound more coils.
> Then I hit another peak of about 20 watts when I reached 19 turns. The
> watts then again fell off and at 10 turns I stopped the experiment. I'm
> not sure but I'm guessing that the second peak was probably the 40m
> harmonic.
>
> Okay, heres the kicker, besides the loading cap seeming to be
> ineffectual, at no time did I ever see the "resonant dip". Accourding to
> the tune up proccedure, to find the dip you set the mode switch to TUNE
> and set the meter switch to read plate current. (When I did this I saw
> about 5 mA on the meter is this reasonable?). Then, with the loading cap
> at full, you tune the tuning cap untill you see a dip on the meter, thus
> indicating resonance. I never *once* saw a dip. Not even when I got 25
> watts out of the rig. And I got the same 5 mA reading whether the tuning
> coil was installed or not. At least with the old coil I saw a slight dip
> when the tuning cap reached it's mimimun setting.
>
> An idea here, maybe that first peak was actually the 40m harmonic and
> the second was the 20m harmonic and I should try the same experiment but
> with say 40 coils to begin with. Is this a reasonable ussumption?
>
> So I'm looking at three variables here.
>
> 1. Is the 5 mA plate current reasonable and should the coil being
> disconnected affect that reading? It would think it should.
>
> 2. Why is the loading coil not making any difference (checked the wiring
> and it is sound).
>
> 3. Is the coil still too small?

>
> I'm going to try the experiment with a larger coil tonight. I also have
> a 40m crystal and I've built the 40m coils as well so I think I'll try
> tuning with the 40m stuff as well.
>
> Thanks for all the help!
>
> Rick
>
>
>

2188. Capacitor Breakdown Voltage

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-26 00:00:00 UTC
From: ll2363@aol.com
Message-ID: <19990826000722.23588.00004774@ng-fs1.aol.com>
Source record: 67488

Have some 160000uf caps and would like to use them in a 13.8 volt power supply system. They have a max surge of 12 volts. Can this be safely exceeded?

Thanks

Jon in Michigan

2189. Re: Capacitor Breakdown Voltage

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-26 00:00:00 UTC
From: Victoria Welch <vikki@oz.net>
Message-ID: <7q2j6r$7e4$0@216.39.144.179>
Source record: 67489

LL2363 wrote:
>
> Have some 160000uf caps and would like to use them in a 13.8 volt power
> supply system. They have a max surge of 12 volts. Can this be safely exceeded?

I wouldn't think so. I personally would not use anything less than 25 V
or preferably 35V. I had one of these go off in my face and it made a
lasting impression. No the metal stuff didn't hit me, but from where
the metal shrapnel(sp?) was found several people thought it went
interdimensional, because from all evidence it *should* have hit me.

Hope this helps.

Take care es 73, Vikki.
-
Victoria Welch, WV9K, DoD#-13, Net/Sys/WebAdmin SeaStar.org,
vikki.oz.net
"Walking on water and developing software to specification are
easy as long as both are frozen" - Edward V. Berard.
Do not unto others, that which you would not have others do unto you.

2190. Re: Capacitor Breakdown Voltage

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-26 00:00:00 UTC
From: Mike Willis <M.J.Willis@rl.ac.uk>
Message-ID: <37C4F368.B7C63A57@rl.ac.uk>
Source record: 67490

LL2363 wrote:

> Have some 160000uf caps and would like to use them in a 13.8 volt power
> supply system. They have a max surge of 12 volts. Can this be safely exceeded?

As long as you are half a mile away when they explode you will be safe. I.e. No.

2191. Re: Capacitor Breakdown Voltage

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-26 00:00:00 UTC
From: Mike Willis <M.J.Willis@rl.ac.uk>
Message-ID: <37C4F3C8.4E04944@rl.ac.uk>
Source record: 67491

> Have some 160000uf caps and would like to use them in a 13.8 volt power
> supply system. They have a max surge of 12 volts. Can this be safely exceeded?

However - you could use two in series with balancing resistors to give you 80000 uF at 24V.
Remember you need something like 18V DC on the capacitors to give headroom for the regulator to work with.

2192. FREE SOFTWARE

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-26 00:00:00 UTC
From: J Thirlwell <jthirlwell@freezone.co.uk>
Message-ID: <37C5251F.52F456BC@freezone.co.uk>
Source record: 67492

For free software visit

JT Software

2193. HF radio using MC1350 as IF amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-26 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7q3erq$e2c$1@uranium.btinternet.com>
Source record: 67493

I am considering making a simple homebrew HF radio using an MC1350 as the IF amplifier, with an IF of 1.6MHz. I do not have any suitable crystal or ceramic filters, but expect to get enough selectivity with the high IF and perhaps by preceding the MC1350 with a few transformer coupled stages of IF amplification. Does anyone have experience in using the MC1350, and what sort of performance should I expect from this setup.

Thanks, best wishes from David.

2194. Re: Do Power Inverters Make a Lot of RFI?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-26 00:00:00 UTC
From: "aaa@bbb.com" <aaa@bbb.com>
Message-ID: <37C546AC.9EC0DE@bbb.com>
Source record: 67494

Most of the Hi efficiency
invertors use 50 Khz RF or so like a
computer power supply to convert
12 volts to 120 volts AC 60 Hz.
The convert the 150 volts DC at the other end of the DC-DC
to 120 volts AC by chopping it up in a bridge.

Now, 50Khz can generate a lot of RFI, if not properly filtered.

Some of the older invertors using the huge IRON CORE transformer wont
generate so much RFI as they are only operating around 60 Hz.

It shouldnt be too difficult to build your own with a 10-12 volts -
120volts
20 AMp transformer and a few MTP3055 transistors driven off
a TL494 or LM3524 and running at 60 Hz.

Advantage of TL494 is to provide variable/adjustable duty cycle
just like the commercial invertors do to provide quasi-sine wave as they
call it.

73's

Bill Youse wrote:

> I'm thinking about buying a 500 watt inverter for running a computer and
> maybe a small refrigerator for emergency use. Will it make a lot of
> RFI on the HF bands? Whistler, Statpower and Cherokee are the brands
> I'm considering. If anyone has
> experience with these for field day, etc. I'd would like to know how
> much radio noise they make.
>
> Thanks, Bill
> N6DZS

2195. Re: Favorite tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-26 00:00:00 UTC
From: "aaa@bbb.com" <aaa@bbb.com>
Message-ID: <37C5488C.CEE322DE@bbb.com>
Source record: 67495

hi there,

6u8 = mixer, rf amp , oscilator, audio preamp, audio lineamp, headphone amp, audio phase invertor.

6ba6 = if amp, rf amp, oscilator (vfo or crystal)

6bq5 or 6l6GC or 6kg6 = speaker driver, or FInal for (QRP) transmitter

This is the least I need to get going .

12au7 for audio
and
6ak5 for RF and audio

is what I will consider also

Dont forget the 6EH7/6eJ7 frame grid pentodes with GM = 12-15 mS.

Let me know how it goes

73's

singhpk @ exit109 dot com

Bob Liesenfeld wrote:

> Hi gang,
> I'm thinking of building some "glowing" rigs. If you had to pick just
> a few tubes for HF recieving purposes, ie, RF amp, IF, audio, etc, what
> would your choices be?
>
> 72
>
> Bob 'POQ
> --
> Genuine E-mail From the Land of the Everlasting Icicle...
> Bob Liesenfeld
> wb0poq@visi.com

2196. Re: WTB Kenwood TR-2600A Parts/Accessories

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-26 00:00:00 UTC
From: drmarc@wwa.com
Message-ID: <qvdx3.172$Hk7.5580@ord-read.news.verio.net>
Source record: 67496

In article <37c4a1bd.0@news.isdn.net>, "Amach" <sugarsmack@ficom.net> wrote:
>This is a multi-part message in MIME format.
>
>
>Looking for PL tone chip for my old Kenwood TR-2600A handie-talkie radio.
Also, a mobile charger and/or a dead battery pack for it.
>Please reply at ramacher@ficom.net
>
>Thanks -
>Rod
>KG4BOO
****

Three yrs ago I got a new battery pack for a TR2500 (without any old battery casing) from East Coast Transister Parts, Inc., 2 Marlborough Rd., West Hempstead, NY 11552 phone at that time was: 516-483-5742

It cost $75 at that time.

I don't know the construction/part number for the tone board but my TR2500 uses a TU-1 which is a module that goes on at the bottom of the radio and the battery goes on after the tone module. I have not been able to find one out there and have seen a few other requests of the past three yrs.

Marc Schneider, Psy.D.
e-mail to: <drmarc@wwa.com>
(call sign: W4NVY)

2197. Re: HF radio using MC1350 as IF amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-26 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.SOL.4.10.9908261248290.17469-100000@Ocean.CAM.ORG>
Source record: 67497

On Thu, 26 Aug 1999, David Cunningham wrote:

> I am considering making a simple homebrew HF radio using an MC1350 as the IF
> amplifier, with an IF of 1.6MHz. I do not have any suitable crystal or
> ceramic filters, but expect to get enough selectivity with the high IF and
> perhaps by preceding the MC1350 with a few transformer coupled stages of IF
> amplification. Does anyone have experience in using the MC1350, and what
> sort of performance should I expect from this setup.
>
> Thanks, best wishes from David.
>
>
You won't get narrow bandwidth at that frequency with just IF
transformers.

A single tuned circuit sets the bandwidth, and it will be too broad at
that frequency.

Additional tuned circuits will not narrow the bandwidth, only improve the
skirt selectivity.

What you will end up with is the equivalent of a direct conversion
receiver, with a converter and IF amplifier ahead of it.

That's not completely bad. You'll get a feel for superhets. And if you
plan it right, you could add a filter later.

Consider putting the IF on a frequency where you can get crystals, and
then build a simple ladder filter for it. Even a simple crystal filter
will give better results than some tuned circuits.

Filters aside, I think it's easier to build a receiver nowadays with a
high IF than a 455KHz IF. You don't have to worry about tracking the
front end with the local oscillator to keep images out. You can have the
front end tuned separately from the oscillator, and not worry that you are
tuning to the wrong image. You also will not need as many front end tuned
circuits for the same amount of image rejection.

The MC1350P has to be fairly straightforward to use at this point,
considering it's about thirty years old now. Use it with a good ground,
and bypass it well. The pinout is such that you can put a ground across
the device to separate the input from the output. It has lots of gain,
and is good up to the 45MHz range (where television IF's are, and for
which the MC1350P was aimed for).

Consider building it "dead-bug" fashion. Just take a piece of copper
circuit board, use that as a really good ground point, and build

the circuit over that. I was doing that before the term was ever used in print. The big ground surface will help you keep things from oscillating. The method allows for easy changing, at least compared to a printed circuit board.

If you build the receiver in module form, then you can change things later if things don't work out so well. Put the front end and mixer on one board. Then the IF separately. Might even be smart to put the product detector and BFO separately, and perhaps in a shielded box. (I've made boxes out of circuit board stock, though they tend to be a tad uneven. You can also pull out some nice shielded boxes out of TV sets and VCRs.) Then you can change the IF circuitry or move it to another frequency without having to rework everything.

Michael VE2BVW

2198. Re: HF radio using MC1350 as IF amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-26 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37C58C3A.5A113EFE@teleport.com>
Source record: 67498

The only thing I'd like to add to the good advice you've already gotten is that the MC1350 is pretty noisy. So be sure you have adequate low-noise gain ahead of it.

Roy Lewallen, W7EL

2199. Re: HF radio using MC1350 as IF amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-26 00:00:00 UTC
From: David Fentem <david.fentem@gtri.gatech.edu>
Message-ID: <37C5A4AB.9B357B59@gtri.gatech.edu>
Source record: 67499

Excellent point, Roy.

If it's an option, it would also help to put some filtering after the
MC1350 prior to detection. I homebrewed a QRP rig a few years ago with
4 poles of xtal ladder filter before the MC1350 and 2 poles after it.
It made for a very "quiet" receiver with very little background hiss.

-Dave
kw4m

Roy Lewallen wrote:
>
> The only thing I'd like to add to the good advice you've already gotten
> is that the MC1350 is pretty noisy. So be sure you have adequate
> low-noise gain ahead of it.
>
> Roy Lewallen, W7EL

2200. NE567 tone decoder as FM detector

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-26 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7q48em$m9m$1@uranium.btinternet.com>
Source record: 67500

Is it possible to make an FM detector using the NE567 PLL tone decoder to
demodulate 455kHz IF?
d.l.c@btinternet.com

2201. Need schematic or manual for Astron RS-35A

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-26 00:00:00 UTC
From: Tony Giroux <agiroux@cvn.net>
Message-ID: <37C5CF1C.C5F8FA4D@cvn.net>
Source record: 67501
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment
Body handling: Binary attachment payload not displayed: agiroux.vcf

Bought one cheap at a fest with the knowledge that
it didn't work. Finally need to get it working
to power a solid state rig.

This is an older one which only has one meter which
switches between voltage & current.

I'll pay for copying & mailing if need be.

Tony -- KF3BX
agiroux@cvn.snap.net
remove .snap for address

[One or more binary attachments are retained only in the source text.]

2202. Re: Need schematic or manual for Astron RS-35A

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-26 00:00:00 UTC
From: Clif Holland <clif@avvid.com>
Message-ID: <37C5D2DD.339A@avvid.com>
Source record: 67502
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Tony Giroux wrote:
>
> Bought one cheap at a fest with the knowledge that
> it didn't work. Finally need to get it working
> to power a solid state rig.
>
> This is an older one which only has one meter which
> switches between voltage & current.
>
> I'll pay for copying & mailing if need be.
>
> Tony -- KF3BX
> agiroux@cvn.snap.net
> remove .snap for address
>
> --
>
> Name: agiroux.vcf
> Part 1.2 Type: text/x-vcard
> Encoding: 7bit
> Description: Card for Tony Giroux

Try their website, a lot of schematics there...
--
Clif Holland, KA5IPF
Owner of AVVid, an Authorized Kenwood and Icom Service Center
For more info click on the following
http://www.avvid.com/
or call 1-800-214-5779

2203. Mounting LEDs in case ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-27 00:00:00 UTC
From: Hansanter <shbcommm@indigo.ie>
Message-ID: <37C5CF26.C994FCC2@indigo.ie>
Source record: 67503

Hi all,

I'm sure we've all mounted an LED or two into the case of a project box,
but haven't they all been circular LEDs ?
I need to fit 43 LEDs into a project case in a circular pattern but I'd
like to use the rectangular LEDs (5mm X 2mm). For the regular circular
ones you just drill a hole with the right size drill bit but has anybody
any ideas on how to make neat rectangular holes.

Regards

Terry

2204. SM 20 Mic

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-27 00:00:00 UTC
From: John Woolem <jwoolem@flash.net>
Message-ID: <37C5EC3D.C85166BB@flash.net>
Source record: 67504

as new box and book 150 and i ship

--
Amateur Radio Station N5TKG

2205. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-27 00:00:00 UTC
From: pooua@aol.com
Message-ID: <7q5642svv1@nnrp1.deja.com>
Source record: 67505
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

In article <7p7crl$856$1@bgtnsc03.worldnet.att.net>,
"Al, N2NKB" <n2nkb@n2nkb@postoffice.worldnet.att.net> wrote:
> You have discovered one of my life-long fantasies.
> You can set up an array of antennas, rectify the
> energy, and power all of your house-hold appliances.

Yeah, so?

I guess I'm not getting the joke. Of course you
could set up a field of antennas and power your
equipment from it. The trouble is, a regular antenna
only develops a few microwatts. You would be much
farther ahead just to put in photocells.

BTW, Sandia National Labs developed an antenna for
IR about a decade ago. If they succeed in producing
an antenna for visible or UV, it should open the door
to greatly improved solar cells.

--
Richard Alexander
Richard's Electronic Kingdom
http://members.aol.com/pooua

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2206. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-27 00:00:00 UTC
From: pooua@aol.com
Message-ID: <7q56h5$ta2$1@nnrp1.deja.com>
Source record: 67506
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

In article <7p7f1vgdg1@bgtnsc03.worldnet.att.net>,
"Al, N2NKB" <n2nkb@n2nkb@postoffice.worldnet.att.net> wrote:
> Thanks for your interesting story, Franz.
> Many amateur radio operators like myself have lit up fluorescent
> bulbs at close range to our transmitters. But I never heard of
> someone living to a commercial station that had all of that energy
> near by. I hope we hear more interesting stories about this on
> this newsgroup; I think that the thread will be long.

There are groups in the United States who protest
high voltage lines, and just to dramatize their protest,
they carry standard shop fluorescent tubes and stand
under high voltage lines. I remember the picture in
"Reader's Digest" showing a group of a dozen people or
so, arms held up in the air and holding 3-foot fluorescent
tubes that glowed eerily from the induced voltage of
the lines 100 feet above them. This is an interesting
visual effect after dusk.

--
Richard Alexander
Richard's Electronic Kingdom
http://members.aol.com/pooua

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2207. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-27 00:00:00 UTC
From: pooua@aol.com
Message-ID: <7q57tpuat1@nnrp1.deja.com>
Source record: 67507
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

In article <37be419a.14246923@netnews.worldnet.att.net>,
notjimbob@worldnet.att.net (James Meyer) wrote:
> On Mon, 16 Aug 1999 10:08:00 -0500, Roy McCammon <rbmccammon@mmm.com>
wrote:

[snip]

> I'm convinced that something very similar is going
> on in our ears. Our ears are very sensitive to sound
> levels in the nano watt range. Recent reports have
> indicated that some of the "sounds" like ringing and
> whistling associated with a condition known as
> "tinnitus" can actually be measured with sensitive
> microphones as sound generated *in* the ear.

My understanding is that normal ears generate sounds.
These are eliminated by the brain, so we don't hear
them. My memory of this information is weak, so I
may easily be mistaken.

--
Richard Alexander
Richard's Electronic Kingdom
http://members.aol.com/pooua

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2208. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-27 00:00:00 UTC
From: Dave Sparvell <sparvell@*nospam*rftechnology.co.uk>
Message-ID: <01bef05f$410ec940$0100a8c0@drawing>
Source record: 67508
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

Perhaps someone may know more about this and can elaborate.

I heard a story 20+ years ago of someone living very near to the BBC Droitwich Longwave transmitter (198kHz) doing exactly this having constructed a loop in the attic of his house.

The transmitter runs either 500KW or 1MW and can be received over all of the UK and most of Europe.

The BBC couldn't understand why there was a distinct null in their radiation pattern, and this lead to the offender being tracked down.

He was proscuted for the theft of electricity.

Regards
David Sparvell G4FTC

sparvell@*nospam*rftechnology.co.uk
--
to reply, please remove *nospam* from my address

pooua@aol.com wrote in article <7q56h5$ta2$1@nnrp1.deja.com>...
> In article <7p7f1vgdg1@bgtnsc03.worldnet.att.net>,
> "Al, N2NKB" <n2nkb@n2nkb@postoffice.worldnet.att.net> wrote:
> > Thanks for your interesting story, Franz.
> > Many amateur radio operators like myself have lit up fluorescent
> > bulbs at close range to our transmitters. But I never heard of
> > someone living to a commercial station that had all of that energy
> > near by. I hope we hear more interesting stories about this on
> > this newsgroup; I think that the thread will be long.
>
> There are groups in the United States who protest
> high voltage lines, and just to dramatize their protest,
> they carry standard shop fluorescent tubes and stand
> under high voltage lines. I remember the picture in
> "Reader's Digest" showing a group of a dozen people or
> so, arms held up in the air and holding 3-foot fluorescent
> tubes that glowed eerily from the induced voltage of
> the lines 100 feet above them. This is an interesting
> visual effect after dusk.
>
> --
> Richard Alexander
> Richard's Electronic Kingdom
> http://members.aol.com/pooua

>
>
> Sent via Deja.com http://www.deja.com/
> Share what you know. Learn what you don't.
>

2209. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-27 00:00:00 UTC
From: "William L. Bahn" <wbahn@uswest.net>
Message-ID: <rscmnpfcj7126@corp.supernews.com>
Source record: 67509
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

So, to summarize, you are claiming that someone built a loop antenna in their attic that was able to collect a noticeable amount of energy from a transmitted waveform that has a 1500 meter wavelength. You are further claiming that the amount of energy collected was so significant that they noticed a "distinct null " in their radiation pattern. Right. Can you say, "Urban Legend"?

About everyone that gets involved with electronics dreams up plans of stealing power from the power company or the local AM station. What they don't realize yet are little things like wavelength considerations and the fact that you can't collect more energy than is passing through the antenna's induction area - and that R^2 term kills you, even in close. Even if the antenna was next door you would have a hard time getting even 0.1% of the radiated energy through your attic. So you are already down to less than 500W. And then your efficiency of recovering it would be atrociously low - and even at 10% you wouldn't have enough energy recovered to light a decent light bulb.

Dave Sparvell wrote in message <01bef05f$410ec940$0100a8c0@drawing>...
>Perhaps someone may know more about this and can elaborate.
>
>I heard a story 20+ years ago of someone living very near to the BBC
>Droitwich Longwave transmitter (198kHz) doing exactly this having
>constructed a loop in the attic of his house.
>
>The transmitter runs either 500KW or 1MW and can be received over all of
>the UK and most of Europe.
>
>The BBC couldn't understand why there was a distinct null in their
>radiation pattern, and this lead to the offender being tracked down.
>
>He was proscuted for the theft of electricity.
>
>Regards
>David Sparvell G4FTC
>
>sparvell@*nospam*rftechnology.co.uk
>--
>to reply, please remove *nospam* from my address
>
>pooua@aol.com wrote in article <7q56h5$ta2$1@nnrp1.deja.com>...
>> In article <7p7f1vgdg1@bgtnsc03.worldnet.att.net>,
>> "Al, N2NKB" <n2nkb@n2nkb@postoffice.worldnet.att.net> wrote:
>> > Thanks for your interesting story, Franz.

>> > Many amateur radio operators like myself have lit up fluorescent
>> > bulbs at close range to our transmitters. But I never heard of
>> > someone living to a commercial station that had all of that energy
>> > near by. I hope we hear more interesting stories about this on
>> > this newsgroup; I think that the thread will be long.
>>
>> There are groups in the United States who protest
>> high voltage lines, and just to dramatize their protest,
>> they carry standard shop fluorescent tubes and stand
>> under high voltage lines. I remember the picture in
>> "Reader's Digest" showing a group of a dozen people or
>> so, arms held up in the air and holding 3-foot fluorescent
>> tubes that glowed eerily from the induced voltage of
>> the lines 100 feet above them. This is an interesting
>> visual effect after dusk.
>>
>> --
>> Richard Alexander
>> Richard's Electronic Kingdom
>> http://members.aol.com/pooua
>>
>>
>> Sent via Deja.com http://www.deja.com/
>> Share what you know. Learn what you don't.
>>

2210. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-27 00:00:00 UTC
From: sbharris@ix.netcom.com
Message-ID: <7q5nm2$j7v@dfw-ixnews3.ix.netcom.com>
Source record: 67510
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

In <01bef05f$410ec940$0100a8c0@drawing> "Dave Sparvell"
<sparvell@*nospam*rftechnology.co.uk> writes:
>
>Perhaps someone may know more about this and can elaborate.
>
>I heard a story 20+ years ago of someone living very near to the BBC
>Droitwich Longwave transmitter (198kHz) doing exactly this having
>constructed a loop in the attic of his house.
>
>The transmitter runs either 500KW or 1MW and can be received over all
of
>the UK and most of Europe.
>
>The BBC couldn't understand why there was a distinct null in their
>radiation pattern, and this lead to the offender being tracked down.
>
>He was proscuted for the theft of electricity.
>
>Regards
>David Sparvell G4FTC

Sounds appocryphal, since tapping the far-field is just what
everybody with a radio does (no effect on the transmitter), and ther is
certainly no screening of receivers downfield with a little antenna
like that. Tapping the nearfield would not have an effect on EMR
pattern-- at least not the kind the BBC cares about. It would show up
as an unexplained transmitter-antenna impedence mismatch, and overall
power draw, but I refuse to believe this would be noticed, unless
somebody did some serious winding of coils around the antenna itself.

2211. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-27 00:00:00 UTC
From: jan@panteltje.demon.nl
Message-ID: <935751066.13895.1.pluto.d4ee0662@news.demon.nl>
Source record: 67511
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

>Perhaps someone may know more about this and can elaborate.
>
>I heard a story 20+ years ago of someone living very near to the BBC
>Droitwich Longwave transmitter (198kHz) doing exactly this having
>constructed a loop in the attic of his house.
>
>The transmitter runs either 500KW or 1MW and can be received over all of
>the UK and most of Europe.
>
>The BBC couldn't understand why there was a distinct null in their
>radiation pattern, and this lead to the offender being tracked down.
>
>He was proscuted for the theft of electricity.
>
So then every body with a radio or tv could, less electricity, sure, but still
some.
I read someone in the US stole a bread (from a church), because he was hungry
(probably had diffficulty finding a job, it was his second conviction).
Then he got LIFE for that (yes 1999).
Justice is still only for the rich is it not? The English judges send people to
Australia in labour camps for steeling food.
Well, I would not mind living there now, beautiful place.
But from this you can learn, better 'detune' your radio, or you may get the
chair.

* When the house is in session, no ones property and rights are safe *

2212. Re: ARRL Simulation software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-27 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <37C68029.4F0257B@mwci.net>
Source record: 67512

WB wrote:

> get a copy of electronics workbench, you might like this better

I have both ARRL Radio Designer and the latest version of EWB, called MultiSim 6.0.

MultiSim, Personal Edition, sells for $400. I like it very much for DC, nonlinear and transient analysis, using 8 kinds of Virtual Instruments. The Prodessional Edition, with expanded features (I would like to have it), sells for $900.

Radio Designer sells for $150 and is far superrior for RF linear design, in my opinion. Its Circles Utility is an electronic Smith Chart that is excellent. Its Optimizer Utility and Probe Utility are also excellent.

I have used Radio Designer since it first came out, on several different kinds of computer, with absolutely no problems of any kind. But it is possible that collisions can occur between different applications in a computer. I have seen some of this, but not with Radio Designer. Most of the time a PC-knowledgeable person can track these problems down in a particular PC and fix them. Incorrect or conflicting Registry Entries are often the culprits. Dynamic Link Libraries sometimes conflict.

I really think that the badmouthing of Radio Designer from certain quarters is mostly hogwash.

Bill W0IYH

2213. Re: ARRL Simulation software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-27 00:00:00 UTC
From: WB <willyacht@yahoo.com>
Message-ID: <tlwx3.476$1E2.2715@ozemail.com.au>
Source record: 67513

Thanks for that useful info, I will pick up a copy of Radio Designer. I seem
to collect software like this.

PS I use your soft limiting speech processor its terrific

Will

William E. Sabin <sabinw@mwci.net> wrote in message
news:37C68029.4F0257B@mwci.net...
>
>
> WB wrote:
>
> > get a copy of electronics workbench, you might like this better
>
> I have both ARRL Radio Designer and the latest version of EWB, called
> MultiSim 6.0.
>
> MultiSim, Personal Edition, sells for $400. I like it very much for DC,
> nonlinear and transient analysis, using 8 kinds of Virtual Instruments.
The
> Prodessional Edition, with expanded features (I would like to have it),
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> Radio Designer sells for $150 and is far superrior for RF linear design,
in
> my opinion. Its Circles Utility is an electronic Smith Chart that is
> excellent. Its Optimizer Utility and Probe Utility are also excellent.
>
> I have used Radio Designer since it first came out, on several different
> kinds of computer, with absolutely no problems of any kind. But it is
> possible that collisions can occur between different applications in a
> computer. I have seen some of this, but not with Radio Designer. Most of
> the time a PC-knowledgeable person can track these problems down in a
> particular PC and fix them. Incorrect or conflicting Registry Entries are
> often the culprits. Dynamic Link Libraries sometimes conflict.
>
> I really think that the badmouthing of Radio Designer from certain
quarters
> is mostly hogwash.
>
> Bill W0IYH
>

2214. Re: Microwave 1N23 Diodes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-27 00:00:00 UTC
From: Zack Lau <zlau@arrl.org>
Message-ID: <37C695CE.223FA8C@arrl.org>
Source record: 67514

www.shfmicro.com has 1N24 that look awfully similar--Zack W1VT

2215. Re: Mounting LEDs in case ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-27 00:00:00 UTC
From: Zack Lau <zlau@arrl.org>
Message-ID: <37C69995.6D6AC74D@arrl.org>
Source record: 67515

A milling machine and rotary table, plus some files for touching up the corners.
The rotary table can precisely align the holes in a circular pattern.

Expensive, but perhaps worthwhile if you need this sort of stuff every week or two.

Alternately, the low budget method is to drill small holes and enlarge them with
a file. I've actually done this with 1/16 (1.6mm) holes in copper and brass for
10 GHz slot antennas--it would be much easier with aluminum.

73--Zack W1VT

2216. Power Inverters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-27 00:00:00 UTC
From: stoskopf@tri.NET
Message-ID: <37C6A042.F99AB320@tri.net>
Source record: 67516

Don Lancaster has had a long series of discussion of Magic Sines or such for using variable switching to generate sine waves at high efficiency. I was interested in using such a method to generate 400Hz power for use with some low power mil stuff. Same would give clean 60 Hz at lower clock rate.

Anyone seen a published converter using this technique?

N0UU

2217. Re: Mounting LEDs in case ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-27 00:00:00 UTC
From: Mike Willis <M.J.Willis@rl.ac.uk>
Message-ID: <37C6A2EA.2D99A13E@rl.ac.uk>
Source record: 67517

>
> any ideas on how to make neat rectangular holes.

It is possible using a mill (almost rectangular) or by using a punch and die. With effort, a small file. With the prospect of 43 of them, all at the correct relative angle to the circle, I would convince myself that round LEDs were "artistically correct".

2218. Re: ARRL Simulation software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-27 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <37C69E78.EC9393F8@mwci.net>
Source record: 67518

WB wrote:

> PS I use your soft limiting speech processor its terrific.

Thanks, Will.

Bill W0IYH

2219. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-27 00:00:00 UTC
From: meron@cars3.uchicago.edu
Message-ID: <FH4rIA.1JF@midway.uchicago.edu>
Source record: 67519
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

In article <7q5nm2$j7v@dfw-ixnews3.ix.netcom.com>, sbharris@ix.netcom.com(Steven B. Harris) writes:
>In <01bef05f$410ec940$0100a8c0@drawing> "Dave Sparvell"
><sparvell@*nospam*rftechnology.co.uk> writes:
>>
>>Perhaps someone may know more about this and can elaborate.
>>
>>I heard a story 20+ years ago of someone living very near to the BBC
>>Droitwich Longwave transmitter (198kHz) doing exactly this having
>>constructed a loop in the attic of his house.
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>>The transmitter runs either 500KW or 1MW and can be received over all
>of
>>the UK and most of Europe.
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>>The BBC couldn't understand why there was a distinct null in their
>>radiation pattern, and this lead to the offender being tracked down.
>>
>>He was proscuted for the theft of electricity.
>>
>
> Sounds appocryphal, since tapping the far-field is just what
>everybody with a radio does (no effect on the transmitter), and ther is
>certainly no screening of receivers downfield with a little antenna
>like that. Tapping the nearfield would not have an effect on EMR
>pattern-- at least not the kind the BBC cares about. It would show up
>as an unexplained transmitter-antenna impedence mismatch, and overall
>power draw, but I refuse to believe this would be noticed, unless
>somebody did some serious winding of coils around the antenna itself.

Well, note that the transmitter mentioned here broadcasts at quite a long wavelength, about 1.5 km. So the near field extends rather far and if the house in the story was within few hundred metres of the transmitter (quite possible), it was deep in the near field.

Mati Meron | "When you argue with a fool,
meron@cars.uchicago.edu | chances are he is doing just the same"

2220. Re: PCB design software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-27 00:00:00 UTC
From: DIA <astra@softhome.net>
Message-ID: <7q6h2nsph1@smail.nursat.net>
Source record: 67520

> I have looked at some from the UK, the price is right but the
learning curve
> is steep.
> I am not looking to produce 40 layer boards, just double sided,
with rf
> ground planes etc

Hi Will,
Look at this - www.waldherr.com - PIA2.2b. Simple, but powerful
software, very easy to use, one hour more than enough for good routing
of PCB.
WBR,
DIA

2221. Re: HF radio using MC1350 as IF amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-27 00:00:00 UTC
From: N6BIU <spam@nospam.com>
Message-ID: <7q6k5f$4r7@dfw-ixnews15.ix.netcom.com>
Source record: 67521

Using a ladder filter with the MC1350 is probably the best approach for selectivity Vs cost.

I wrote a spur analysis program some years ago and when I ran it looking for a good IF frequency relative to 40 meters, I was pleased (and surprised) to learn that 5.000 MHz crystals and a (Approximately) 2.15 MHz VFO are among the better choices. You'd be amazed at how many of the choices for the IF frequency have potentual spur problems.....

This allows using common (and CHEAP) 5.000 MHz crystals, and the VFO frequency is low enough that I used a varactor diode for the tuning. While the transciever is not complete yet, the Rx is up and running. I cheated a bit on the Rx and made use of a VERY obsolete part (LM373).

If you look in the "QRP POWER" published by ARRL, you will find a similar system designed by KH6CP although he used 12.000 MHz crystals. His design does use MC1350 chips and he optimized for strong signal ability. I'd recommend reading his article in detail, it has a lot of good design information.

Jim
N6BIU

EMAIL: jpennell @ ix |dot| netcom |dot| com

I passionately hate SPAM.... I made the mistake ONCE of posting my true address in a newsgroup and I've suffered bulk EMAIL for quite some time since then.

2222. Need Help with a 10m beam - Tri-beam.jpg (0/1)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-27 00:00:00 UTC
From: barddas@spammerswpc.net
Message-ID: <37c714b0.94893916@news.swpc.net>
Source record: 67522

{Remove spammer from address to email}
My grandfather had a 10 meter beam that had three elements shaped like
thgose in the attachment. He has passed away and the antenna is
nowhere to be found, I don't know even this antennas name but I wish
to buy or build one.. Anyone know what it is called or have specs or
plans for one like it?
barddas@spammerswpc.net
Truth Against the World & Love Against All Else!

2223. Req: Found out what the antenna is I need specs for it is a JO GUNN JG-3+3 STAR. Anyone have them??? TIA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-27 00:00:00 UTC
From: barddas@spammerswpc.net
Message-ID: <37ca3f2d.105772371@news.swpc.net>
Source record: 67523

Ammended previous post Sorry for ther inconvenience.
Barddas@spammerswpc.net
{Remove the spammer to email}
Truth Against the World & Love Against All Else!

2224. wanted: 23cm transmitter and receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-27 00:00:00 UTC
From: "Carel, PA0CMU" <cmulder@casema.net>
Message-ID: <37C6E0AB.9F8C7EDA@casema.net>
Source record: 67524

I'm searching for a 23cm transmitter and receiver to send videosignals
from a security camera.
It is not nessesary that the signal is coded because it will be used for
tests.

Eric M.
Netherlands
(muldereric@hotmail.com)

2225. Re: HELP! Tube Guru's Advice Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-27 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <37C70DAD.43FDE6A7@midwestmicro-tek.com>
Source record: 67525

Okay, I think I've got it figured out. In the tune up procedure that is given, they at no time say anything about KEYING the circuit when looking for the dip. I was working with it two nights ago when this thought occured to me and then when I was reading Michael's post yesterday it all made sense. Armed with this new knowledge and with all that I've learned from you guys about proper tuning and resonance I'm going to try to get it all together this weekend. I'll post on monday to let you know how it goes

Thanks Guys!

Rick

2226. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-27 00:00:00 UTC
From: sbharris@ix.netcom.com
Message-ID: <7q75cd$kq5@dfw-ixnews19.ix.netcom.com>
Source record: 67526
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

In <935751066.13895.1.pluto.d4ee0662@news.demon.nl>
jan@panteltje.demon.nl (Jan Panteltje) writes:
>>some.
>I read someone in the US stole a bread (from a church), because he was
hungry
>(probably had diffficulty finding a job, it was his second
conviction).
>Then he got LIFE for that (yes 1999).

Mr. Jean Valjean, no doubt.

2227. OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-27 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7q772t$9k2$1@autumn.news.rcn.net>
Source record: 67527
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

I do a small radio restoration column for a "popular" non-ham
SWL/Scanner orientated magazine. After offering some simple projects, I've
noticed a fantastic response from the readers; but, I am slowly
realizing that the median age of most people I hear from falls
between 65 and 72! It's interesting when you receive long, handwritten
letters
from Old-Timers, but never even an email from someone younger showing an
interest in the old technologies or proper restoration techniques.....

I am wondering if anyone under the age of 50 is building radios anymore, or
is the "magic" of building a one-tube regenerative receiver using a 30 or
'99
tube reserved just for those of us with AARP membership. I am feeling
kind of sad, because more than a few old timers have sent me the
remains of their junkboxes because no one else is interested; and they
didn't
have the heart to take the stuff to the dump. (Nothing special, old sockets,
resistors, coils, etc.)

I am wondering, are we really the

Last American Dinosaurs

2228. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-27 00:00:00 UTC
From: sbharris@ix.netcom.com
Message-ID: <7q77vf$82s@dfw-ixnews4.ix.netcom.com>
Source record: 67528
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

In <FH4rIA.1JF@midway.uchicago.edu> meron@cars3.uchicago.edu writes:
>
>In article <7q5nm2$j7v@dfw-ixnews3.ix.netcom.com>,
sbharris@ix.netcom.com(Steven B. Harris) writes:
>>In <01bef05f$410ec940$0100a8c0@drawing> "Dave Sparvell"
>><sparvell@*nospam*rftechnology.co.uk> writes:
>>>
>>>Perhaps someone may know more about this and can elaborate.
>>>
>>>I heard a story 20+ years ago of someone living very near to the BBC
>>>Droitwich Longwave transmitter (198kHz) doing exactly this having
>>>constructed a loop in the attic of his house.
>>>
>>>The transmitter runs either 500KW or 1MW and can be received over
all
>>of
>>>the UK and most of Europe.
>>>
>>>The BBC couldn't understand why there was a distinct null in their
>>>radiation pattern, and this lead to the offender being tracked down.
>>>
>>>He was proscuted for the theft of electricity.
>>>
>>
>> Sounds appocryphal, since tapping the far-field is just what
>>everybody with a radio does (no effect on the transmitter), and ther
is
>>certainly no screening of receivers downfield with a little antenna
>>like that. Tapping the nearfield would not have an effect on EMR
>>pattern-- at least not the kind the BBC cares about. It would show
up
>>as an unexplained transmitter-antenna impedence mismatch, and overall
>>power draw, but I refuse to believe this would be noticed, unless
>>somebody did some serious winding of coils around the antenna itself.
>
>Well, note that the transmitter mentioned here broadcasts at quite a
>long wavelength, about 1.5 km. So the near field extends rather far
>and if the house in the story was within few hundred metres of the
>transmitter (quite possible), it was deep in the near field.

Yep. It remains to guess at the current in a transmitter antenna in
such a setup, figure out the magnetic flux at (say) 500 m, and then
what power you could expect to generate with an antenna loop of a given

area, ala Faraday. For this purpose it doesn't matter if the loop is one wire or a thousand-- same power out, just different voltage.

2229. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-27 00:00:00 UTC
From: Jim Doe <nospam@nospam.com>
Message-ID: <7q78ja$35d$1@nntp3.atl.mindspring.net>
Source record: 67529
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

CommQuart <commquart@erols.com> wrote in message
news:7q772t$9k2$1@autumn.news.rcn.net...
> I am wondering, are we really the
>
> Last American Dinosaurs

My dad, who's 79, got a computer last year. I never could get him interested in ham radio, but he's taken to NetMeeting like the proverbial duck to water. He doesn't keep track of the countries he's talked to but I know he's well on his way to 100. He learned Morse in the service but never liked it, and I sure wouldn't let him listen to some of the going's on on the HF ham bands. He talks to a lot of young people, who seem to appreciate his mature opinions. I doubt they could carry on the same level of conversation on the ham bands--for one thing, NetMeeting is full duplex, and he has a camera, too.

I got interested in ham radio because of a neighbor we had when I was 10 or 11. He took me and his son, my age, to Field Day one year. There was all this old surplus stuff with mysterious dials and knobs. Even the commercial stuff looked neat. You could tell a Hallicrafters from a Hammarlund at 100 feet (well, in those days I could!). The R8 I have now blends in perfectly with all the audio gear in the cabinet, and you can't tell a Yaesu from an Icom from a Kenwood unless you walk right up to it. Digital readout and computer control means you can pop right on to a frequency--no skill involved at all. Computer games and hacking seem to be the challenges now. Building radios that will never compare with even cheap commercial stuff just isn't attractive. Way back when, commercial gear was priced out of reach of many of us, and even if it weren't you could still match the performance with homemade stuff if you worked at it. I got my start fixing 25-cent console radios obtained from the Salvation Army, and tearing apart discarded TVs. That avenue of progression is nearly closed now.

Yes, I think we are dinosaurs!

73,

Jim

2230. Re: PCB design software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-27 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7q7823lqi1@news1.fast.net>
Source record: 67530

-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

WB <willyacht@yahoo.com> wrote in message
news:Xznx3.182$1E2.796@ozemail.com.au...
> I am looking to purchase some PCB design software, one thats easy to
use,
> has a autorouter and has a good set of manuals for beginners. Any
> suggestions?
>
> I have looked at some from the UK, the price is right but the
learning curve
> is steep.
> I am not looking to produce 40 layer boards, just double sided,
with rf
> ground planes etc
>
>
> Will

Check out http://www.cadsoftusa.com/freeware.htm

I own the full "professional" version of this and find it works quite
well.
(I[m just a customer, not related in any other way to the company.)

73,

- --

Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI
Fellow, Radio Club of America
Senior Member, IEEE
Member, ARRL
Join NCI - Hams for the 21st Century!
Help modernize ham radio and assure its future survival!
http://www.nocode.org

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=X9tP
-----END PGP SIGNATURE-----
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2231. Re: PLL frequency synthesizer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-27 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7q78oqpst1@news1.fast.net>
Source record: 67531

-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

David Cunningham <D.L.C@btinternet.com> wrote in message
news:7q6rsq$i71$1@uranium.btinternet.com...
> Is it possible to make a PLL frequency synthesizer to provide, say,
1 to
> 30MHz output, using an LM565 and some TTL chips? suggestions to
> d.l.c@btinternet.com please.

I doubt it ... the spec'd maximum operating frequency of the VCO is
500 kHz.
If memory serves me correctly ... I didn't read the entire data sheet
... it's
an R-C multivibrator type of VCO ... TOTALLY unsuitable for RF usage.

There are lots of PLL chips available from National, Motorola,
Fujitsu,
and many others ... check their web sites and you'll find something
that
will be useful.

If you want to make something that covers 1-30 MHz, there are a
number of things to consider ... first, you're unlikely to build a
good
VCO that can cover that range. That implies either bandswitched
VCOs or running a VCO up in the VHF/UHF range to get the
tuning range and then dividing down.

Depending on your application a DDS may be a better choice.
There you can easily get coverage of the entire band with a
single chip that's controllable via a microcontroller or via a
simple interface from a PC printer port.

I hope this helps some and stimulates some thought.

73,

- --
Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI
Fellow, Radio Club of America
Senior Member, IEEE
Member, ARRL

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Help modernize ham radio and assure its future survival!
http://www.nocode.org

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gbJcntoXR1J419WOiobI4YN/
=Qj0Z
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2232. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-27 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7q7b3c$1i5$1@news1.fast.net>
Source record: 67532
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

```
-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

CommQuart <commquart@erols.com> wrote in message
news:7q772t$9k2$1@autumn.news.rcn.net...
> I do a small radio restoration column for a "popular" non-ham
> SWL/Scanner orientated magazine. After offering some simple
projects, I've
> noticed a fantastic response from the readers; but, I am slowly
> realizing that the median age of most people I hear from falls
> between 65 and 72! It's interesting when you receive long,
handwritten
> letters
> from Old-Timers, but never even an email from someone younger
showing an
> interest in the old technologies or proper restoration
techniques.....
>
> I am wondering if anyone under the age of 50 is building radios
anymore, or
> is the "magic" of building a one-tube regenerative receiver using a
30 or
> '99 tube reserved just for those of us with AARP membership.

Would that really surprise you? After all, building a one-tube
regenerative receiver is merely a regurgitation of something that
was done hundreds or thousands of times back in the 30s ...
and the result will be a vastly inferior receiver to what one
could easily build with as few as one, to perhaps a few,
modern ICs ... and it would likely radiate like crazy.

I don't find any "magic" in that ...

I can't for the life of me understand why anyone would
be attracted to waste the time in such an endeavour when
there are so many more useful, more interesting things
well within reach.

> I am feeling
> kind of sad, because more than a few old timers have sent me the
> remains of their junkboxes because no one else is interested; and
they
> didn't
> have the heart to take the stuff to the dump. (Nothing special, old
sockets,
```

> resistors, coils, etc.)
>
> I am wondering, are we really the
>
> Last American Dinosaurs

With all due repect, it would seem so ... do you really expect the youngsters of today, with all of their exposure to computers, the internet, cellphones, and all sorts of other sophisticated consumer electronics devices to actually be interested in recreating antiquated
stuff that the real world abandoned decades ago???

Now don't get me wrong, if YOU want to build stuff like that, that's fine with me ... but I think it's ridiculous to bemoan the fact that today's youth aren't interested in nostalgia radio when there are so many more useful and interesting things they could be doing with radio.

73,

- --
Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI
Fellow, Radio Club of America
Senior Member, IEEE
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Join NCI - Hams for the 21st Century!
Help modernize ham radio and assure its future survival!
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fk+TtK+Sxlz2TH6xEPE7qxgD
=pKt0
-----END PGP SIGNATURE-----

2233. Re: PLL frequency synthesizer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-27 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.SOL.4.10.9908272032140.10576-100000@Stratus.CAM.ORG>
Source record: 67533

On Fri, 27 Aug 1999, David Cunningham wrote:

> Is it possible to make a PLL frequency synthesizer to provide, say, 1 to
> 30MHz output, using an LM565 and some TTL chips? suggestions to
> d.l.c@btinternet.com please.
>
It's not at all possible.

The 565 is rated to 500KHz.

The phase detector is not really suitable for a synthesizer, being nothing more than a double balanced mixer. It has an AC component, and the detector is not suitable for wideband use because it will lock on harmonics.

The VCO, even if it could reach the HF range, is an RC VCO, so it will have way too much jitter.

The 565 and other Signetics PLL's are now thirty years old. They were pretty nifty at the time, but they were more for analog use than digital. While the application notes will show a programmable divider between the VCO and the phase detector, they really aren't suitable for that, and I think that sort of use was shown more to be all-inclusive than to be realistic.

Even if you could use the 565, you'd still need a reference (undoubtedly a crystal in the HF range, and a string of dividers to get you down to your channel spacing) and a programmable divider chain to select your desired frequency (and if you aren't going to control that with BCD switches, you'll need extra circuitry for connecting a dial to the divider chain). Considering all that, the 565 supplies a fairly insignificant part of the circuitry.

A 4046 or it's HC version hs a better phase detector. Again, though, you won't want to use the VCO because it's an RC VCO and it has frequency limitations. But the one of the phase detectors in there is as good as you're likely to see in some other device.

Of course, you'd still have to deal with the reference and programmable divider, and the VCO.

I don't know about availability, but Motorola (and probably others) make IC's that contain a good phase detector, an oscillator and divider chain for the reference, and the programmable divider, which are intended for synthesizer use. They certainly put a lot in one package, and at least some of the devices are fairly flexible.

Michael

2234. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-27 00:00:00 UTC
From: Gerald D'Entremont <w5ba@csi.com>
Message-ID: <7q7clr$cr6$1@ssauraab-i-1.production.compuserve.com>
Source record: 67534
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Carl R. Stevenson <wa6vse@fast.net> wrote in message
news:7q7b3c$1i5$1@news1.fast.net...
<snip>
> With all due repect, it would seem so ... do you really expect the
> youngsters of today, with all of their exposure to computers, the
> internet, cellphones, and all sorts of other sophisticated consumer
> electronics devices to actually be interested in recreating
> antiquated
> stuff that the real world abandoned decades ago???
<snip>
Well...with further due respect I will point out that the thing that
got my 16-yr old out of his chair in front of the computer last night where
he had been 'glued' for the past several hours was the sound of CW coming
out of the TV set in the living room. No, it wasn't my ladder-line
re-radiating again ;-)...I had just put in a copy of the ZL9CI video that
9V1YC had been kind enough to send me into the VCR and he and I wound up
sitting down together and enjoyed watching an hour showing a dedicated group
of ops doing "stuff that the real world abandoned decades ago". Yes...the
metero sta. on Campbell is all automated now and all the data is up-linked
on each sat pass by computer, but there was something compelling enough to
attract a teenagers attention in what would motivate a dozen ops to endure a
long boat ride to a sub-Antarctic island and spend a month banging out QSO's
to ten's of thousand of people around the globe.
If you're the Last Dinasour...you've got some company ;-)
73/ZUT, Gerald W5BA

> Join NCI - Hams for the 21st Century!
> Help modernize ham radio and assure its future survival!
> http://www.nocode.org
<snip PGP sig block>
;-)

2235. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-27 00:00:00 UTC
From: Marc Hildebrant <hildebrantfamily@worldnet.att.net>
Message-ID: <7q7eg1mbj1@bgtnsc01.worldnet.att.net>
Source record: 67535
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

The fact is that do it your self for anything is in the decline. Wether the subject is car fixing, radio work, or home fixup.

I myself enjoy making my own stuff.

Marc

2236. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-27 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7q7f8g$m5e$1@autumn.news.rcn.net>
Source record: 67536
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Carl R. Stevenson wrote in message <7q7b3c$1i5$1@news1.fast.net>...

>With all due repect, it would seem so ... do you really expect the
>youngsters of today, with all of their exposure to computers, the
>internet, cellphones, and all sorts of other sophisticated consumer
>electronics devices to actually be interested in recreating
>antiquated
>stuff that the real world abandoned decades ago???
>

>Help modernize ham radio and assure its future survival!
>http://www.nocode.org
>
Aw, bingo! What can you do to "modernize" amateur radio that would
bring youngsters back into the hobby? Is "no-code" really the answer?
Unfortunately, from a strictly communications standpoint, whatever is
being done today with "modern" equipment was being done in the
40s and 50s with antiquated equipment. If the "magic" or radio is so
easily replaced by USING satellites, cellphones and computers, I see no
hope for the youth of America in becoming interested in modern electronics,
or ham radio, let alone "antiquated" technologies. Having a 16 year old
who is more interested in downloading .wav files, games, etc. than learning
how the computer works or how to program it, I do worry.

Regards

Pete K1ZJH

2237. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-27 00:00:00 UTC
From: John Moriarity <k6qq@hdo.net>
Message-ID: <rsektf50j7147@corp.supernews.com>
Source record: 67537
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Carl R. Stevenson <wa6vse@fast.net> wrote in message
news:7q7b3c$1i5$1@news1.fast.net...
> I can't for the life of me understand why anyone would
> be attracted to waste the time in such an endeavour when
> there are so many more useful, more interesting things
> well within reach.
>
> With all due repect, it would seem so ... do you really expect the
> youngsters of today, with all of their exposure to computers, the
> internet, cellphones, and all sorts of other sophisticated consumer
> electronics devices to actually be interested in recreating
> antiquated
> stuff that the real world abandoned decades ago???

I wonder how many of these modern, enlightened youngsters have built a
computer,
a modem, a cell phone, etc. from scratch?

We "dinosaurs" built our radios, and experienced something in using
them that these "modern" kids never will (sadly).

It's like thinking you're some technical genius because you know how
to use a telephone.

73,

John, K6QQ

Alturas, CA, at the corner of 299 & 395 (under the smoke).

2238. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-27 00:00:00 UTC
From: Ron Ostman <w0nyq@minntaccdp.com>
Message-ID: <7q7k18$1amt$1@news1.spacestar.net>
Source record: 67538
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

There are a few of us "young" builders still out there . . .I'm 37 and have a basement full of type 30 tubes, Hammarlund coil forms, Velvet Verniers, peach crates and cotton-covered wire. I plan on "wasting" quite a bit of time this winter on several regen and superhet projects - and will enjoy every minute of it. To each his own.

73,

Ron, W0NYQ (ex WB0NYQ, WN0NYQ)

2239. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-27 00:00:00 UTC
From: "Al, N2NKB"
Message-ID: <7q7kgr$33l$1@bgtnsc03.worldnet.att.net>
Source record: 67539
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

I build and restore old radio equipment, (44 years old) but I am feeling a
little built guilty lately for not getting into PICs.
Al

CommQuart wrote in message <7q772t$9k2$1@autumn.news.rcn.net>...
>I do a small radio restoration column for a "popular" non-ham
>SWL/Scanner orientated magazine. After offering some simple projects, I've
>noticed a fantastic response from the readers; but, I am slowly
>realizing that the median age of most people I hear from falls
>between 65 and 72! It's interesting when you receive long, handwritten
>letters
>from Old-Timers, but never even an email from someone younger showing an
>interest in the old technologies or proper restoration techniques.....
>
>I am wondering if anyone under the age of 50 is building radios anymore, or
>is the "magic" of building a one-tube regenerative receiver using a 30 or
>'99
>tube reserved just for those of us with AARP membership. I am feeling
>kind of sad, because more than a few old timers have sent me the
>remains of their junkboxes because no one else is interested; and they
>didn't
>have the heart to take the stuff to the dump. (Nothing special, old
sockets,
>resistors, coils, etc.)
>
>I am wondering, are we really the
>
>Last American Dinosaurs
>
>
>
>

2240. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-27 00:00:00 UTC
From: Tim <ka8ddz@worldnet.att.net>
Message-ID: <37C7598C.ADE766A@worldnet.att.net>
Source record: 67540
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

&#65533;

Marc Hildebrant wrote:

> The fact is that do it your self for anything is in the decline. Wether the
> subject is car fixing, radio work, or home fixup.
>
> I myself enjoy making my own stuff.
>
> Marc

I'll go with Marc on this one, it does make me wonder about the interests of youth today. I'm only 37 but I can remember the days of sitting and looking at *old* copies of Popular Mechanics and dreaming of all the neat stuff you could build. Boats, sleds, cottages, TV consoles, Teeder Todders etc. It used to drive me crazy because my dad was not a builder and we also didn't have the money for young Tim to throw&#65533; away on some silly project. Arrrrgh. Of course now I've got the money, just need to find the time. :)

I've mentioned building several projects with my kids, I turned over the Dremel Jigsaw to them, no interest. They've built a few birdhouse kits but only at Dads urging. At 8 years old I was using the same Dremel Jigsaw, I found a book of plans for bookshelves, shadowboxes, birdhouses, you name it. I think I made everything in the book. That saw ran all summer long.

While Amateur radio, and specifically building amateur gear may be in decline I don't think radio is all alone, I think in general the youth of today are in a different mode and really don't have the interest of hands on as the older crowd may have.
&#65533;

Tim ka8ddz
&#65533;

2241. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-27 00:00:00 UTC
From: Jack <friday2k@pacbell.net>
Message-ID: <37C75FFB.9ADA6357@pacbell.net>
Source record: 67541
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

I agree with John, K6QQ in particular. It is a point well taken
that it isn't necessarily the "vintage" of the "hands on" project that
really counts, it is actually encouraging the young to participate in
any project that will enrich a storehouse of practical knowledge for
them. I am 50. I don't consider myself a homebrewer at all. However,
when I was 12 and a novice operator I did build a few Heathkits and
prior to that some simple breadboard projects. I do occassionally get
into an old rig such as my Viking II or KWS-1 to do maintenance and
minor repairs with an Elmer (even at my age). I have put together QRP
kits such as the NC 20 and found this to enrich a fabulous hobby, that I
will participate in to the end. I use the latest technologies too. The
analogy when referring to the youg would of couse be computers and ultra
solid state.
I drive a very high tech european import and at the same time get greasy
working on a vintage car. In radio, those who have knowlege and use of
the latest electronics will eventually investigate where it all came
from.
Bottom line...Don't dwell on the era, just continue to encourage hands
on activities that will enable generations now and to come, to move into
the future while embracing the rich past.
Thanks for the bandwidth,
Jack W6ABC

2242. WTB GE RTV 162 from Hamvention vendor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-28 00:00:00 UTC
From: k9sqg@aol.com
Message-ID: <19990827205332.08537.00001002@ng-ff1.aol.com>
Source record: 67542

Need to find somebody who sells GE RTV 162, white silicon rubber that is electrical grade.

73

Evan

2243. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-28 00:00:00 UTC
From: w4pqwhs@aol.com
Message-ID: <19990827214649.17345.00000587@ng-fc1.aol.com>
Source record: 67543

I can relate to all of your comments, I feel like I am seeing the end of homebuilding.. I see people on the internet asking for instructions on how to build an "all mode,all band " 100 watt transceiver,160 thru 2 meters.the poor guy has a good idea,but, he has never held a soldering iron in his hand,he has not a clue of what goes into building the simpliest of circuits.. oh well I had 50 years or so of enjoyment in building, wish I could see some younger people get interested .. 73 Harold W4PQW

2244. Re: wanted: 23cm transmitter and receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-28 00:00:00 UTC
From: Bobby Atkinson <bobbys@prodigy.net>
Message-ID: <01bef102$5b2da820$0100a8c0@ZTU>
Source record: 67544

If you can live with 2.4GHz www.x10.com sells a nifty set, will do
stereo audio too.

Carel, PA0CMU <cmulder@casema.net> wrote in article
<37C6E0AB.9F8C7EDA@casema.net>...
> I'm searching for a 23cm transmitter and receiver to send videosignals
> from a security camera.
> It is not nessesary that the signal is coded because it will be used for
> tests.
>
> Eric M.
> Netherlands
> (muldereric@hotmail.com)
>
>

2245. Recommend GOOD 33cm FM ATV Xmtr Please!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-28 00:00:00 UTC
From: kleptein@hotmail.com
Message-ID: <37c7549f.29731806@news.fast.net>
Source record: 67545
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.misc

Hello..

I am presently working on a project and am in serious need of some recommendations. I am putting together a small 33cm ATV Xmtr but am having problems finding just the right transmitter. My plan is to feed 10-20 mW into a Down East 3310 PA and just run it like that. Problem is, I can't find a good transmitter to fit the bill. If you know of something that matches as many of these criteria as possible, PLEASE email me...

Synthesized
Only 10-20 mW or power controlled somehow
Small Size
FM Video
Reliable for extended operation
Clean output

All I've been able to find was some "spy transmitters" which are way too much money because they aren't designed for the amateur service. Help, please!

2246. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-28 00:00:00 UTC
From: JJ <jj@no.net>
Message-ID: <37C7503A.45D0@no.net>
Source record: 67546
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Carl R. Stevenson wrote:
>
> -----BEGIN PGP SIGNED MESSAGE-----
> Hash: SHA1
>
> CommQuart <commquart@erols.com> wrote in message
> news:7q772t$9k2$1@autumn.news.rcn.net...
> > I do a small radio restoration column for a "popular" non-ham
> > SWL/Scanner orientated magazine. After offering some simple
> projects, I've
> > noticed a fantastic response from the readers; but, I am slowly
> > realizing that the median age of most people I hear from falls
> > between 65 and 72! It's interesting when you receive long,
> handwritten
> > letters
> > from Old-Timers, but never even an email from someone younger
> showing an
> > interest in the old technologies or proper restoration
> techniques.....
> >
> > I am wondering if anyone under the age of 50 is building radios
> anymore, or
> > is the "magic" of building a one-tube regenerative receiver using a
> 30 or
> > '99 tube reserved just for those of us with AARP membership.
>
> Would that really surprise you? After all, building a one-tube
> regenerative receiver is merely a regurgitation of something that
> was done hundreds or thousands of times back in the 30s ...
> and the result will be a vastly inferior receiver to what one
> could easily build with as few as one, to perhaps a few,
> modern ICs ... and it would likely radiate like crazy.
>
> I don't find any "magic" in that ...
>
> I can't for the life of me understand why anyone would
> be attracted to waste the time in such an endeavour when
> there are so many more useful, more interesting things
> well within reach.
>
> > I am feeling
> > kind of sad, because more than a few old timers have sent me the
> > remains of their junkboxes because no one else is interested; and

> they
> > didn't
> > have the heart to take the stuff to the dump. (Nothing special, old
> sockets,
> > resistors, coils, etc.)
> >
> > I am wondering, are we really the
> >
> > Last American Dinosaurs
>
> With all due repect, it would seem so ... do you really expect the
> youngsters of today, with all of their exposure to computers, the
> internet, cellphones, and all sorts of other sophisticated consumer
> electronics devices to actually be interested in recreating
> antiquated
> stuff that the real world abandoned decades ago???
>
> Now don't get me wrong, if YOU want to build stuff like that, that's
> fine with me ... but I think it's ridiculous to bemoan the fact that
> today's youth aren't interested in nostalgia radio when there are
> so many more useful and interesting things they could be doing
> with radio.
>
> 73,

Somehow I would expect that kind of response from you Carl.

****
* cirdehsoc@alltel.ne *
* nufo40@server.virtual.net.au *
* trewq@liquidinformation.com *
* dave@maloney.com *
* makelotsofmoneynow@usa.net *
* 3624@earthlink.ne *
* sales@advancedmachine.com *
* mrbill2u@bustamail.com *
* ab12715@aol.com *
* bb8874@ausi.com *
* pwaremove@mythirdage.com *
* prewrittenads@bigfoot.com *
* aies@aies.net *
* testcom@tin.it *
* af4k@earthlink.net *
* sabbatai_zvi@hotmail.com *
* fraudinfo@psinet.com *
* ju7676767@surfree.com *
* cybernet101@bigfoot.com *
* dfghrwt4354.com@earth.iaonline.com *
* 2Fs9381Sy@surfree.com *
* jccheezum@uspis.gov *
* jquello@fcc.gov *

```
* sness@fcc.gov *
* rchong@fcc.gov *
* rhundt@fcc.gov *
* tracyd@fbi.gov *
************************************
```

2247. WANTED

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-28 00:00:00 UTC
From: redberd95@aol.comnospam
Message-ID: <19990828022054.07304.00000425@ng-fu1.aol.com>
Source record: 67547

I am looking for a 2m ssb transciever or transverter. Homebrew or factory.
Please email directly at redberd95@aol.com.

Randy KA4NMA

2248. WANTED 2M SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-28 00:00:00 UTC
From: redberd95@aol.comnospam
Message-ID: <19990828021940.07304.00000424@ng-fu1.aol.com>
Source record: 67548

I am looking for a 2m ssb transciever or transverter. Homebrew or factory.
Please email directly at redberd95@aol.com.

Randy KA4NMA

2249. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-28 00:00:00 UTC
From: Ed Price <edprice@pacbell.net>
Message-ID: <37C78D34.705F@pacbell.net>
Source record: 67549
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Marc Hildebrant wrote:
>
> The fact is that do it your self for anything is in the decline. Wether the
> subject is car fixing, radio work, or home fixup.
>
> I myself enjoy making my own stuff.
>
> Marc

About those cars, there's something strange going on there. Cars must be
getting closer to the ground every year, cause it's getting harder and
harder for me to get underneath them.

Ed
WB6WSN

2250. Re: PCB design software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-28 00:00:00 UTC
From: p.richards@ukonline.co.uk
Message-ID: <37c7c220.17172238@news.ukonline.co.uk>
Source record: 67550

Try http://www.vutrax.co.uk/

their first level of functionality is free...

Paul

On Fri, 27 Aug 1999 13:24:45 +1000, "WB" <willyacht@yahoo.com> wrote:

>I am looking to purchase some PCB design software, one thats easy to use,
>has a autorouter and has a good set of manuals for beginners. Any
>suggestions?
>
>I have looked at some from the UK, the price is right but the learning curve
>is steep.
>I am not looking to produce 40 layer boards, just double sided, with rf
>ground planes etc
>
>
>Will
>

Paul Richards

2251. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-28 00:00:00 UTC
From: Hagstar <yonny@worldnet.att.net>
Message-ID: <37C7CABE.276FD4D6@worldnet.att.net>
Source record: 67551
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Interesting you mention it today; it's just in the past few weeks I started to getting into this idea, and tinkering a bit. I have learned so much repairing circuits, I figure building one will teach me even more. Plus I want to start making breadboard style radios that never existed for display purposes, as I think so many balloon tubes are just too nice to be hidden.

I'm 42, and I often feel like "The Kid" at swaps, then I go snowboarding and I am "The Old Man". No median is available :). I thought everybody WANTED it this way, Peter- it's the *OLD* Timer's Bulletin, after all. I won't get into a long tirade about this, people here know my views. I've heard a lot about how hard and with little thanks everyone toils to makes swaps possible, and that my criticisms are well intentioned but pointless. You can fight City Hall easier than AWA, evidently. Still, my hardest scheduling problem for my business (pool service) hasn't been any of my 40 customer's demands but figuring out how to go to Rochester for 6 hrs next week. This is a game for the retired, it seems clear.

How about an event specifically for kids at a swap/conference, with cool displays of breadboards and spark gaps- what kid could resist such a thing ? BUT- how many kids are going to come on a Weds or Thurs at 7 am ? It would have to be Sat at noon, or nothing. This would be a great way to teach electronics- Bardeen, Shockley and those guys where great, but transistors are BORING, awful, and dull compared to our glowing bottles. And kids NEED to learn about basic electronics today more than ever. The liability issues today, a opposed to the carefree 60's when I was making 12K Jacob's Ladders in the basement with bell wire and coat hangers, would make lower B+ voltage circuits essential, though.

Just a thought,
John H.

2252. Re: PLL frequency synthesizer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-28 00:00:00 UTC
From: Paul Breed <Paul@Netburner.com>
Message-ID: <37C7DE85.C6D336E2@Netburner.com>
Source record: 67552

Try an Analog Devices
AD9851 DDS.

Add a 20Mhz reference osc and a good low pass filter and it will
generate 0->72Mhz under computer control.

The App note even has the design for the LP filter.

If you want another solution try an AD 9835 it will do 0->20Mhz and is
cheaper.

Paul

Paul Breed Chief Architect, NetBurner
Networking in one day.
http://www.netburner.com

2253. Online HAMFEST - FREE

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-28 00:00:00 UTC
From: compcnsult@aol.com
Message-ID: <19990828085306.05925.00000899@ng-fv1.aol.com>
Source record: 67553

Visit the new online Hamfest:

http://www.ehamfest.com

All ads placed free until 10/1/99

What do you have to lose!

2254. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-28 00:00:00 UTC
From: nospam@mindspring.com
Message-ID: <37c7d879.694129@news.mindspring.com>
Source record: 67554
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

"CommQuart" <commquart@erols.com> wrote:

>I am wondering if anyone under the age of 50 is building radios anymore, or
>is the "magic" of building a one-tube regenerative receiver using a 30 or
>'99
>tube reserved just for those of us with AARP membership.

When I looked into getting a radio project "kit" like my uncle's old Heathkit I found out that Heath is out of that buisness. The only kit type receiver that I could find mention of, was the Ten-Tec 1254 mentioned in Passport. Paying $200 for a project that when completed has a reputation for being only "so-so" leads one to the natural q of why anybody would want one. Heck, it doesn't even have SSB and yet is said to take 24- 27 hours to complete to come up with something that is described as "no serious DX receiver". Yuk.

I don't mean to impune anybody else's hobby, but these days, for what amounts to a day's pay one can buy an off the shelf radio the size of a large paperback book that is technically superior to most anything the average basement tinkerer is likely to come up with in terms of ease of use and portability. As to putting together something with hard to find, delicate vacuum tubes, I just truly don't get it.

Homebrew radios, like homebrew computers are fast becoming anachronistic. Let's face it, those of us under 70 often have more disposable income than disposable time. I think that we all owe a debt of gratitude to those that sweated long hours coming up with solutions and configurations that are now standard, but the sun is setting on the sheer viability of the home built radio, computer or telescope.

repects,
ss.

2255. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-28 00:00:00 UTC
From: Bill Fairbanks <BILLFAIRBANKS@worldnet.att.net>
Message-ID: <01bef15a$e1ccd240$5810460c@default>
Source record: 67555
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Oh, I'm not so sure that building interest is totally dead. The internet (aka computers) has been a tremedous boost to the radio hobby. Now, for the first time, a relative newcomer has access to information that just wasn't available just a few years ago. More importantly, we have access to parts and old radios to restore and operate. I suspect that with more magazine articles like yours leading the way, that interest in vintage as well as modern electronics will build at all age levels. Besides, have you noticed the increase in kit manufacturer's lately; modern, yes, but 'building' none the less.

The vintage radio hobby is no different than vintage cars, guns, typewriters or whatever. It's fun to tinker with the past.

73

Bill

2256. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-28 00:00:00 UTC
From: nospam@mindspring.com
Message-ID: <37c7e53d.3963363@news.mindspring.com>
Source record: 67556
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

"John Moriarity" <k6qq@hdo.net> wrote:

>It's like thinking you're some technical genius because you know how
>to use a telephone.

I don't know about that. It's more like the amount of technology that is in daily use exceeds any individuals capacity to learn all of the fundamental nuances of each facet of all that we come in contact with daily. 30-40 years ago, an intellegent person really could pretty much keep up with changes in technology enough to become a jack-of-all trades and some knowledge of electronics, auto mechanics, refrigeration, biology, astronomy, mathematics, physics, chemistry, etc. was considered a standard for a well rounded individual. These days, technology advances so rapidly that keeping up with even just the important changes in any given field is just about a full time job in itself.

Who's to blame somebody for not really caring how a 30's vintage tube radio works, when just keeping up with necessary software upgrades is so time consuming? Today's focus is on the information, not the technology that brings the information. It's such a cliche' that few stop to think what it really means, but we're at a point where the technology age is giving way to the information age. The information about how to delvelop the technology to deliver the information, is just one small part of an ever complex spiral.

I'm a lot more interested in seeing young people just get engaged in learning _something_ that stimulates creativity and critical thinking than I am concerned whether or not they wish to laborously re-trace individual steps of those who've pioneered various technologies that are now taken for granted.

My final thought on this matter is that the tube radio technology is not sufficiently out of modern memory to be considered all that interesting. I note resurgences in interest of ancient processes, but those processes are usually more along the lines of truly old technologies that tie into self sufficientcy. It's not like the average tube builder ever personally made the filaments and blew the glass tubes. Rather, he relied on parts supplied by others, and these days whose to blame somebody for relying on resistors rather than tubes, or even whole radios rather than breadboards?

ss.

2257. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-28 00:00:00 UTC
From: p.richards@ukonline.co.uk
Message-ID: <37c9c66b.18271095@news.ukonline.co.uk>
Source record: 67557

I wouldn't mind building something - probably would enjoy it too, but
I wouldn't want to build anything which duplicates any of the
equipment I have.

So tell me. Would it be possible - or practical - for a novice to
build a 23cm transceiver or transverter?

Paul
G6XFC

who is nowhere near 50 (or 40)

On 28 Aug 1999 01:46:49 GMT, w4pqwhs@aol.com (W4pqw HS) wrote:

>I can relate to all of your comments, I feel like I am seeing the end of
>homebuilding.. I see people on the internet asking for instructions on how to
>build an "all mode,all band " 100 watt transceiver,160 thru 2 meters.the poor
>guy has a good idea,but, he has never held a soldering iron in his hand,he has
>not a clue of what goes into building the simpliest of circuits.. oh well I had
>50 years or so of enjoyment in building, wish I could see some younger people
>get interested .. 73 Harold W4PQW
>
>

Paul Richards

2258. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-28 00:00:00 UTC
From: David Stinson <arc5@ix.netcom.com>
Message-ID: <37C7F152.8FF641B4@ix.netcom.com>
Source record: 67558
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

We builders are still here, at least in spirit.
I'm 42 and I still build things -when I can get the time!

That's the problem- time. Life is so rushed and harried now;
We all must work longer hours to have anywhere near the
buying power our parents had. I own two small businesses
and my wife works as a teacher's aide, and it's still
touch-n-go on the bills sometimes. The businesses eat
so much time that months can go by before I can heat
a soldering iron again. And keeping up with email?
I have 172 pieces in my inbox right now, at least
2/3rds of which will require a personal response.

tempus edax rerum!

Dave Stinson
arc5@ix.netcom.com

2259. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-28 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <7q91q6$1mv$1@autumn.news.rcn.net>
Source record: 67559
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

> Paying $200 for a project that when completed
> has a reputation for being only "so-so" leads one to the natural q
of
> why anybody would want one...

That's one area where building kits has changed. With printed circuits and automated assembly techniques, production assembly is no longer so labor intensive. It is now often less expensive to assemble a rig than to write and print a manual to tell someone else how to do it. That is, at least in part, what put Heathkit out of business. For the most part you no longer build a kit to save money. You do it because you enjoy building, operating, and understanding a rig you put together yourself (even if it cost the same or more).

2260. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-28 00:00:00 UTC
From: "Spunky, the Hookah Smoking Catapillar."
Message-ID: <203C119012176A66.7F2AD60F908A7BBA.9B68B728ADB3DD18@lp.airnews.net>
Source record: 67560
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

The people who do things the hard way are the people who had no choice.
In this modern age, things are not as hard and everything comes pre-made,
thus people don't have to build radio's from scratch anymore.
That is why old hams are the ones who build radios, because they had to.

2261. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-28 00:00:00 UTC
From: Hagstar <yonny@worldnet.att.net>
Message-ID: <37C80F24.CE02FDE6@worldnet.att.net>
Source record: 67561
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

David Stinson wrote:

> That's the problem- time. Life is so rushed and harried now;
> We all must work longer hours to have anywhere near the
> buying power our parents had.

Consider this- most antique radios today, in working condition, sell for the same price as when they were made. You can buy a radio that cost a year's wages in 1934 for a week's wages today. And you could buy the same function (i.e. a good sounding radio) for less than a day's wages.

Face it, we just want more from life. Look, I'm a pool guy- I just got back from my rounds of suburbia. And a lot of us have more toys than our parents ever dreamed of calling essential, IMHO, and more than we have time to play with (the irony of this seems to escape people).

John H.

2262. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-28 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <37C80F04.2465@ix.netcom.com>
Source record: 67562
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

CommQuart wrote:
>
Re: The Title

Lots of HomeBrew Electronics at URL:
http://www.ac6v.com/pagehb.html

Someone's doing it - what difference does age make?? Maybe the guys in
their 20-30's will build when they are 50+ (after the kids grow up)!!

-- All in good fun
73 From Rod In San Diego
Keepa dem irons tinned!!

AC6V INDEX TO DX AND HAM RADIO
FEATURING 88 PAGES, 400 INDEXED TOPICS, AND 3000 LINKS
Over 443,000 visits on the counter
http://www.ac6v.com/pageas.html -- Alphabetical Index
http://www.ac6v.com/ -- Home Page
http://www.ac6v.com/pagedx.html -- DX Reference Pages

2263. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-28 00:00:00 UTC
From: jbyrns@enteract.com
Message-ID: <jbyrns-2808991143090001@216-80-34-29.d.enteract.com>
Source record: 67563
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Hi Peter,

I think people are still building things, even things using tubes, they just aren't building tube radios. If you want to see dozens of people building audio amplifiers with tubes, you have only to look in rec.audio.tubes. In the realm radios, if you look around you can find a lot of people building crystal sets. I suspect the attraction of crystal sets lies in their ease of construction and tweaking, which is a result of their simplicity. Tube radio building seems to be a less popular avocation than building crystal sets, or tube audio equipment. There still people still building electronic equipment from parts.

Regards,

John Byrns

In article <7q772t$9k2$1@autumn.news.rcn.net>, "CommQuart" <commquart@erols.com> wrote:

> I do a small radio restoration column for a "popular" non-ham
> SWL/Scanner orientated magazine. After offering some simple projects, I've
> noticed a fantastic response from the readers; but, I am slowly
> realizing that the median age of most people I hear from falls
> between 65 and 72! It's interesting when you receive long, handwritten
> letters
> from Old-Timers, but never even an email from someone younger showing an
> interest in the old technologies or proper restoration techniques.....
>
> I am wondering if anyone under the age of 50 is building radios anymore, or
> is the "magic" of building a one-tube regenerative receiver using a 30 or
> '99
> tube reserved just for those of us with AARP membership. I am feeling
> kind of sad, because more than a few old timers have sent me the
> remains of their junkboxes because no one else is interested; and they
> didn't
> have the heart to take the stuff to the dump. (Nothing special, old sockets,
> resistors, coils, etc.)
>
> I am wondering, are we really the
>
> Last American Dinosaurs

Surf my web pages at, http://www.enteract.com/~jbyrns/index.html

2264. Re: PCB design software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-28 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7q93v7hbq1@autumn.news.rcn.net>
Source record: 67564

WinDraft and WinBoard are two excellent programs--the price depends
on the number of "pins" the software is registered for. I believe you can
download and try the programs at the ivex.com website. They are also
sold thru NTE distributors.

Expect some steep "learning curves" if you have never used autocad
before. I mainly use the WinDraft program for schematic work, but I
have never mastered the netlists, etc. Of course, there is nothing
preventing
you from manually creating the pc board artwork using WinBoard--and for
RF circuits that may be the preferred method.

Pete

Carl R. Stevenson wrote in message <7q7823lqi1@news1.fast.net>...
>-----BEGIN PGP SIGNED MESSAGE-----
>Hash: SHA1
>
>WB <willyacht@yahoo.com> wrote in message
>news:Xznx3.182$1E2.796@ozemail.com.au...
>> I am looking to purchase some PCB design software, one thats easy to
>use,
>> has a autorouter and has a good set of manuals for beginners. Any
>> suggestions?
>>
>> I have looked at some from the UK, the price is right but the
>learning curve
>> is steep.
>> I am not looking to produce 40 layer boards, just double sided,
>with rf
>> ground planes etc
>>
>>
>> Will
>
>Check out http://www.cadsoftusa.com/freeware.htm
>
>I own the full "professional" version of this and find it works quite
>well.
>(I[m just a customer, not related in any other way to the company.)
>
>73,
>
>- --
>

>Carl R. Stevenson - WA6VSE
>mailto:wa6vse@fast.net
>http://www.users.fast.net/~wa6vse
>NCI #1052
>Director, NCI
>Fellow, Radio Club of America
>Senior Member, IEEE
>Member, ARRL
>Join NCI - Hams for the 21st Century!
>Help modernize ham radio and assure its future survival!
>http://www.nocode.org
>
>-----BEGIN PGP SIGNATURE-----
>Version: PGP for Personal Privacy 5.5.3
>
>iQA/AwUBN8cjLpe+N6+q84HiEQIWigCgqVwv2eKXYkbk6bLuHdrUJlrF8VcAoL99
>d00g0PvMBuM3xfzF3niTrWc+
>=X9tP
>-----END PGP SIGNATURE-----
>
>
>

2265. WANTED: CW-paddles

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-28 00:00:00 UTC
From: "Carel, PA0CMU" <cmulder@casema.net>
Message-ID: <37C818CD.B17A3ACE@casema.net>
Source record: 67565
Cross-posted to: rec.radio.amateur,rec.radio.amateur.homebrew,alt.ham-radio.morse,al.ham-radio.hf

For some reason (???) my first call returns an error-message.
So here the question again:

I'am searching for constructiondetails and/or measures
from the Norcal Paddles or, even better, a not used set of the
brass parts. Homebrewing is easy when you can use machines
and not only saw and file?
I already have enough JPEG/GIFF pictures!

Any info is welcome. Pse mail to: cmulder@casema.net

73, Carel PA0CMU

2266. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-28 00:00:00 UTC
From: Phil Nelson <nospam.philnelson@antiqueradio.org>
Message-ID: <rsg92jfcj7126@corp.supernews.com>
Source record: 67566
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

This is a fascinating thread. I agree with a number of points that have already been made, and won't repeat them. I do have a couple of additional comments.

My website's project/restoration section includes instructions on how to build a crystal shortwave receiver. We get a steady trickle of mail from people who are building this radio, so I guess there is still some interest out there in exploring "old" technology.

If I fix and old radio or build a one-tube set from scratch, it's a nostalgic activity. But the old-timers were technically *progressive* in their time. It was a forward-looking activity to build a radio from scratch in the days when factory-made radios were just starting to appear. Radio was not "old-time" in the 1920s -- it was cutting-edge technology!

We're being a little hard on today's kids to condemn them for lack of interest in 70-year old technology. The old-timers building 1920s radios were exploring the technology of *their* day, not reviving 70-year old techniques in ginning cotton or whittling barn stools.

If the old-timers were alive and the same age in the 1990s, they would be exploring 1990s technology, and I tend to think it would be more along the lines of software than hardware.

The underlying hardware has become disposable, non-user-repairable, and thus not terribly interesting. My younger son is very mechanically inclined, and loves to gather old found junk or spare parts from my garage to fashion a "machine." Unfortunately, a lot of his raw materials -- a smashed cel phone he found on the street, innards of a solid-state CD player put out in the neighbor's trash, etc. -- contain no useful reusable parts. It's fun to pretend that a cel phone scotch-taped to a CD player lets you broadcast music to ET. But I daresay few people on earth could take the parts from those two items and make something new and useful from them.

Software -- programming your computer, creating a databasem building an interactive website, etc. -- is the layer where an average person can accomplish something interesting and fun nowadays. Maybe the year 2000 analogue of building your own regen receiver is building your own website!

Cheers.

Phil
philnelson@antiqueradio.org
Phil's Old Radios
http://antiqueradio.org/index.html

2267. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-28 00:00:00 UTC
From: Will Sparks <willy@home.com>
Message-ID: <7q91v2$dnk@journal.concentric.net>
Source record: 67567
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

Hey William, this is USENET, you are not allowed to think logically here,
much less be informed...

William L. Bahn <wbahn@uswest.net> wrote in message
news:rscmnpfcj7126@corp.supernews.com...
> So, to summarize, you are claiming that someone built a loop antenna in
> their attic that was able to collect a noticeable amount of energy from a
> transmitted waveform that has a 1500 meter wavelength. You are further
> claiming that the amount of energy collected was so significant that they
> noticed a "distinct null " in their radiation pattern. Right. Can you say,
> "Urban Legend"?
>
> About everyone that gets involved with electronics dreams up plans of
> stealing power from the power company or the local AM station. What they
> don't realize yet are little things like wavelength considerations and the
> fact that you can't collect more energy than is passing through the
> antenna's induction area - and that R^2 term kills you, even in close.
Even
> if the antenna was next door you would have a hard time getting even 0.1%
of
> the radiated energy through your attic. So you are already down to less
than
> 500W. And then your efficiency of recovering it would be atrociously low -
> and even at 10% you wouldn't have enough energy recovered to light a
decent
> light bulb.

2268. Re: Mounting LEDs in case ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-28 00:00:00 UTC
From: Roland Burgan <rburgan@up.net>
Message-ID: <37C8498F.C67743EB@up.net>
Source record: 67568

You can also drill out circular holes equal to the diameter
distance across the rectangle, and back fill inside with
model airplane glue, then touch up the outside with enamel.

Tim wrote:

>
>
> Michael Black wrote:
>
> >
> >
> > Realistically, a better idea might be to rearrange the project. Do the
> > LEDs really have to be mounted on the surface of the box? If not, cut a
> > circle in the box where you want the LEDs. Mount the LEDs ona circuit
> > board below that. Cover the hole with a suitably colored piece of
> > plexiglass.
> >
> > Tha advantage to this is you don't have to do extensive work on the box.
>
> I did something along these lines when I did a wind direction display, I used
> the rectangle shaped ones only because I had a couple hundred of them already.
> I cut a piece of plexiglass about 3" in diameter, glued 36 led's, 360 degrees
> :) to the plexiglass I used simple masking tape and taped all around the edge
> of the plexiglass with one piece so I now had sort of a dish or bowel with
> led's in the bottom. I mixed epoxy and colored it using some india ink I
> poured it so the epoxy came jus to the back edge of the led's you could still
> see the green color. Once it dried I used a large disk sander and got it
> almost perfectly round. The 3" block was then mounted above the faceplate with
> a smaller hole underneath to allow wireing. It worked better than I expected.
> If you do this, use very slow drying epoxy to allow the bubbles to work to the
> top.
>
> Tim ka8ddz

2269. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-28 00:00:00 UTC
From: Roland Burgan <rburgan@up.net>
Message-ID: <37C84A6A.F43BA8E5@up.net>
Source record: 67569
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

I find myself designing and building fewer things
primarily because the move in new IC's to SM(Surface
Mount)..things get very difficult to do, especially in
making printed circuit boards for homebrew stuff as
a result.

AC6V wrote:

> CommQuart wrote:
> >
> Re: The Title
>
> Lots of HomeBrew Electronics at URL:
> http://www.ac6v.com/pagehb.html
>
> Someone's doing it - what difference does age make?? Maybe the guys in
> their 20-30's will build when they are 50+ (after the kids grow up)!!
>
> -- All in good fun
> 73 From Rod In San Diego
> Keepa dem irons tinned!!
> ----
> AC6V INDEX TO DX AND HAM RADIO
> FEATURING 88 PAGES, 400 INDEXED TOPICS, AND 3000 LINKS
> Over 443,000 visits on the counter
> http://www.ac6v.com/pageas.html -- Alphabetical Index
> http://www.ac6v.com/ -- Home Page
> http://www.ac6v.com/pagedx.html -- DX Reference Pages

2270. ANTENNA RESTRICTION HELP HERE

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-28 00:00:00 UTC
From: John Williams <ac6tsXX@n2.net>
Message-ID: <37c862e6.0@wagner.n2.net>
Source record: 67570

>Antenna restriction solutions, help, and IDEAS!
>go to page below and click ANTENNA RESTRICTIONS link. Bookmark it for
>future referance...changes daily.

--
Page at-> http://www.angelfire.com/ca2/home4biz/index.html
---/---
---/---
----/----
-----/-----

AC6TS John Williams
LAT. 33.06.15 LON. -117.03.36 7.030Mhz CW
DM13KC 14.030Mhz CW

2271. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-28 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <37C85F7C.9B3@pop.removethistomailme.net>
Source record: 67571
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

sensory surfer wrote:
>
> ... 30-40 years ago, an intellegent person really could pretty much
> keep up with changes in technology enough to become a jack-of-all
> trades and some knowledge of electronics, auto mechanics,
> refrigeration, biology, astronomy, mathematics, physics, chemistry,
> etc. was considered a standard for a well rounded individual.
> These days, technology advances so rapidly that keeping up with even
> just the important changes in any given field is just about a full
> time job in itself.

Very well said.

> ... Today's focus is on the information, not the
> technology that brings the information. It's such a cliche' that few
> stop to think what it really means, but we're at a point where the
> technology age is giving way to the information age. The information
> about how to delvelop the technology to deliver the information, is
> just one small part of an ever complex spiral.

Again, that just about nails it.

Think of the PCS cellular telephone I now use exclusively instead of a landline. My father probably took his share of telephones apart in his youth, and in doing so he would have gained enough knowledge to exhaustively understand the technology in the course of a weekend or two, perhaps with the aid of one or two elementary electronics books written for laymen. The most complex, abstract part of a telephone 30 years ago was its hybrid network. And once you understand what a transformer does, you're 90% of the way to understanding a hybrid.

Now, suppose I were to take apart my Qualcomm PCS phone in an attempt to learn how it work(ed). Contemplating its "guts" spread all over the workbench, I might as well be looking at the remnants of the Roswell alien autopsy. There is nothing to be learned from such a sterile experience, unless I already have a thorough understanding of what I'm looking at. There are few if any parts I can cannibalize from the corpse to tinker with or use in another project. I might spend a whole month studying a monolithic phase-locked VCO chip -- even probing it with a VOM, oscilloscope, or, hell, a vector network analyzer. But that won't tell me how the phone as a whole works -- only one small part of it. By the time an inquisitive kid figures out anything meaningful about the way a telephone works nowadays, it'll be obsolete anyway! (Which is obvious to anyone sentient enough to use the phone in the first place.) Much the same, I think, is true of modern communications

systems ("radios").

> I'm a lot more interested in seeing young people just get engaged in
> learning _something_ that stimulates creativity and critical thinking
> than I am concerned whether or not they wish to laborously re-trace
> individual steps of those who've pioneered various technologies that
> are now taken for granted.

Indeed. It would be a sad way of repaying the giants on whose shoulders we now stand, if we were all content to follow in their footsteps instead!

The key point is, hacking code on my old 48K Apple][+ was just as important (and, dare I say, romantic?) a formative experience for me as taking apart phones and building radios was for my father. I also spent plenty of time as a kid building and playing with tube (and transistor, and IC) radios, but in retrospect it's a damned good thing I didn't stick with that particular path in life. For many practitioners, even the once-creative art of electrical engineering has become little more than a competitive cost-reduction game these days. An EE's job still demands creativity -- arguably more than ever, in fact -- but it also pretty much rules out most opportunities to stand back and appreciate the technology for its own sake. For all but a few lucky engineers, modern electronics as a career seems to be just another high-stress numbers game.

> My final thought on this matter is that the tube radio technology is
> not sufficiently out of modern memory to be considered all that
> interesting. I note resurgences in interest of ancient processes, but
> those processes are usually more along the lines of truly old
> technologies that tie into self sufficientcy. It's not like the
> average tube builder ever personally made the filaments and blew the
> glass tubes. Rather, he relied on parts supplied by others, and these
> days whose to blame somebody for relying on resistors rather than
> tubes, or even whole radios rather than breadboards?
>
> ss.

Right on. That's exactly what continues to make electronics interesting as a hobby (if not a career) from my point of view. All of that integration puts an awe-inspiring amount of power in the hands of people who take the time to understand how to wield it. Using a recent pet project of mine as an example, I couldn't have built a 10-megabit microwave link out of tubes. Or even discrete transistors, without a lot more effort than I would have ever wanted to put into it. There has never been a better time for a hobbyist to partake of the fruits of technological innovation -- even if you have to do it for a living, too. :-)

That being said, building HF gear out of tubes is a different matter entirely. That might be a perfectly reasonable hobby, just like playing with model trains or reproducing the Eiffel tower from matchsticks. But

you can't confuse it with what we now call "radio" or "electronics." It also seems safe to predict that 500 years from now, when it's time for the "resurgence of interest" you speak of, it won't be possible to hear anything but atmospheric static on a homebrew vacuum-tube radio.

-- jm
http://www.qsl.net/ke5fx

Note: My E-mail address has been altered to avoid spam

2272. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-28 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7q9pudeag1@news1.fast.net>
Source record: 67572
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

```
-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

Roland Burgan <rburgan@up.net> wrote in message
news:37C84A6A.F43BA8E5@up.net...
> I find myself designing and building fewer things
> primarily because the move in new IC's to SM(Surface
> Mount)..things get very difficult to do, especially in
> making printed circuit boards for homebrew stuff as
> a result.

SMT (surface mount technology) isn't any harder to work
with than through-hole parts ... it just takes different tools
(not a fortune in them, either) and different techniques.

In fact, it's a LOT easier to remove a multi-lead SMT
device from the board and replace it without damaging
the board than it is to do the same with a through-hole
part.

I don't understand the part about making PCBs being
harder ... could you elaborate on that one?

- --
Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI
Fellow, Radio Club of America
Senior Member, IEEE
Member, ARRL
Join NCI - Hams for the 21st Century!
Help modernize ham radio and assure its future survival!
http://www.nocode.org

-----BEGIN PGP SIGNATURE-----
Version: PGP for Personal Privacy 5.5.3

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2273. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-28 00:00:00 UTC
From: Rich Grise <offduty@entheosengineering.com>
Message-ID: <37C87A53.61E@entheosengineering.com>
Source record: 67573
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

A related legend is the guy who had one of those high-voltage
lines going by, near his property, so he strung up a wire
parallel to it, picking up power for free via induction. Yah,
Right. He's supposed to even have got busted for stealing
power.

It would be kind of an interesting experiment, though. (to
string a wire parallel to the lines, to see what kind of
power you actually could get - maybe a watt or two, I'd
think, if it's close enough to one of the phases.)

Cheers!
Rich

Will Sparks wrote:
>
> Hey William, this is USENET, you are not allowed to think logically here,
> much less be informed...
>
> William L. Bahn <wbahn@uswest.net> wrote in message
> news:rscmnpfcj7126@corp.supernews.com...
> > So, to summarize, you are claiming that someone built a loop antenna in
> > their attic that was able to collect a noticeable amount of energy from a
> > transmitted waveform that has a 1500 meter wavelength. You are further
> > claiming that the amount of energy collected was so significant that they
> > noticed a "distinct null " in their radiation pattern. Right. Can you say,
> > "Urban Legend"?
> >
> > About everyone that gets involved with electronics dreams up plans of
> > stealing power from the power company or the local AM station. What they
> > don't realize yet are little things like wavelength considerations and the
> > fact that you can't collect more energy than is passing through the
> > antenna's induction area - and that R^2 term kills you, even in close.
> Even
> > if the antenna was next door you would have a hard time getting even 0.1%
> of
> > the radiated energy through your attic. So you are already down to less
> than
> > 500W. And then your efficiency of recovering it would be atrociously low -
> > and even at 10% you wouldn't have enough energy recovered to light a
> decent
> > light bulb.

2274. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-28 00:00:00 UTC
From: jbyrns@enteract.com
Message-ID: <jbyrns-2808992121320001@216-80-34-25.d.enteract.com>
Source record: 67574
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

In article <7qa3lb$4hc$1@nnrp1.deja.com>, Edward J. Engelken
<ed_engelken@my-deja.com> wrote:

> Pete:
>
> You really got everyone going on this one!
>
> For starters, ask any new EE graduate the difference between a superhet
> and a TRF receiver and you will find out quickly that the new EEs don't
> have a clue how a radio works. The University of Texas at Austin
> recently changed the name of the EE department to Electrical and
> Computer Engineering. In the "good old days" Electrical Engineering and
> Radio Engineering were basically the same thing. Now it's computers and
> the Internet. Kiss radio goodbye!

Ed,

I disagree, in the "good old days", Electrical Engineering and Power
Engineering were basically the same thing. EE was never basically the
same thing as Radio Engineering. EE went straight from Power Engineering,
through a short period without a definite identity, to Computer
Engineering.

Regards,

John Byrns

Surf my web pages at, http://www.enteract.com/~jbyrns/index.html

2275. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-28 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <7qa6n7$5r9$1@autumn.news.rcn.net>
Source record: 67575
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

> Kiss radio goodbye!

Perhaps in the traditional sense. However, aren't cell phones, pcs, wireless modems, and satellite links all "radio"? Who's designing all the new hi-tech communications systems that are showing up on the market?

2276. Re: Help with VFO Buffer - load isolation needs improving - vfo+buffer.gif (0/1)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-28 00:00:00 UTC
From: Bob Liesenfeld <wb0poq@visi.com>
Message-ID: <37C89AA8.79B5C2B9@visi.com>
Source record: 67576

rjburden@bigpond.com wrote:
>
> Hi,
>
> I have a problem with the buffer in my VFO (3.6MHz) which has me
> stumped - it is being pulled from frequency far too easily. I am using
> a simple two transistor buffer from Solid State Design (the bible!),
> copied in the attached gif.

What follows this ckt? I have found that it is tough to get good
stability in a "straight through" system, that is, if amps follow the
VFO and output much power on the same freq. Have you tryed feeding the
output of your ckt into a resistor of various values to check the
pulling? If not, try that and see if there is less effect. If so, then
I would suspect the problem as described above.

Bob L. 'POQ
> -----------------------
> Regards,
> Richard VK5OO
> VK5OO @ yahoo.com.au
>
> "Nothing better than home-brew, except perhaps an absence of Spam"

--
Genuine E-mail From the Land of the Everlasting Icicle...
Bob Liesenfeld
wb0poq@visi.com

2277. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-28 00:00:00 UTC
From: "Al, N2NKB"
Message-ID: <7qa9v9$6gh$1@bgtnsc01.worldnet.att.net>
Source record: 67577
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Bob Lewis wrote in message <7qa6n7$5r9$1@autumn.news.rcn.net>...
>> Kiss radio goodbye!
>
>Perhaps in the traditional sense. However, aren't cell phones, pcs,
>wireless modems, and satellite links all "radio"? Who's designing all
>the new hi-tech communications systems that are showing up on the
>market?

Guy's in their forties, like myself. But your point is well taken, there
is a great demand for electrical engineers that design radios, filters,
and amplifiers. I shifted from low noise-low frequency audio design
to microwave filter design six years ago within my same company.
Fortunately, my company recognized the learning curve, and now
I have a niche position.
It may take 2 or 3 years for a new graduate to
become proficient with radio design, and top communications companies
are aware of that and provide mentors and training.
Al

2278. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-28 00:00:00 UTC
From: Denis Kuwahara <denis_kuwahara@foxinternet.net>
Message-ID: <37C8AF6C.8679992A@foxinternet.net>
Source record: 67578
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Dear SS, and the rest of this thread,
Pete you certainly got the responses out of the woodwork. Thanks for asking the question. And for the excellent discussion points.

I would comment however to "SS" that he might want to check out www.tentec.com and their kits, they produced a 1253 which was intended as a starter radio and originally sold for $24.00, I see that the current price for the "improved" version is $59.00 but it would provide an excellent way to experience the "regenerative days of old" which had the sensitivity of modern equipment, but with simpler circuitry. As I see it the tradeoff being that the digital radio of today does not require the jockeying back and forth between controls to peak the circuitry to hear the weak stations.

To add heresy to this thread, I'll offer my "radical" thoughts. As a 65 year old grandpa, I am attempting to create a kit of parts that my grandchildren (ages 9, 8, and 5) might read and build with. It will build a crystal set, complete with galena crystal and mount, plus a 1N34 for when finding the hot spot gets too problematical. And, it will build a regenerative receiver with a J-FET and amplifier module that I will supply.

My intent for this kit is to see if there is any interest - inquisitiveness into the electronics / sciences field. I figure that the one thing that I have to pass on to the following generations is the curiosity of what makes things tick, and how to go about finding out the answers. I also have a single 201A regenerative receiver that I plan to use as a "show and tell" piece to demonstrate how the "old timers" did things.

I realized the need to try and spark this quest for information when I had made a casual comment with some fellow worker, on wondering how plastic interlinking chain must be manufactured. While he didn't have a clue, he made the comment that "only you would ask that question". And, I saw that many people do take modern technology on faith, and have NO CLUE as to what marvel they are working with. Stop and think about the automatic transmission in automobiles -- a mechanical computer; who among this group knows the details of the algorithms involved in making shift decisions, of more to the point -- cares??? We just get into the cars and put it into drive and go.

Sorry that I get so long winded, but it's hard to get off the soap box when I get wound up. Thanks again Pete.

Regards,
Denis

sensory surfer wrote:
>
> "CommQuart" <commquart@erols.com> wrote:
>
> >I am wondering if anyone under the age of 50 is building radios anymore, or
> >is the "magic" of building a one-tube regenerative receiver using a 30 or
> >'99
> >tube reserved just for those of us with AARP membership.
>
> When I looked into getting a radio project "kit" like my uncle's old
> Heathkit I found out that Heath is out of that buisness. The only kit
> type receiver that I could find mention of, was the Ten-Tec 1254
> mentioned in Passport. Paying $200 for a project that when completed
> has a reputation for being only "so-so" leads one to the natural q of
> why anybody would want one. Heck, it doesn't even have SSB and yet is
> said to take 24- 27 hours to complete to come up with something that
> is described as "no serious DX receiver". Yuk.
>
> I don't mean to impune anybody else's hobby, but these days, for what
> amounts to a day's pay one can buy an off the shelf radio the size of
> a large paperback book that is technically superior to most anything
> the average basement tinkerer is likely to come up with in terms of
> ease of use and portability. As to putting together something with
> hard to find, delicate vacuum tubes, I just truly don't get it.
>
> Homebrew radios, like homebrew computers are fast becoming
> anachronistic. Let's face it, those of us under 70 often have more
> disposable income than disposable time. I think that we all owe a debt
> of gratitude to those that sweated long hours coming up with solutions
> and configurations that are now standard, but the sun is setting on
> the sheer viability of the home built radio, computer or telescope.
>
> repects,
> ss.

2279. Re: Need schematic or manual for Astron RS-35A

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-28 00:00:00 UTC
From: Gregory Beat <gregory.beat@mediaone.net>
Message-ID: <HA2y3.4985$1a1.224769@elnws01>
Source record: 67579

Check the 723 first --- this is the part that I have
replaced most often .... but in any event take the voltage readings and go
from there.

G. Beat
W9GB

Bubba Joe <bubbajoe@mail.usa.net> wrote in message
news:7q4q2rca1@fir.prod.itd.earthlink.net...
> Enjoy
>
>
> Tony Giroux <agiroux@cvn.net> wrote in message
> news:37C5CF1C.C5F8FA4D@cvn.net...
> > Bought one cheap at a fest with the knowledge that
> > it didn't work. Finally need to get it working
> > to power a solid state rig.
> >
> > This is an older one which only has one meter which
> > switches between voltage & current.
> >
> > I'll pay for copying & mailing if need be.
> >
> > Tony -- KF3BX
> > agiroux@cvn.snap.net
> > remove .snap for address
>
>
>

2280. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-28 00:00:00 UTC
From: davem@groucho.cs.ubc.ca
Message-ID: <7qalkd$9rl@groucho.cs.ubc.ca>
Source record: 67580
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

"Carl R. Stevenson" <wa6vse@fast.net> writes:

>I don't understand the part about making PCBs being
>harder ... could you elaborate on that one?

SMT parts use fine enough lead spacing that you pretty much have to use photographic methods to make boards that use them, it seems to me.

I've made a number of PC boards for through-hole parts by directly drawing on the copper with a resist pen. I've done others by covering the board with adhesive packing tape, then slitting it with a knife and peeling off the tape wherever I wanted the copper etched away. I've seen someone describe a technique that involves cutting the copper directly with a Dremel tool and abrasive wheel. All of these are practical for boards that use 0.1 inch spacing through-hole parts, with no traces between pins.

But once you need to run traces between pins at 0.1 inch pitch, or start working with chips that have 0.05 inch lead spacing, these methods seem unlikely to produce working boards very often.

So, you need a more precise technique, and these generally involve photosensitive PC boards and exposure frames and deveoper, or a computer and a laser printer, or both. If you don't already have any of that equipment, it seems like a lot of additional hardware and technique just to make use of one surface-mount part.

Dave

2281. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: kinsler@frognet.net
Message-ID: <nF1y3.3727$914.269313@typ11.nn.bcandid.com>
Source record: 67435
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

>About everyone that gets involved with electronics dreams up plans of
>stealing power from the power company or the local AM station. What they
>don't realize yet are little things like wavelength considerations and the
>fact that you can't collect more energy than is passing through the
>antenna's induction area - and that R^2 term kills you, even in close. Even
>if the antenna was next door you would have a hard time getting even 0.1% of
>the radiated energy through your attic. So you are already down to less than
>500W. And then your efficiency of recovering it would be atrociously low -
>and even at 10% you wouldn't have enough energy recovered to light a decent
>light bulb.

Well, the short answer is that you can indeed collect electric power by making a long loop antenna beneath a high-voltage power line. It's typically not illegal to do so, but the electric utilities don't like it because the practice exposes both customers and line personnel to shock hazards.

When a farmer fences off his land along an electric utility's right-of-way, the fence often becomes a shock hazard. The electric utility has a fence crew that works along the right-of-way, installing insulators and grounds on fences. There have been a few accidents, like fires resulting from arcs between a fence and a tractor during refueling.

It's true that not much power can be collected from an electric power line through an antenna. The secret power theft book I saw once sniffed that "...a wind charger would probably be more effective."

I don't know about power collection from radio stations. I'm not certain that it wouldn't indeed be possible to build a collection antenna that was efficient enough to alter the pattern slightly. The effect of such an antenna would be that of another antenna close to the radio station broadcasting the identical signal out of phase. This would indeed cancel some of the broadcast signal. It's difficult to imagine that power so obtained would be particularly handy to use, though. And you'd sure have to like the format of that radio station: you'd hear the modulation signal everywhere, whether you had a radio receiver or not.

M Kinsler
--
.....
Athens, Ohio, USA. Home of the "How Things Work" educational program.
See http://www.frognet.net/~kinsler

2282. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: Bobby Atkinson <bobbys@prodigy.net>
Message-ID: <01bef1da$8c8f03e0$0100a8c0@ZTU>
Source record: 67436
Body handling: HTML body converted to readable text

Probably not without help or more than average knowledge.
However you probably could learn how to make an antenna
for 23cm with a reasonable amount of effort. Bobby

Paul Richards wrote in article <
> So tell me. Would it be possible - or practical - for a novice to
> build a 23cm transceiver or transverter?
>
> Paul
> G6XFC
>
> Paul Richards
>

2283. Re: Help with VFO Buffer - load isolation needs improving - vfo+buffer.gif (0/1)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: Murray Kelly <mkelly@powerup.com.au>
Message-ID: <37C8C58B.5A3A@powerup.com.au>
Source record: 67437

If you don't mind a square wave output you can do what I did.
A CMOS buffer, biased linearly (o/p to i/p via a meg)
and coupled to the VFO with a very small cap worked fine.
I just ran thru another buffer (there are 6) for luck,
then used the other 4 paralled as a driver.

> Hi,
>
> I have a problem with the buffer in my VFO (3.6MHz) which has me
> stumped - it is being pulled from frequency far too easily. I am using
> a simple two transistor buffer from Solid State Design (the bible!),
> copied in the attached gif.

> Richard VK5OO
> VK5OO @ yahoo.com.au
>
> "Nothing better than home-brew, except perhaps an absence of Spam"

--
****
* Murray Kelly vk4aok mkelly@powerup.com.au *
* 29 Molonga Ter. / Graceville/ QLD. 4075/ Australia *
* ph/fax Intl+ 61 7 3379 3307 *
****

2284. Re: Mounting LEDs in case ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: Bobby Atkinson <bobbys@prodigy.net>
Message-ID: <01bef1e0$c61e5ec0$0100a8c0@ZTU>
Source record: 67438

How about mounting the leds on a piece on circuit board material,
you can paint the front (before inserting and soldering the leds).
Then cut a large hole in the box and mate it with the circuit board.
Traces on the back make it easy to connect the leds too.
73 Bobby K4BGA

Hansanter <shbcommm@indigo.ie> wrote in article
<37C5CF26.C994FCC2@indigo.ie>...
> Hi all,
>
> I'm sure we've all mounted an LED or two into the case of a project box,
> but haven't they all been circular LEDs ?
> I need to fit 43 LEDs into a project case in a circular pattern but I'd
> like to use the rectangular LEDs (5mm X 2mm). For the regular circular
> ones you just drill a hole with the right size drill bit but has anybody
> any ideas on how to make neat rectangular holes.
>
> Regards
>
> Terry
>

2285. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: Randy Guttery <comcents@mississippi.net>
Message-ID: <37C8CBB5.4B7CDFCA@mississippi.net>
Source record: 67439
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

John Byrns wrote:

> I disagree, in the "good old days", Electrical Engineering and Power
> Engineering were basically the same thing.

This I agree with...

> EE was never basically the
> same thing as Radio Engineering.

Depends... Electrical E. - true - Electronics Engineering - was the same as - and some schools did (and still do) offer both. As a student - without much money - I went to a community college (they were called Junior colleges then) which offered both - I took the EsE courses. Cal-Poly - whos campus literally backed up to Mt. SACs (Mount San Antonio College) - also offered (and still does offer) both. The prep classes are the same - but once into your "major" - they were different. There was even a major difference in the degrees issued - Electrical Engineering got an Associate in Science - while Electronics Engineering got an AA - Associate in Arts. The year I attended - they finally got the school - and the accrediting body to change the Electronics degree to an AS

> EE went straight from Power Engineering,
> through a short period without a definite identity, to Computer
> Engineering.

I think many schools have combined the two EEs into one - and yes - they do seem VERY slanted towards embedded systems (various types of computers), etc.

It was a wake-up call to me a couple of years ago - when talking to a recent BE graduate - that he had a difficult time with the idea of a "self powered" radio... he really had to see (hear) one work to believe that enough power could be recovered from the micro volts of a radio signal to drive a transducer to audible levels - any type of re-producer. Crystals? sure if you want to talk semi-conductor substrate and growth of junctions - or even their tendency to exhibit electrical characteristics changes based on wavelength - (commonly known as resonance)... but a crystal as a point contact detector driving another as a transducer??? Had to see (hear) it to believe it!!!!!

Perhaps I'm a "fuddy-duddy" - but I believe there is much to be learned from history both of what works - and what we should avoid --- and it's obviously NOT being thoroughly taught - at least in some places...

best regards...
--
randy guttery

A Tender Tale - a page dedicated to those Ships and Crews so vital to
the Silent Service:
http://www.mississippi.net/~comcents/tendertale/ttp0.html

2286. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: sbharris@ix.netcom.com
Message-ID: <7qan4k$94r@dfw-ixnews4.ix.netcom.com>
Source record: 67440
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

In <37c8802c.5721112@news1.ns.sympatico.ca> tmacinty@ns.sympatico.ca
(Tom MacIntyre) writes:
>
>Rich Grise <offduty@entheosengineering.com> wrote:
>
>>A related legend is the guy who had one of those high-voltage
>>lines going by, near his property, so he strung up a wire
>>parallel to it, picking up power for free via induction. Yah,
>>Right. He's supposed to even have got busted for stealing
>>power.
>>
>>It would be kind of an interesting experiment, though. (to
>>string a wire parallel to the lines, to see what kind of
>>power you actually could get - maybe a watt or two, I'd
>>think, if it's close enough to one of the phases.)
>>
>>Cheers!
>>Rich
>
>There's always the way that WILL work...a friend of mine was doing
>sound for a concert, and he found that suddenly the audio
>changed...upon checking his AC lines, he found that several
>high-wattage (1200 watts or so) hot dog cookers had been spliced into
>his power cables by some resourceful folk...cut through all layers of
>insulation, etc, and connected the cookers...now, to try THAT with an
>overhead power line...
>
>Tom

You'd likely cook your hot dog, all right. And at about 1200 watts,
too.

2287. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: sbharris@ix.netcom.com
Message-ID: <7qamsp$luv@dfw-ixnews8.ix.netcom.com>
Source record: 67441
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

In <37C87A53.61E@entheosengineering.com> Rich Grise
<offduty@entheosengineering.com> writes:
>
>A related legend is the guy who had one of those high-voltage
>lines going by, near his property, so he strung up a wire
>parallel to it, picking up power for free via induction. Yah,
>Right. He's supposed to even have got busted for stealing
>power.
>
>It would be kind of an interesting experiment, though. (to
>string a wire parallel to the lines, to see what kind of
>power you actually could get - maybe a watt or two, I'd
>think, if it's close enough to one of the phases.)
>
>Cheers!
>Rich

Sounds like a great way to get electrocuted, too. If you're going to steal power by induction from power lines, obviously (in theory) you want to use lines with the highest magnetic fields, and thus highest currents. These won't necessarily be the highest voltage lines, but probably will be (despite what you read about transformers and power distribution), since trunk lines actually usually carry more current as well as higher voltage, and the much higher currents which result from sub-station step-down are distributed over many wires, so you don't see them ever in one wire.

The simplest thing is run a direct tap from a local pole transformer if you're going to steal power. Which you hardly have to climb the pole to do (risking getting fried on the local secondary grid)-- all you have to do is use the existing power tap, and bypass your power meter at the house. Of course, this has been thought of, and the local subgrids are monitored for consumption, and if all local readings on a secondary don't add up to what the meters on houses do, to some fair approximation, they'll do some careful checking to see who's running around a meter on your street. So what you can steal and get away with, isn't much. Or you would put an insulated induction coil around the transformer, but naturally the loss would again show up, or else the device would be detected in short order the next time the transformer was checked and serviced, and then they'd follow the line right to you, the ciminal. A dumber crime can hardly be imagined. Unless possibly the one where you want to string up next to the high-amp high-tension line, of course.

2288. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: sbharris@ix.netcom.com
Message-ID: <7qaqbn$jon@dfw-ixnews11.ix.netcom.com>
Source record: 67442
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

In <gp1y3.3700$914.267020@typ11.nn.bcandid.com> kinsler@frognet.net (Mark Kinsler) writes:
>
>You were misinformed. Nobody gets life imprisonment in the US for much of
>anything short of murder, treason, or a very large inventory of illegal
>drugs.

Under the California's "three strikes" law you could get 25 yours for a third conviction after two felonies, and third didn't even have to be a felony. Shoplifting would do it. There were several celebrated cases of rather minor crimes putting somebody way for 25 years. I do not know if the law is still on the books, but was for a long time.

Second, the amount of some drugs you have to have to put you in Federal prison for life (effectively) is not large, depending on the drug. I don't have the tables, but a kg of crack cocaine would certainly do it. You could put that in a purse and it's not what one thinks of as a large inventory, unless you have a different idea of the word than I do.

> Theft without breaking and entering is never more than a
>misdemeanor.

Wrongo. It goes felony based on value in all states. Steal a tractor or backhoe, go to prison. Matters not if the keys were in it, no breaking required. Furthermore, if you have an accomplice, conspiracy is a felony all by itself, even if you never comit the crime. In fact, under federal law it is actually a felony to conspire to comit a misdemenor. A law no often enforced, but certainly on the books. And there are a lot of people doing federal time due to extra "conspiracy" convictions, all felonies. Juries really have no idea how harsh Federal penalties are, and how little latitude judges have in applying them, once a conviction has been made.

>
>>Justice is still only for the rich is it not?
>
>Not here. The courts here in Athens County regularly appoint local
>attorneys to represent indigent defendents. I've watched it happen.

Have you watched those attorneys work? It wasn't long ago that Alabama paid the state legal defender $1000 to prepare a death penalty

defense, something that most lawyers say takes at least 500 hours to do adequately. That's $2 an hour. What do you suppose the quality is like? So you can watch all you like, but until the state makes equal resources available to defense as are available to prosecution, there will be no justice in any terms you can imagine, for people who aren't wealthy. For everyone else, the prosecution IS the punishment. No matter how it ends.

>If you come to visit the US, stop in and watch some court proceedings:
>except for juvenile cases, they're always open to the public and the
>press.

On second thought, don't. If you want to retain any regard for sausages or the law, don't watch either one made (Bismarck). This goes also for criminal court proceedings.

>Maybe that's the case in Europe, but not here in the US. Our
>legislators are citizens like everyone else, and they have to stand
>for re-election every other year.

So what? It's not like they feel much of the impact of the laws they pass, while they're in the legislature. The legislator is not running a business, or being an employee in one. By the time he gets out of the game and finds out what he's done, it's way too late. As for the people, they hardly know who to blame for what. Legislators lie, and nobody really has the resources to find out who's actually responsible for what. As congress votes on 1000 page documents that not one of them has actually read all the way through, not even they know.

> Again, you're welcome to visit our Capitol building and
>watch our House of Representatives and Senate in session.

If you have the stomach for it. You can do it on CNN. It all looks mighty impressive until you listen to what is actually being said. As JFK liked to tell the story, when he first got to congress one old Texas senator told him not to worry-- that he'd spend the first few months wondering how he got there, and the rest of the time wondering how everyone else did. No truer thing was ever said.

>Thousands of
>people do so each year, and most sessions are televised as well.

The speeches in the hall (now for TV) are televised. Closed door sessions, voice votes, and the important dickering in committees (where the real stuff is done) is mostly not. So you can't even choose not to follow Bismark's advice. By and large, you don't get to watch. You just get to pay.

2289. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: Rich Grise <offduty@entheosengineering.com>
Message-ID: <37C90C19.1920@entheosengineering.com>
Source record: 67443
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

```
... in the US. Our legislators
> are citizens like everyone else, and they have to stand for re-election
> every other year. Again, you're welcome to visit our Capitol building and
> watch our House of Representatives and Senate in session. Thousands of
> people do so each year, and most sessions are televised as well.
>
> M Kinsler

And quite the effective cure for insomnia.

;-}
Rich Grise
```

2290. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: Hagstar <yonny@worldnet.att.net>
Message-ID: <37C91A3F.C06E16AF@worldnet.att.net>
Source record: 67444
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Tim wrote:
>
>
> I think in general the youth of today are in a
> different mode and really don't have the interest of hands on as the > older crowd may have.
>
>

If true, perhaps that's connected with the fact that we don't *make*
much of anything in this country anymore, except good planes. that's
actually tangible and has mass, period. I disagree with Bill T.- I don't
even see much paper coming out of my computer. I am doing an outdoor
column for a weekly local paper now, and I do it all within Netscape,
only very rarely do I fire up the printer.

John H.
>

2291. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: n2cqr@erols.com
Message-ID: <37c94c13.78673306@news.erols.com>
Source record: 67445
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Great thread! "To each his own" seems to be the bottom line, but let me throw in a few more ideas on the benefits of playing with dead, old technology.

-- There is a satisfaction that comes from listening to a radio that you built yourself that you will never get from a store-bought radio. I like to work on circuits that are a simple as possible, circuits that are within my capacity to understand at the component level. For this reason I try to avoid ICs. For me they are often mysterious black boxes and detract from the HB satisfaction.

-- There is a challenge to building this simple stuff. Even if the circuitry is old, outdated and simple, it is NOT easy to get a homebrew receiver working properly.

-- Don't write off homebrew gear as inherently inferior to the commercial stuff. As I type I'm listening on a homebrew receiver to VK7FJ in QSO with TF3DX on 20 cw (I can hear them both).

-- I learn something every time I build one of these things. Manual dexterity improves, shop skills improve and (especially in the debugging phase) I learn some of the electronics.

-- When you build simple and/or old radios like this, you are, I think, getting closer to the physics and science of radio than you do with some of the more modern techniques. I earlier said some positive things about those inventive kids who are hacking away at new software. That's great, but I got tired of it real fast and found myself going back to the old simple radio hardware. For me, working on the software seemed very removed from the science and physics of radio. I was just making sure that the code was written right and in the right sequence etc. Look at the debugging phase: with software you are often looking through the code to see if you put a comma where you should have put a semicolon. With a simple radio, you have to think about where the electrons are going.

-- Playing with this stuff gives you a personal connection to the history of radio. I read about tickling crystals but didn't really understand it until I did it myself. I'd read about the joys and difficulties of regen receivers, but didn't really appreciate it until I built and used one myself.

Again, To each his own...

73 Bill N2CQR
http://www.erols.com/wmeara

2292. Gummel-Poon Transistor Model ? Can ARD use it?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: emr01@ms19.hinet.net
Message-ID: <37c909a5.2835650@news.hinet.net>
Source record: 67446

Can anyone show me where I can find out information on meaning
of the parameters used in Gummel-Poon transistor model?

I was studying an article on LNA design (June 1994 of RF
Design). It uses NEC NE68519. The model the data sheet gave were in
Gummel-Poon model. I'm wondering if someone can point me to where I
may find a figure of the transistor model so I may understand what
each parameter represent and use it in in ARRL Radio Designer.
Thanks.

Oliver

2293. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: tmacinty@ns.sympatico.ca
Message-ID: <37c937db.31642840@news1.ns.sympatico.ca>
Source record: 67447
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

sbharris@ix.netcom.com(Steven B. Harris) wrote:

> Wrongo. It goes felony based on value in all states. Steal a
>tractor or backhoe, go to prison. Matters not if the keys were in it,
>no breaking required. Furthermore, if you have an accomplice,
>conspiracy is a felony all by itself, even if you never comit the
>crime. In fact, under federal law it is actually a felony to conspire
>to comit a misdemenor. A law no often enforced, but certainly on the
>books. And there are a lot of people doing federal time due to extra
>"conspiracy" convictions, all felonies. Juries really have no idea how
>harsh Federal penalties are, and how little latitude judges have in
>applying them, once a conviction has been made.
>
>
Remember George Carlin's routine about sins in the Catholic church?
It's a sin to think about it, a sin to plan it, a sin to think about
planning it, a sin to plan to think about planning it...something
along those lines.

Tom

2294. Help locate antenna program

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: Bill <kg8aw@ismi.net>
Message-ID: <37C93EB1.19906E06@ismi.net>
Source record: 67448
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I need help locating a computer program. The program may have originally been on one of the early 90's Buckmaster CD's. Some of you may be interested in the program and hoping someone knows of the program. I have lost track of it and would like to find it again. The program had several functions, but the one I used and liked did the following: Start the program, tune your receiver to a signal or beacon, rotate beam antenna from stop to stop (360 deg), At the end of the rotation the program would display on screen a picture of the antenna receive pattern. As I find the receive pattern is very close to the transmit pattern in most cases, the program was very useful. The only connection needed was to connect receive audio to the computer soundcard. I have no idea of the program name or who wrote it. Sure hope one of you knows. Please drop me a note if you can help. Thanks, Bill, KG8AW

2295. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7qbfer$40v$1@news1.fast.net>
Source record: 67449
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

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-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

John Miles <jmiles@pop.removethistomailme.net> wrote in message
news:37C85F7C.9B3@pop.removethistomailme.net...
>
> Think of the PCS cellular telephone I now use exclusively instead of
a
> landline. My father probably took his share of telephones apart in
his
> youth, and in doing so he would have gained enough knowledge to
> exhaustively understand the technology in the course of a weekend or
> two, perhaps with the aid of one or two elementary electronics books
> written for laymen. The most complex, abstract part of a telephone
30
> years ago was its hybrid network. And once you understand what a
> transformer does, you're 90% of the way to understanding a hybrid.

Agreed that primitive technologies are fundamentally easier to
comprehend than more complex ones. That's why I'm concerned
about the general decline in the technical competency of the
average ham today compared to the ham of yesteryear. We're
*supposed* to self-educate and keep up with the times, not
stagnate in the technology of the past simply because it meets
the recreational needs of the moment for some.

> Now, suppose I were to take apart my Qualcomm PCS phone in an
attempt to
> learn how it work(ed). Contemplating its "guts" spread all over the
> workbench, I might as well be looking at the remnants of the Roswell
> alien autopsy. There is nothing to be learned from such a sterile
> experience, unless I already have a thorough understanding of what
I'm
> looking at.

If you have a good grasp of the basics of modern technology, you can
figure out quite a few things. Observe the ground planes, shield
partitioning,
and other aspects and follow a few traces from the antenna backwards
to
help you figure out which areas do what ... try searching out the
part numbers
on the ICs on the web, download the .pdf datasheets, and look at the
specs,
```

functional block diagrams and applications information.

> There are few if any parts I can cannibalize from the
> corpse to tinker with or use in another project.

If you do what I've suggested, you might find quite a few parts which
could be useful.

> I might spend a whole
> month studying a monolithic phase-locked VCO chip -- even probing it
> with a VOM, oscilloscope, or, hell, a vector network analyzer. But
that
> won't tell me how the phone as a whole works -- only one small part
of
> it.

I believe you'll find a coherent explaination of the principles of how
the CDMA phones work at http://people.qualcomm.com/karn/cdma.html
if you're actually interested. (I believe it's in compressed
PostScript form,
you may need GhostScript/Ghostview [do a web search, it's a useful
tool to
have].)

> By the time an inquisitive kid figures out anything meaningful
> about the way a telephone works nowadays, it'll be obsolete anyway!

You really think that "inquisitive kids" read that slowly today? Even
if your assertion were true, he/she'd be a WHOLE lot closer to today's
technical realities than he/she'd EVER get building one of Jeff
Herman's
1 or 2 transistor MOPA CW transmitters.

> (Which is obvious to anyone sentient enough to use the phone in the
> first place.) Much the same, I think, is true of modern
communications
> systems ("radios").

Are you asserting that because it's "harder to understand" modern
communications techniques we should all just forget about it and be
satisfied with being rice-box-operating CB-like communicators who
don't understand how/why their rigs work? I take strenuous exception
to that concept if that's truly what you're saying.

> > I'm a lot more interested in seeing young people just get engaged
in
> > learning _something_ that stimulates creativity and critical
thinking
> > than I am concerned whether or not they wish to laborously
re-trace
> > individual steps of those who've pioneered various technologies
that
> > are now taken for granted.

>
> Indeed. It would be a sad way of repaying the giants on whose
shoulders
> we now stand, if we were all content to follow in their footsteps
> instead!

On this we agree ... this seems to be a bit of a turnabout from your
paragraphs
above, which seemed to indicate an attitude of hopelessness and
surrender.
Did I misinterpret your comments above?

> The key point is, hacking code on my old 48K Apple][+ was just as
> important (and, dare I say, romantic?) a formative experience for me
as
> taking apart phones and building radios was for my father. I also
spent
> plenty of time as a kid building and playing with tube (and
transistor,
> and IC) radios, but in retrospect it's a damned good thing I didn't
> stick with that particular path in life. For many practitioners,
even
> the once-creative art of electrical engineering has become little
more
> than a competitive cost-reduction game these days. An EE's job
still
> demands creativity -- arguably more than ever, in fact -- but it
also
> pretty much rules out most opportunities to stand back and
appreciate
> the technology for its own sake. For all but a few lucky engineers,
> modern electronics as a career seems to be just another high-stress
> numbers game.

As one who *did* follow that path, I respectfully disagree. Yes there
are pressures to reduce costs, improve performance, and to get to
market "on time" ... but those pressures demand both creativity and
the ability to appreciate the technology ... so that one can visualize
new solutions to old problems.

- --
Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI
Fellow, Radio Club of America
Senior Member, IEEE
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2296. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7qbgcp$4ln$1@news1.fast.net>
Source record: 67450
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

Bill Meara <n2cqr@erols.com> wrote in message
news:37c94c13.78673306@news.erols.com...
> Great thread! "To each his own" seems to be the bottom line, but
let
> me throw in a few more ideas on the benefits of playing with dead,
old
> technology.
>
> -- There is a satisfaction that comes from listening to a radio that
> you built yourself that you will never get from a store-bought
radio.

I would agree with that, but that does NOT require the use of
"dead" technologies like regen receivers and 1 tube MOPA
transmitters. (more on this below)

> I like to work on circuits that are a simple as possible, circuits
> that are within my capacity to understand at the component level.
For
> this reason I try to avoid ICs. For me they are often mysterious
> black boxes and detract from the HB satisfaction.

Most IC datasheets provide a complete functional block diagram,
theory of operation, and some even provide some transistor-level
description of at least parts of the internals. Once you understand
how a Gilbert Cell double-balanced mixer works, do you REALLY
need the "gory details" about the one in any given IC? I don't think
so. Think of ICs as "super components" which actually ease the
task of building things. They aren't so "mysterious" if you read the
data sheets and understand the underlying principles of the functional
blocks they contain.

> -- There is a challenge to building this simple stuff. Even if the
> circuitry is old, outdated and simple, it is NOT easy to get a
> homebrew receiver working properly.

Particularly if it's an inferior design to begin with, notorious
for instability and problems.

> -- Don't write off homebrew gear as inherently inferior to the
> commercial stuff. As I type I'm listening on a homebrew receiver to
> VK7FJ in QSO with TF3DX on 20 cw (I can hear them both).

That doesn't say anything about the level of performance of your
receiver. What's its MDS sensitivity? 12 dB SINAD sensitivity?
IIP3? IIP2? Spurious free dynamic range? Adjacent channel
rejection? (I could go on, but hopefully you get the idea.) ALL
that your statement that you could hear those two stations said
was that they were suficiently strong at your location at that time.
It does NOT "prove" that you have a receiver of any particular
level of "quality."

> -- I learn something every time I build one of these things. Manual
> dexterity improves, shop skills improve and (especially in the
> debugging phase) I learn some of the electronics.

That's all good ... great, in fact ... however, if you built something
that was more in line with contemporary technology than that
of decades ago the things you learn would be more useful, more
relevant to the world we live in, and the result would undoubtedly
be a better radio for you to ultimately use.

> -- When you build simple and/or old radios like this, you are, I
> think, getting closer to the physics and science of radio than you
do
> with some of the more modern techniques.

The "physics and science" haven't changed ... mankind simply has
a more complete and useful understanding of them and how to apply
them. If anything, working with modern techniques will teach you
more (and demand that you learn a bit of new stuff.)

> Again, To each his own...

Certainly ... I'm not condemning you for what you're doing ... just
tring to point out that working with more modern technology is
not "hopeless" as you seem to think, would result in your learning
more useful information, and would result in both a better radio
and a more competent ham.

73,

- --
Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI
Fellow, Radio Club of America
Senior Member, IEEE
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Help modernize ham radio and assure its future survival!
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2297. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: jan@panteltje.demon.nl
Message-ID: <935937830.17871.0.pluto.d4ee0662@news.demon.nl>
Source record: 67451
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

I think I am not misinformed, on the contrary, it was on CNN
www.cnn.com/ and search a bit, it must be a month or more ago.
I follow US politics pretty close too.
Of cause it is great to be proud of your country, it has achieved many great feats.
But is is also wise to have open eyes, and read the small print.
Jan

2298. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7qbh90$5ed$1@news1.fast.net>
Source record: 67452
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

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Hash: SHA1

Edward J. Engelken <ed_engelken@my-deja.com> wrote in message
news:7qa3lb$4hc$1@nnrp1.deja.com...
>
> For starters, ask any new EE graduate the difference between a
superhet
> and a TRF receiver and you will find out quickly that the new EEs
don't
> have a clue how a radio works. The University of Texas at Austin
> recently changed the name of the EE department to Electrical and
> Computer Engineering. In the "good old days" Electrical Engineering
and
> Radio Engineering were basically the same thing. Now it's computers
and
> the Internet. Kiss radio goodbye!

Not so ... perhaps the UT@A has chosen to focus on other specialty
fields. However, MANY universities have programs which are very
focused on wireless (radio) communications. (CALTECH, UC Davis,
UCLA, and many others) While I'll grant you that even the MSEEs
coming out of many of these programs need some practical, real world
experience to become seasoned engineers, they ARE well-grounded
in the fundamental technical knowledge.

> The so-called Yuppie generation was brought up on television, a
visual
> medium. Computers are largely a visual medium, so someone brought
up on
> TV will follow right in to computers. Radio is an auditory medium
and
> just doesn't seem to generate much interest with the under 50 crowd.

Your prejudices are showing ... "radio" (wireless in the RF frequency
range)
is a means of conveying information from one place to another without
wires.
TV is just a form of radio comunications, as is CW, SSB, FM, all the
digital
modes, cellphones, PCS, and every other form you could list.

If you're saying that society's use of radio communications is
changing and
maturing, that's correct. However, to "pigeon-hole" "radio" into just
```

audible
forms of communication is both unrealistic and too confining. And,
yes,
doing so will restrict the number of youth who will join our ranks ...
being
used to the "content rich" multi-media experience of the internet and
the
instant availability of cellphone communications, they can
understandably
be left with a "That's all there is???" reaction to today's ham radio,
which
is stuck in a time-warp of the 50's or 60's at best.

Go to your local movie rental place and rent "Pleasantville" ... it's
entertaining,
but it might also open your eyes a bit to the fact that change is
inevitable and
that fighting it only results in unnecessary conflict which won't stop
change
anyway.

> I am a member of the Texas Antique Radio Club and the average age of
our
> membership is around 60 - 65. Our youngest active member is in his
late
> 30s and we have several members in their 80s. Unfortunately, we
have no
> female members. We are basically just a bunch of hairy-legged old
> farts. How about plugging a few of the Antique Radio Clubs in your
> column each month and help us bring in some younger (and female)
> members.

"Plugging" it over and over again won't make it interesting,
particularly
to the youth of today. Enjoy it if you do, but don't bemoan the fact
that
virtually everyone else finds tubes and regen receivers boring and
inferior.
To do so will only cause you more frustration and disappointment
because
the world is NOT going to go back to "the good old days" and you can't
keep it from advancing.

73,
- --
Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI
Fellow, Radio Club of America

Senior Member, IEEE
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2299. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: "Laszlo I. Morocz" <kf4pv@SPAMMENOTlmorocz.com>
Message-ID: <Kfcy3.2706$Xz1.7852@jump.innerx.net>
Source record: 67453
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Bill Meara wrote in message <37c94c13.78673306@news.erols.com>...
>-- When you build simple and/or old radios like this, you are, I
>think, getting closer to the physics and science of radio than you do
>with some of the more modern techniques. I earlier said some
>positive things about those inventive kids who are hacking away at new
>software. That's great, but I got tired of it real fast and found
>myself going back to the old simple radio hardware. For me, working
>on the software seemed very removed from the science and physics of
>radio. I was just making sure that the code was written right and in
>the right sequence etc. Look at the debugging phase: with software
>you are often looking through the code to see if you put a comma where
>you should have put a semicolon. With a simple radio, you have to
>think about where the electrons are going.
>

You saying that with software you don't have to think? Them's fightin'
words, Bill! :-)

Seriously though, software is as much engineering as RF. The reason you
weren't having fun is because the software was too simple. If all you're
worried about is the sequences and typos, you're just playing. It's like
worrying if you've gotten your wires crossed on a light bulb/battery
circuit. The real science comes in when you design a system that actually
does something complicated. Real-time timing constraints, asynchronous
events, user interface issues, processing algorithms, etc. that don't show
up in the little toy applications done by beginners are what demand exactly
the same type of creative, innovative, careful and scientific thinking that
the level of RF engineering you're used to demands. To paraphrase someone,
with real software you have to think about where the information is going.

And if software seems too removed from radios for you, consider this - with
today's DSP technology you can implement an AM/FM/CW/SSB/FSK radio almost
entirely in software. This is about as connected to the real world of radios
as you can get. And in a symmetry that I find very pleasing, the computers
that let you do this are implemented almost completely with RF techniques.
So, it's all 2 sides of the same coin. Have fun on yours, but remember that
you're most cordially invited over to the software side to play, and we'd
love to have you stay a while and do some engineering. In the meantime, I
need to get back to soldering up my 2-transistor, 1 IC 100% homebrew regen
receiver.

73 de KF4PV/3 Laszlo

--
To reply, remove the text SPAMMENOT from the e-mail address.

2300. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7qbk1t$jd3$1@autumn.news.rcn.net>
Source record: 67454
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Carl R. Stevenson wrote in message <7q7b3c$1i5$1@news1.fast.net>...
>-----BEGIN PGP SIGNED MESSAGE-----
>Hash: SHA1

>Would that really surprise you? After all, building a one-tube
>regenerative receiver is merely a regurgitation of something that
>was done hundreds or thousands of times back in the 30s ...
>and the result will be a vastly inferior receiver to what one
>could easily build with as few as one, to perhaps a few,
>modern ICs ... and it would likely radiate like crazy.

>
>I don't find any "magic" in that ...

You are missing the point. I am not talking about a high tech.
magazine like Communications Quarterly, but rather a magazine
that primarily serves a scanner and SWL based readership.
These are folks, for the most part, who have never seen a regenerative
circuit, or even a resistor or capacitor. For them, it is something new,
and something that is comprehensible given a proper instructor
and a graduated learning curve. If you can blend a column that deals
with restoration, basic electronic skills, and also offers some "hands-on"
reinforcement, it is an accomplishment, even it only brings a small
fraction
into the fold. The folks who did build the receiver at least have some
technical
knowledge of how it works, and an enormous sense of pride in their
accomplishment.
Why do you elect to belittle their efforts?

For a non-technical person to build even a simple "primitive" receiver,
and to have it work, brings a sense of accomplishment--or even "magic".
Hopefully, it will lead to deeper interest in the current levels of
technology. For
some, it is an enjoyable end in itself. Besides, what is it about "hobby"
that
needs further clarification?
>
>I can't for the life of me understand why anyone would
>be attracted to waste the time in such an endeavour when
>there are so many more useful, more interesting things
>well within reach.
>

Sure, maybe for you, but not for a non-technical based readership.
Beginners don't want to mess with circuit boards, and small semiconductors.
These folks do have basic household tools like screwdrivers
and pliers and can handle what is
being presented. Circuit board projects will be done, but that involves
having a supplier for the boards, and an infallible list of suppliers, and
even
a presentation of rudimentary soldering skills.

>With all due repect, it would seem so ... do you really expect the
>youngsters of today, with all of their exposure to computers, the
>internet, cellphones, and all sorts of other sophisticated consumer
>electronics devices to actually be interested in recreating
>antiquated
>stuff that the real world abandoned decades ago???

How many cellphone calls does it take to comprehend the technology?
This is a rather lame point. Or, are you suggesting doing a cellphone
construction project?
>
>Now don't get me wrong, if YOU want to build stuff like that, that's
>fine with me ... but I think it's ridiculous to bemoan the fact that
>today's youth aren't interested in nostalgia radio when there are
>so many more useful and interesting things they could be doing
>with radio.

Come on, what more interesting and useful things are today's youth
doing with radio? We are faced with an aging fraternity, a dumbed
down licensing structure, and folks with licenses who can't even cut
a dipole. I know, I know, rather stupid to expect them to do so when
you can buy one. On one hand you support no-code, and on the other
you can't comprehend why it is important to start their journey on
a very basic and elementary level. The ends sometimes justify the means.
>
>73,
>
>- --
>Carl R. Stevenson - WA6VSE
>mailto:wa6vse@fast.net
>http://www.users.fast.net/~wa6vse
>NCI #1052
>Director, NCI
>Fellow, Radio Club of America
>Senior Member, IEEE
>Member, ARRL
>Join NCI - Hams for the 21st Century!
>Help modernize ham radio and assure its future survival!
>http://www.nocode.org
>
Good lord, we need a list of creditentials, too?

73

Peter J. Bertini K1ZJH, extra and first telephone
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection" Popular Communications Magazine
Associate Editor/Editorial Review Board member, and writer, Ham Radio Magazine
Contributor to ARRL handbook and specialty handbooks
QST Magazine cover plaque award holder

2301. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: JJ <jj@no.net>
Message-ID: <37C946DA.79F7@no.net>
Source record: 67455
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Carl R. Stevenson wrote:
>
> -----BEGIN PGP SIGNED MESSAGE-----
> Hash: SHA1
>
> Edward J. Engelken <ed_engelken@my-deja.com> wrote in message
> news:7qa3lb$4hc$1@nnrp1.deja.com...
> >
> > For starters, ask any new EE graduate the difference between a
> superhet
> > and a TRF receiver and you will find out quickly that the new EEs
> don't
> > have a clue how a radio works. The University of Texas at Austin
> > recently changed the name of the EE department to Electrical and
> > Computer Engineering. In the "good old days" Electrical Engineering
> and
> > Radio Engineering were basically the same thing. Now it's computers
> and
> > the Internet. Kiss radio goodbye!
>
> Not so ... perhaps the UT@A has chosen to focus on other specialty
> fields. However, MANY universities have programs which are very
> focused on wireless (radio) communications. (CALTECH, UC Davis,
> UCLA, and many others) While I'll grant you that even the MSEEs
> coming out of many of these programs need some practical, real world
> experience to become seasoned engineers, they ARE well-grounded
> in the fundamental technical knowledge.
>
> > The so-called Yuppie generation was brought up on television, a
> visual
> > medium. Computers are largely a visual medium, so someone brought
> up on
> > TV will follow right in to computers. Radio is an auditory medium
> and
> > just doesn't seem to generate much interest with the under 50 crowd.
>
> Your prejudices are showing ... "radio" (wireless in the RF frequency
> range)
> is a means of conveying information from one place to another without
> wires.
> TV is just a form of radio comunications, as is CW, SSB, FM, all the
> digital
> modes, cellphones, PCS, and every other form you could list.

>
> If you're saying that society's use of radio communications is
> changing and
> maturing, that's correct. However, to "pigeon-hole" "radio" into just
> audible
> forms of communication is both unrealistic and too confining. And,
> yes,
> doing so will restrict the number of youth who will join our ranks ...
> being
> used to the "content rich" multi-media experience of the internet and
> the
> instant availability of cellphone communications, they can
> understandably
> be left with a "That's all there is???" reaction to today's ham radio,
> which
> is stuck in a time-warp of the 50's or 60's at best.
>
> Go to your local movie rental place and rent "Pleasantville" ... it's
> entertaining,
> but it might also open your eyes a bit to the fact that change is
> inevitable and
> that fighting it only results in unnecessary conflict which won't stop
> change
> anyway.
>
> > I am a member of the Texas Antique Radio Club and the average age of
> our
> > membership is around 60 - 65. Our youngest active member is in his
> late
> > 30s and we have several members in their 80s. Unfortunately, we
> have no
> > female members. We are basically just a bunch of hairy-legged old
> > farts. How about plugging a few of the Antique Radio Clubs in your
> > column each month and help us bring in some younger (and female)
> > members.
>
> "Plugging" it over and over again won't make it interesting,
> particularly
> to the youth of today. Enjoy it if you do, but don't bemoan the fact
> that
> virtually everyone else finds tubes and regen receivers boring and
> inferior.
> To do so will only cause you more frustration and disappointment
> because
> the world is NOT going to go back to "the good old days" and you can't
> keep it from advancing.
>
>

You can only expect a negative response from Carl, who must really lead
a lonely life.

****
* cirdehsoc@alltel.ne *
* nufo40@server.virtual.net.au *
* trewq@liquidinformation.com *
* dave@maloney.com *
* makelotsofmoneynow@usa.net *
* 3624@earthlink.ne *
* sales@advancedmachine.com *
* mrbill2u@bustamail.com *
* ab12715@aol.com *
* bb8874@ausi.com *
* pwaremove@mythirdage.com *
* prewrittenads@bigfoot.com *
* sushi27@iname.com *
* aies@aies.net *
* testcom@tin.it *
* af4k@earthlink.net *
* sabbatai_zvi@hotmail.com *
* fraudinfo@psinet.com *
* ju7676767@surfree.com *
* cybernet101@bigfoot.com *
* dfghrwt4354.com@earth.iaonline.com *
* 2Fs9381Sy@surfree.com *
* jccheezum@uspis.gov *
* jquello@fcc.gov *
* sness@fcc.gov *
* rchong@fcc.gov *
* rhundt@fcc.gov *
* tracyd@fbi.gov *
****

2302. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7qbm0v$1mi$1@autumn.news.rcn.net>
Source record: 67456
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

>
>> I like to work on circuits that are a simple as possible, circuits
>> that are within my capacity to understand at the component level.
>For
>> this reason I try to avoid ICs. For me they are often mysterious
>> black boxes and detract from the HB satisfaction.
>
>Most IC datasheets provide a complete functional block diagram,
>theory of operation, and some even provide some transistor-level
>description of at least parts of the internals. Once you understand
>how a Gilbert Cell double-balanced mixer works, do you REALLY
>need the "gory details" about the one in any given IC? I don't think
>so. Think of ICs as "super components" which actually ease the
>task of building things. They aren't so "mysterious" if you read the
>data sheets and understand the underlying principles of the functional
>blocks they contain.
>
>> -- There is a challenge to building this simple stuff. Even if the
>> circuitry is old, outdated and simple, it is NOT easy to get a
>> homebrew receiver working properly.
>
>Particularly if it's an inferior design to begin with, notorious
>for instability and problems.
>
>> -- Don't write off homebrew gear as inherently inferior to the
>> commercial stuff. As I type I'm listening on a homebrew receiver to
>> VK7FJ in QSO with TF3DX on 20 cw (I can hear them both).
>
>That doesn't say anything about the level of performance of your
>receiver. What's its MDS sensitivity? 12 dB SINAD sensitivity?
>IIP3? IIP2? Spurious free dynamic range? Adjacent channel
>rejection? (I could go on, but hopefully you get the idea.) ALL
>that your statement that you could hear those two stations said
>was that they were suficiently strong at your location at that time.
>It does NOT "prove" that you have a receiver of any particular
>level of "quality."
>

Probably a level of performance that would shame any HF receiver
with an NE612 Gilbert Cell mixer in the frontend.

Pete

2303. Re: Gummel-Poon Transistor Model ? Can ARD use it?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <37C94A51.3A61CA11@mwci.net>
Source record: 67457

Oliver Huang wrote:

> Can anyone show me where I can find out information on meaning
> of the parameters used in Gummel-Poon transistor model?
>
> I was studying an article on LNA design (June 1994 of RF
> Design). It uses NEC NE68519. The model the data sheet gave were in
> Gummel-Poon model. I'm wondering if someone can point me to where I
> may find a figure of the transistor model so I may understand what
> each parameter represent and use it in in ARRL Radio Designer.
> Thanks.

SPICE programs use Gummel-Poon parameters to establish an operating point for a BJT, and from there a small-signal equivalent circuit. In SPICE the two-port S-parameters for the transistor can be found by simulating a two-port test circuit (50 ohm gen, 50 ohm load) that is based on these G-P parameters.

When these S-parameters are found at a set of frequencies they can be used by ARD, employing the Circles Utility for amplifier and matching network design, which "low-end" SPICE programs do not have.

Bill W0IYH

2304. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <2jceV9AqFTy3EwgV@jmwa.demon.co.uk>
Source record: 67458
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

<7qaqbn$jon@dfw-ixnews11.ix.netcom.com>, Steven B. Harris
<sbharris@ix.netcom.com> inimitably wrote:
>Furthermore, if you have an accomplice,
>conspiracy is a felony all by itself, even if you never comit the
>crime.

I believe in English law, a conspiracy to do even something *legal* is
also an offence! Luckily, there are few prosecutions.
--
Regards, John Woodgate, OOO - Own Opinions Only.
Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
Did you hear about the hungry genetic engineer who made a pig of himself?
PLEASE DO ****NOT**** MAIL COPIES OF NEWSGROUP POSTS TO ME!!!!

2305. Want HP 141T Operators and Service manual (not a copy)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: John Burch <occupant@dtgnet.com>
Message-ID: <3Fey3.2121$586.14763@newsfeed.slurp.net>
Source record: 67459
Cross-posted to: alt.ham-radio.marketplace,rec.ham-radio.swap,rec.radio.amateur.homebrew

What do you have?

Thanks

John
occupant@dtgnet.com
..

2306. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7qbsojdpf1@autumn.news.rcn.net>
Source record: 67460
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Carl R. Stevenson wrote in message <7qbh90$5ed$1@news1.fast.net>...
>-----BEGIN PGP SIGNED MESSAGE-----
>Hash: SHA1
>
>
>
>Go to your local movie rental place and rent "Pleasantville" ... it's
>entertaining,
>but it might also open your eyes a bit to the fact that change is
>inevitable and
>that fighting it only results in unnecessary conflict which won't stop
>change
>anyway.
>
I'd rather wait for it to appear on satellite. You are still using analog
tape? Better yet, I would recommend reading any books on the history
of Major Armstrong, Lee DeForest and David Sarnoff. That is, assuming
anyone still remembers the way to library instead of the local video store.

>
>"Plugging" it over and over again won't make it interesting,
>particularly
>to the youth of today.

You are the youth of today?

Enjoy it if you do, but don't bemoan the fact
>that
>virtually everyone else finds tubes and regen receivers boring and
>inferior.

Now you speak for everyone, that keyboard must be getting crowded.

>73,
>- --
>Carl R. Stevenson - WA6VSE
>
enormous brag tape deleted--snip snip

>-----END PGP SIGNATURE-----
>
>
73

Pete

2307. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: Steve <rstevew@armory.com>
Message-ID: <37C97EAB.29AA@armory.com>
Source record: 67461
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

John Woodgate wrote:
>
> <7qaqbn$jon@dfw-ixnews11.ix.netcom.com>, Steven B. Harris
> <sbharris@ix.netcom.com> inimitably wrote:
> >Furthermore, if you have an accomplice,
> >conspiracy is a felony all by itself, even if you never comit the
> >crime.
>
> I believe in English law, a conspiracy to do even something *legal* is
> *also* an offence! Luckily, there are few prosecutions.
> --
> Regards, John Woodgate, OOO - Own Opinions Only.

That's insane, John. A business contract is a legal conspiracy! I don't
think you have that quite right.
-Steve
--
-Steve Walz rstevew@armory.com ftp://ftp.armory.com:/pub/user/rstevew
-Electronics Site!! 1000 Files/50 Dirs!! http://www.armory.com/~rstevew
Europe Naples Italy: http://ftp.unina.it/pub/electronics/ftp.armory.com

2308. Re: Help with VFO Buffer - load isolation needs improving - vfo+buffer.gif (0/1)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: "Hugo W. Catta" <h.catta@att.net>
Message-ID: <7qbv5phdp1@bgtnsc01.worldnet.att.net>
Source record: 67462

Try a smaller value for C16.
73
Hugo
CX9AAK/W2

2309. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: Magnus Homann <d0asta@mis.dtek.chalmers.se>
Message-ID: <ltk8qewcxp.fsf@mis.dtek.chalmers.se>
Source record: 67463
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

John Woodgate <jmw@jmwa.demon.co.uk> writes:

> <7qaqbn$jon@dfw-ixnews11.ix.netcom.com>, Steven B. Harris
> <sbharris@ix.netcom.com> inimitably wrote:
> >Furthermore, if you have an accomplice,
> >conspiracy is a felony all by itself, even if you never comit the
> >crime.
>
> I believe in English law, a conspiracy to do even something *legal* is
> *also* an offence! Luckily, there are few prosecutions.

But, is then every agreement also a conspiracy?

You learn a lot in s.e.d.

Homann
--
Magnus Homann, M.Sc. CS & E
d0asta@dtek.chalmers.se

2310. News " 10 " GHZ

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: Marc <ON4LBT@skynet.be>
Message-ID: <7qc6rp$tc7$6@news0.skynet.be>
Source record: 67464

http://users.skynet.be/ON4LBT/ghz1.htm

2311. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <yaZPL8B9Ray3EwzM@jmwa.demon.co.uk>
Source record: 67465
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

<37C97EAB.29AA@armory.com>, Steve <rstevew@armory.com> inimitably
wrote:
>That's insane, John. A business contract is a legal conspiracy! I don't
>think you have that quite right.

There is absolutely nothing to say that English law is sane. The
situation could have arisen through one of Henry VIIth's scribes being
drunk and missing out a line of text in a copy parchment!

We had no laws against female homosexual offences for around 100 years
because no-one dared tell Queen Victoria that they existed!
--
Regards, John Woodgate, OOO - Own Opinions Only.
Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
Did you hear about the hungry genetic engineer who made a pig of himself?
PLEASE DO ****NOT**** MAIL COPIES OF NEWSGROUP POSTS TO ME!!!!

2312. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7qc9bs$nd0$1@news1.fast.net>
Source record: 67466
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

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-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

CommQuart <commquart@erols.com> wrote in message
news:7qbm0v$1mi$1@autumn.news.rcn.net...
>
> Probably a level of performance that would shame any HF receiver
> with an NE612 Gilbert Cell mixer in the frontend.
>
> Pete

Where did I say that the NE612 "was the best part in the world" ???

- --

Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI
Fellow, Radio Club of America
Senior Member, IEEE
Member, ARRL
Join NCI - Hams for the 21st Century!
Help modernize ham radio and assure its future survival!
http://www.nocode.org

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iQA/AwUBN8moJ5e+N6+q84HiEQKT/QCg0jZC6IogGHYzVfEMRqf2Kbe4ki0AoNo+
GjqQAYEVwA1ynwu5azhpoVAP
=4cLz
-----END PGP SIGNATURE-----
```

2313. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: GG <nbc_red@mailcity.com>
Message-ID: <37C99802.16A6@mailcity.com>
Source record: 67467
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Carl R. Stevenson wrote:

> "Plugging" it over and over again won't make it interesting,
> particularly
> to the youth of today. Enjoy it if you do, but don't bemoan the fact
> that
> virtually everyone else finds tubes and regen receivers boring and
> inferior.
> To do so will only cause you more frustration and disappointment
> because
> the world is NOT going to go back to "the good old days" and you can't
> keep it from advancing.

You seem to feel you have the authority to speak for everyone else?
Virtually everyone else in the current generation do not even know what
a tube or regen receiver is and they just might not find them as boring
as you seem to think.
According to you way of thinking we should close all the museums, after
all, way would anyone be interested in all that old stuff, just forget
the past, that is what most of the current generation wants to do
anyway. You think like them, which is "if I didn't have anything to do
with it, it isn't worth remembering."

2314. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7qc9pp$no2$1@news1.fast.net>
Source record: 67468
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

```
-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

Dave Martindale <davem@groucho.cs.ubc.ca> wrote in message
news:7qalkd$9rl@groucho.cs.ubc.ca...
> "Carl R. Stevenson" <wa6vse@fast.net> writes:
>
> >I don't understand the part about making PCBs being
> >harder ... could you elaborate on that one?
>
> SMT parts use fine enough lead spacing that you pretty much have to
use
> photographic methods to make boards that use them, it seems to me.
>
> I've made a number of PC boards for through-hole parts by directly
> drawing on the copper with a resist pen. I've done others by
covering
> the board with adhesive packing tape, then slitting it with a knife
> and peeling off the tape wherever I wanted the copper etched away.
> I've seen someone describe a technique that involves cutting the
copper
> directly with a Dremel tool and abrasive wheel. All of these are
> practical for boards that use 0.1 inch spacing through-hole parts,
> with no traces between pins.
>
> But once you need to run traces between pins at 0.1 inch pitch, or
> start working with chips that have 0.05 inch lead spacing, these
> methods seem unlikely to produce working boards very often.

Agreed ...

> So, you need a more precise technique, and these generally involve
> photosensitive PC boards and exposure frames and deveoper, or a
computer
> and a laser printer, or both. If you don't already have any of that
> equipment, it seems like a lot of additional hardware and technique
> just to make use of one surface-mount part.

What are you going to do in a few more years when through-hole
parts are no longer available? Industry is going to SMT. Soon
through-hole parts will be as scarce as octal tube sockets and
Nuvistors ... if you want to build, you're going to have to learn,
prepare, and adapt.
```

It isn't that hard, just different ... all it takes is some
self-education
and minimal equipment.

- --
Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI
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Senior Member, IEEE
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Help modernize ham radio and assure its future survival!
http://www.nocode.org

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Version: PGP for Personal Privacy 5.5.3

iQA/AwUBN8mp35e+N6+q84HiEQIMhACeNEkSSmpbM3+t06omaPCZi6F8h1QAoOIv
toIAYU5qyIj9NnE7RZvm2Pjp
=O+4t
-----END PGP SIGNATURE-----

2315. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: maddog@io.com
Message-ID: <37c99c3f.18741318@news.io.com>
Source record: 67469
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

On Sun, 29 Aug 1999 10:31:48 -0400, "Carl R. Stevenson"
<wa6vse@fast.net> wrote:

>[snip]
> that does NOT require the use of
>"dead" technologies like regen receivers and 1 tube MOPA
>transmitters. (more on this below)
>[snip]
>Think of ICs as "super components" which actually ease the
>task of building things. They aren't so "mysterious" if you read the
>data sheets and understand the underlying principles of the functional
>blocks they contain.
>{snip]
>Particularly if it's an inferior design to begin with, notorious
>for instability and problems.
>[snip]
>That doesn't say anything about the level of performance of your
>receiver. What's its MDS sensitivity? 12 dB SINAD sensitivity?
>IIP3? IIP2? Spurious free dynamic range? Adjacent channel
>rejection? (I could go on, but hopefully you get the idea.) ALL
>that your statement that you could hear those two stations said
>was that they were suficiently strong at your location at that time.
>It does NOT "prove" that you have a receiver of any particular
>level of "quality."
>[snip]
>if you built something
>that was more in line with contemporary technology than that
>of decades ago the things you learn would be more useful, more
>relevant to the world we live in, and the result would undoubtedly
>be a better radio for you to ultimately use.
>[snip]
>If anything, working with modern techniques will teach you
>more (and demand that you learn a bit of new stuff.)
>[snip]
>just tring to point out that working with more modern technology
>[snip] would result in your learning
>more useful information, and would result in both a better radio
>and a more competent ham.

Phrases like "more useful", "more competent", "more relevant", "level
of performance", "spurious free", "level of quality" "inferior
design", and "dead technologies" conjure up images of the
hard-working engineer who's trying to compete, excel, get it right. I
work as an electronics professional, and I've see lots of these

people. They're usually tired all the time, one project away from getting it right, and one week away from burnout. Frankly, I felt tired after reading your narrative, not motivated.

I think seeing *beyond* technology is the key to discovery. Radio is magic, truely. All the techno-logical progress in the world can't hide it. Build a radio yourself, with you own two little paddy-paws, and the magic grabs you. Can we do it better? Sure! Do we have to, to experience its magic? Heck, no!

What about the smile that spreads across your face when you or your kiddo flip the switch and sound comes out of the speaker you wired up yourself, outta stuff you built from grampa's junk box? Magic. Or the warm feeling that wells up inside your chest when you tweak that regen control and the beat note suddenly appears out of a bunch of clicking hisses? Magic. Or the feeling of appreciation that comes over you when you see a production- hardened EE encouraging a youngster to complete his first radio kit? Magic. Or just the sense of satisfaction that you feel when you tweak a tuned circuit and have a (dare I mention it?) bipolar transitor IF amplifier spring to life? To me, that's FUN... [but as to being more relevant... nnnaaaahhh...]

34 years ago when I was a mere teeny-bopper, I remember being invited into a ham's "shack". It was full of big gray and black boxes, some shiny and new, some obsolete WWII surplus. It was quite impressive. On the kitchen table, there was a 2x2 foot square of masonite, with four or five tubes mounted on top, and coils wound on toilet-paper rolls. When I asked about it, his face lit up. He reached in and connected a wire with an alligator clip, and the tubes turned orange, and in a few seconds there were sounds of morse code and quacky voices. State of the art? I don't think so. Magic! You bet!

Now, I don't have a bunch of letters past my name (I'll offer just the 4 the FCC granted me), so I won't try to refute the accuracy of your comments, they're probably technically correct. And I'll betcha that you do something just for fun in your life, Carl, but apparently it's not homebrewing electronics. Really, what makes you smile, Carl?

73,
monty N5FC

2316. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.SOL.4.10.9908291759140.2092-100000@Stratus.CAM.ORG>
Source record: 67470
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

On Sun, 29 Aug 1999, CommQuart wrote:

>
> Carl R. Stevenson wrote in message <7qbh90$5ed$1@news1.fast.net>...
> >-----BEGIN PGP SIGNED MESSAGE-----
> >Hash: SHA1
> >
> >
> >
> >Go to your local movie rental place and rent "Pleasantville" ... it's
> >entertaining,
> >but it might also open your eyes a bit to the fact that change is
> >inevitable and
> >that fighting it only results in unnecessary conflict which won't stop
> >change
> >anyway.
> >
> I'd rather wait for it to appear on satellite. You are still using analog
> tape? Better yet, I would recommend reading any books on the history
> of Major Armstrong, Lee DeForest and David Sarnoff. That is, assuming
> anyone still remembers the way to library instead of the local video store.
>[stuff deleted]

"Empire of the Air" is a good book about those three. The name of the
author might be Tom Lewis; certainly that's the name that comes to mind.
There was a PBS show some years back with the same name, interesting too,
though I don't know if it was based on the book or both were done in
conjunction with each other. I meant to buy it when it came out, never
got around to it, and finally read it last year when I joined the library
for the first time since I was a kid. (I lost interest in the library
about the time I'd worked through all the available books on electronics
and radio, and rejoined when I realized I was missing a lot of books that
I wanted to read because of cost.)

"Man of High Fidelity: Edwin Howard Armstrong" by Lawrence Lessing is the
book about Armstrong that I've read. It came out in hardcover originally,
but made it into a Bantam paperback thirty years ago. I found a used copy
about fifteen years ago, and I've seen other copies since.

If we're on the topic of inventors, I found "A Streak of Luck" by Robert
Conot an interesting biography of Thomas Edison. It too went from
hardcover to a Bantam paperback editition that came out in 1980.
Electricity is so common place, I found it interesting to read about how
the original electrical wiring inside houses were owned by the company,

and the wires were soldered to the bulbs because nobody envisioned it as anything but a lighting system.

"Tesla: Man out of Time" by Margaret Cheney. This is a Dell paperback from 1981. Tesla had influence on the others.

I don't have it handy, but the first bibliography I read of an electrical/electronic inventor, maybe any inventor at all, was a book about Charles Proteus Steinmetz that I bought from the Scholastic Book Service when I was in elemntary school. I still have it, but not at hand.

I imagine there were/are more scholarly biographies of these inventors, perhaps some that were even aimed at the technologically aware. But these are instances of them getting into the public eye.

I'm reading an interesting book from the library right now that is along the same lines. "The Invention That Changed the World" by Robert Buderi. Copyright 1996, and published by Simon and Schuster. It's about the work on Radar just before, and during, World War II, and where it lead after that. It's not a technical book, and makes only a brief mention of Armstrong which doesn't acknowledge his true importance, but it was a period of great advancements in a very short time.

Yes, reading the history is just as important as knoweing the theory that these people brought us.

Michael VE2BVW

2317. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: Ken Knapp <skyking@epix.net>
Message-ID: <RPjy3.1743$5D.344436@news1.epix.net>
Source record: 67471
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Hi!

Can you recommend any good books on Major Armstrong? I for one would enjoy reading about him.

The biggest problem I have with building some of the older circuits is parts availability. And I once had an electronics store. Tubes I have, sockets I don't. I have info on building an Ocean Hopper, but lack a source of the tuning capacitor. I do, however, have a repro front panel which I got from someone I read about in "CQ" several years ago.

Ken Knapp, N3GBW

2318. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: BOB DUCKWORTH <bob@atl.org>
Message-ID: <37C9A8E5.4A56@atl.org>
Source record: 67472
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Kids are still building stuff, just not as much.

I am mid 40's and still
remember being a kid.

Now I have kids.

These days the kids:

a) Have a lot more interesting things to choose to spend their
free time on.
b) A lot less free time.

-bob

2319. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: Steve <rstevew@armory.com>
Message-ID: <37CA1151.3624@armory.com>
Source record: 67473
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

John Woodgate wrote:
>
> <37C97EAB.29AA@armory.com>, Steve <rstevew@armory.com> inimitably
> wrote:
> >That's insane, John. A business contract is a legal conspiracy! I don't
> >think you have that quite right.
>
> There is absolutely nothing to say that English law is sane. The
> situation could have arisen through one of Henry VIIth's scribes being
> drunk and missing out a line of text in a copy parchment!
>
> We had no laws against female homosexual offences for around 100 years
> because no-one dared tell Queen Victoria that they existed!
> --
> Regards, John Woodgate, OOO - Own Opinions Only.

Hahah! I thought perhaps you had not gotten it right. Conspiracy to
commit a misdemeanor is a felony in both British common law and American
law. I had thought this was perhaps what you had thought.
-Steve
--
-Steve Walz rstevew@armory.com ftp://ftp.armory.com:/pub/user/rstevew
-Electronics Site!! 1000 Files/50 Dirs!! http://www.armory.com/~rstevew
Europe Naples Italy: http://ftp.unina.it/pub/electronics/ftp.armory.com

2320. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: "Edward J. Engelken" <ed_engelken@my-deja.com>
Message-ID: <7qa3lb$4hc$1@nnrp1.deja.com>
Source record: 67581
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

In article <7q772t$9k2$1@autumn.news.rcn.net>,
"CommQuart" <commquart@erols.com> wrote:
> I do a small radio restoration column for a "popular" non-ham
> SWL/Scanner orientated magazine. After offering some simple projects,
I've
> noticed a fantastic response from the readers; but, I am slowly
> realizing that the median age of most people I hear from falls
> between 65 and 72! It's interesting when you receive long,
handwritten
> letters
> from Old-Timers, but never even an email from someone younger showing
an
> interest in the old technologies or proper restoration techniques.....
>

Pete:

You really got everyone going on this one!

For starters, ask any new EE graduate the difference between a superhet and a TRF receiver and you will find out quickly that the new EEs don't have a clue how a radio works. The University of Texas at Austin recently changed the name of the EE department to Electrical and Computer Engineering. In the "good old days" Electrical Engineering and Radio Engineering were basically the same thing. Now it's computers and the Internet. Kiss radio goodbye!

The so-called Yuppie generation was brought up on television, a visual medium. Computers are largely a visual medium, so someone brought up on TV will follow right in to computers. Radio is an auditory medium and just doesn't seem to generate much interest with the under 50 crowd.

There are exceptions. Hopefully, you and others publishing on the subject will continue to provide vital information to keep the hobby going.

I am a member of the Texas Antique Radio Club and the average age of our membership is around 60 - 65. Our youngest active member is in his late 30s and we have several members in their 80s. Unfortunately, we have no female members. We are basically just a bunch of hairy-legged old farts. How about plugging a few of the Antique Radio Clubs in your column each month and help us bring in some younger (and female) members.

--
Best Regards,

Ed

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2321. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: tmacinty@ns.sympatico.ca
Message-ID: <37c8802c.5721112@news1.ns.sympatico.ca>
Source record: 67582
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

Rich Grise <offduty@entheosengineering.com> wrote:

>A related legend is the guy who had one of those high-voltage
>lines going by, near his property, so he strung up a wire
>parallel to it, picking up power for free via induction. Yah,
>Right. He's supposed to even have got busted for stealing
>power.
>
>It would be kind of an interesting experiment, though. (to
>string a wire parallel to the lines, to see what kind of
>power you actually could get - maybe a watt or two, I'd
>think, if it's close enough to one of the phases.)
>
>Cheers!
>Rich

There's always the way that WILL work...a friend of mine was doing sound for a concert, and he found that suddenly the audio changed...upon checking his AC lines, he found that several high-wattage (1200 watts or so) hot dog cookers had been spliced into his power cables by some resourceful folk...cut through all layers of insulation, etc, and connected the cookers...now, to try THAT with an overhead power line...

Tom

2322. Help with VFO Buffer - load isolation needs improving - vfo+buffer.gif (0/1)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: rjburden@bigpond.com
Message-ID: <37c895e0.44024@news.bigpond.com>
Source record: 67583

Hi,

I have a problem with the buffer in my VFO (3.6MHz) which has me stumped - it is being pulled from frequency far too easily. I am using a simple two transistor buffer from Solid State Design (the bible!), copied in the attached gif.

Can any one suggest why this might be happenning? I didn't take a great deal of care in the selection of the transistors because I was under the impression that in this circuit configuration transistor parameters didn't matter.

I conciously avoided FETS because I was using what I had to hand. Perhaps an alternative configuration - cascode? differential? What rules of thumb are there regarding the isolation different buffer configurations have?

I have lots of questions, just no answers :)). Looking forward to your responses.

Regards,
Richard VK5OO
VK5OO @ yahoo.com.au

"Nothing better than home-brew, except perhaps an absence of Spam"

2323. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-29 00:00:00 UTC
From: kinsler@frognet.net
Message-ID: <gp1y3.3700$914.267020@typ11.nn.bcandid.com>
Source record: 67584
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

Jan Panteltje <jan@panteltje.demon.nl> wrote:

>So then every body with a radio or tv could, less electricity, sure, but still >some. >I read someone in the US stole a bread (from a church), because he was hungry >(probably had diffficulty finding a job, it was his second conviction). >Then he got LIFE for that (yes 1999).

You were misinformed. Nobody gets life imprisonment in the US for much of anything short of murder, treason, or a very large inventory of illegal drugs. Theft without breaking and entering is never more than a misdemeanor.

>Justice is still only for the rich is it not?

Not here. The courts here in Athens County regularly appoint local attorneys to represent indigent defendents. I've watched it happen. If you come to visit the US, stop in and watch some court proceedings: except for juvenile cases, they're always open to the public and the press.

> The English judges send people to Australia in labour camps for steeling food.

That ended in 1860. Most European nations had penal colonies at that time.

>Well, I would not mind
>living there now, beautiful place. >But from this you can learn, better >'detune' your radio, or you may get the >chair. > >* When the house is >in session, no ones property and rights are safe *

Maybe that's the case in Europe, but not here in the US. Our legislators are citizens like everyone else, and they have to stand for re-election every other year. Again, you're welcome to visit our Capitol building and watch our House of Representatives and Senate in session. Thousands of people do so each year, and most sessions are televised as well.

M Kinsler

--
.....
Athens, Ohio, USA. Home of the "How Things Work" educational program.
See http://www.frognet.net/~kinsler

2324. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-30 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <37CB1E58.20C8@pop.removethistomailme.net>
Source record: 67385
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Carl R. Stevenson wrote:
>
> Correction ... I don't homebrew obsolete electronics.
>
> > Really, what makes you smile, Carl?
>
> Designing, simulating, implementing, and verifying something like
> an FSK modem which performs within 1 dB of theoretical idea,
> yet consists entirely of gates and has no multi-bit a/d or d/a
> converters :-)

Yawn. Why in the heck would you waste time with something like that?
Ever hear of an MC13155? Besides, nobody uses FSK anymore. Complete
waste of spectrum space with no process gain. Let us know when you have
achieved something useful in a contemporary sense, like maybe a 256-QPSK
modem, or (better yet) a correlated front end for an impulse-domain
receiver.

> Designing a new radio architecture which outperforms the previous
> one significantly, yet uses fewer discrete parts and costs less to
> build :-)
>

"Fewer discrete parts" is right. Unless it consists of nothing but an
ADC and a DSP, it's already obsolete.

> Having my simulations agree within a dB or so of the measured
> performance after the circuit's built and tested :-)
>

Simulations? Yawn. Building:simulation :: sex:Playboy.

> (starting to get the idea???)

Likewise, OM? :-)

-- jm
http://www.qsl.net/ke5fx

Note: My E-mail address has been altered to avoid spam

2325. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-30 00:00:00 UTC
From: Ed Price <edprice@pacbell.net>
Message-ID: <37CB7CD5.28C7@pacbell.net>
Source record: 67386
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

John Miles wrote:
>
> Carl R. Stevenson wrote:
> >
> > Correction ... I don't homebrew obsolete electronics.
> >
> > > Really, what makes you smile, Carl?
> >

[snip]

> "Fewer discrete parts" is right. Unless it consists of nothing but an
> ADC and a DSP, it's already obsolete.
>

> > (starting to get the idea???)
>
> Likewise, OM? :-)
>
> -- jm
> http://www.qsl.net/ke5fx

Strange, but a few days ago, I was doing immunity testing on a digital data link receiver; a nice A/D and then some hot dedicated computing. It stood up to CW fields like a champ. Then we turned on some pulse modulation, you know, like to simulate motor brush noise or an auto ignition. Funny thing happened. The ole digital magic really crapped out when we hit a PRR which was a subharmonic of the sampling rate. If that had been an analog superhet receiver, I doubt if there would have been more than just a little ticking at the detector, and an FM detector would have eliminated even that.

Sorry, I'm no digital design guru; I just get to screw them up.

Ed

2326. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-30 00:00:00 UTC
From: John Mock <kd6pag@qsl-nojunk.net>
Message-ID: <87vh9wh2it.fsf@mongrel.kd6pag.ampr.org>
Source record: 67387
Cross-posted to: rec.radio.amateur.homebrew,radio.amateur.boatanchors

I am wondering if anyone under the age of 50 is building radios anymore, or is the "magic" of building a one-tube regenerative receiver using a 30 or '99 tube reserved just for those of us with AARP membership. I am feeling kind of sad, because more than a few old timers have sent me the remains of their junkboxes because no one else is interested; and they didn't have the heart to take the stuff to the dump. (Nothing special, old sockets, resistors, coils, etc.)

Apparently, you haven't heard of the NORCAL QRP club. They meet every 1st Sunday following the Livermore Flea Market and there's always lots of projects being shown. Not much activity with tubes these days, but you can people building things from all kinds of technology, ranging things built out of complex ICs to the full transcievers built almost entiredly out of the lowly 2N2222, and yes, there was even a regen or two at the last two meetings i attended.

I am wondering, are we really the

Last American Dinosaurs

No, but it's not where mainstream amateur radio is at the moment. And it might be why we're way behind in certain area (like packet, for example). I do think some rethinking of homebrewing is in order, and we definitely need more non-HF projects if most incoming hams do not have HF privileges. Come up with projects for 6 meters and above, and you'll get more people involved in homebrewing.

-- KD6PAG (Networking Old-Timer, "RF newbie")

2327. fs:4cx1500b tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-30 00:00:00 UTC
From: dennis <bigd422@earthlink.net>
Message-ID: <7qg02bceh1@ash.prod.itd.earthlink.net>
Source record: 67388
Cross-posted to:
alt.ham-radio.marketplace,alt.radio.cb.skip,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.cb,rec.radio.swap

for sell 4cx1500b amp tubes pull, like new, $ 100.00 each +shipping

2328. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-30 00:00:00 UTC
From: sbharris@ix.netcom.com
Message-ID: <7qcnc3$2dv@dfw-ixnews3.ix.netcom.com>
Source record: 67474
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

In <2jceV9AqFTy3EwgV@jmwa.demon.co.uk> John Woodgate
<jmw@jmwa.demon.co.uk> writes:
>
><7qaqbn$jon@dfw-ixnews11.ix.netcom.com>, Steven B. Harris
><sbharris@ix.netcom.com> inimitably wrote:
>>Furthermore, if you have an accomplice,
>>conspiracy is a felony all by itself, even if you never comit the
>>crime.
>
>I believe in English law, a conspiracy to do even something *legal* is
>*also* an offence!

Secret but legal agreements are against the law? That must make
many business transactions quite difficult! Urban myth, I'll bet.

2329. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-30 00:00:00 UTC
From: CodysPC@Iserve.Net
Message-ID: <37c9e9fb.659276@news.iserv.net>
Source record: 67475
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Greetings!

While Dancing with the Mouse on Sat, 28 Aug 1999 07:40:46 -0400, the
Modem interrupted with an MNI from "Hagstar <yonny@worldnet.att.net>",
and the MotherBoard buffered this to Video RAM:

:+> How about an event specifically for kids at a swap/conference, with cool
:+> displays of breadboards and spark gaps- what kid could resist such a
:+> thing ? BUT- how many kids are going to come on a Weds or Thurs at 7 am
:+> ? It would have to be Sat at noon, or nothing. This would be a great way
:+> to teach electronics- Bardeen, Shockley and those guys where great, but
:+> transistors are BORING, awful, and dull compared to our glowing bottles.
:+> And kids NEED to learn about basic electronics today more than ever. The
:+> liability issues today, a opposed to the carefree 60's when I was making
:+> 12K Jacob's Ladders in the basement with bell wire and coat hangers,
:+> would make lower B+ voltage circuits essential, though.
:+>
:+> Just a thought,
:+> John H.

Speaking of that.

I remeber somewhere that someone had made plans that can fire Neon
Bulbs.

I believe you can still find drive buffers and isolation buffers to
fire something like the NE2H or NE2's with about 40~75 volts.

Or design RF projects that can use the Neon bulbs as a means to
indicate - with low-level RF strong enough to fire one of those bulbs.

I'll look thru my notes to see if I can find those old "Electronics"
handbooks. ;-)

No guarantees though...

2330. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-30 00:00:00 UTC
From: "David M. Brodbeck" <dmbrodbe@mtu.edu>
Message-ID: <7qd674$n0k$1@campus1.mtu.edu>
Source record: 67476
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

In rec.radio.shortwave sensory surfer <nospam@mindspring.com> wrote:
> I don't mean to impune anybody else's hobby, but these days, for what
> amounts to a day's pay one can buy an off the shelf radio the size of
> a large paperback book that is technically superior to most anything
> the average basement tinkerer is likely to come up with in terms of
> ease of use and portability. As to putting together something with
> hard to find, delicate vacuum tubes, I just truly don't get it.

--> Looked at from that perspective, no, it doesn't make much sense.
Building something yourself can teach you a whole lot about how those
off-the-shelf radios work, though. As a learning experience, it's useful.
And it feels good, too, at least to me. I assembled, a while back, a
'Neophyte Receiver.' This was described in QST around the mid-80's. It's
a two-chip design using an NE602 for the front end and detector and an
LM386 as the audio amp. Not exactly high-end performance, but putting
together a receiver yourself and then having it work is pretty neat.
In some ways this is a golden age for homebrewing -- I mean, you can get
half a radio on a chip! If you're designing something new, these kinds
of things can be great short-cuts. It's as if the inventor of the
gasoline engine had gone down to the local general store and found
spark plugs. ;)

> Homebrew radios, like homebrew computers are fast becoming
> anachronistic. Let's face it, those of us under 70 often have more
> disposable income than disposable time. I think that we all owe a debt
> of gratitude to those that sweated long hours coming up with solutions
> and configurations that are now standard, but the sun is setting on
> the sheer viability of the home built radio, computer or telescope.

--> Yes, but we still need tinkerers to provide us with new designs and
ideas. Your comments on off-the-shelf equipment being better neglects the
fact that all of that off-the-shelf equipment, at some point, existed only
in the mind of the person who invented it.

Incidentally, I'm not an old timer. I'm 22. I've also got an interest
in tube equipment, not for any practical value, but because it's often
beautifully constructed. It's interesting to see equipment where real
effort was put into making it look nice. That doesn't happen anymore.

David Brodbeck, N8SRE dmbrodbe@mtu.edu
finger gull@cyberspace.org for my public key block.

"The hills are alive, with the sound of engineered teeny-bopper hip-hop!"
-- Nefaria

2331. Re: Energy-sucking radio antennas!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-30 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <MCzAtqAX6iy3EwUn@jmwa.demon.co.uk>
Source record: 67477
Cross-posted to: sci.physics,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

<7qcnc3$2dv@dfw-ixnews3.ix.netcom.com>, Steven B. Harris
<sbharris@ix.netcom.com> inimitably wrote:
>In <2jceV9AqFTy3EwgV@jmwa.demon.co.uk> John Woodgate
><jmw@jmwa.demon.co.uk> writes:
>>
>><7qaqbn$jon@dfw-ixnews11.ix.netcom.com>, Steven B. Harris
>><sbharris@ix.netcom.com> inimitably wrote:
>>>Furthermore, if you have an accomplice,
>>>conspiracy is a felony all by itself, even if you never comit the
>>>crime.
>>
>>I believe in English law, a conspiracy to do even something *legal* is
>>*also* an offence!
>
>
> Secret but legal agreements are against the law? That must make
>many business transactions quite difficult! Urban myth, I'll bet.

I don't think so. The contention dates from well before urban myths. It
is probably a drafting defect in the law on conspiracy which, being
known, results in the law being applied sensibly. Yes, I believe it is
the element of secrecy which makes it an offence. There is clearly a
difference between 'secret' and 'undisclosed' which would occupy lawyers
for years.

So, it may be that a contract in plain words is not per se illegal, but
one written in code is illegal.
--
Regards, John Woodgate, OOO - Own Opinions Only.
Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
Did you hear about the hungry genetic engineer who made a pig of himself?
PLEASE DO ****NOT**** MAIL COPIES OF NEWSGROUP POSTS TO ME!!!!

2332. Re: wanted: 23cm transmitter and receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-30 00:00:00 UTC
From: Cliff Chapin <webmaster@stockton-shelter.org>
Message-ID: <37ca5ac0@news1.jps.net>
Source record: 67478

The best way is to build one there is a pair of IC chips out , I have seen copy in one of mags like electronics today that built a modulator demodulator pair with bandwidth wide enough for a couple of video channels.. can look up the info.. email me on the specs or I design one for you

cliff Chapin MSEE
webmaster@stockton-shelter.org
Carel, PA0CMU wrote in message <37C6E0AB.9F8C7EDA@casema.net>...
>I'm searching for a 23cm transmitter and receiver to send videosignals
>from a security camera.
>It is not nessesary that the signal is coded because it will be used for
>tests.
>
>Eric M.
>Netherlands
>(muldereric@hotmail.com)
>

2333. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-30 00:00:00 UTC
From: Tracy Nelson <tnelson@fast.net>
Message-ID: <37CAA549.E09C7507@fast.net>
Source record: 67479
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

"Carl R. Stevenson" wrote:
> Most IC datasheets provide a complete functional block diagram,
> theory of operation, and some even provide some transistor-level
> description of at least parts of the internals. Once you understand
> how a Gilbert Cell double-balanced mixer works, do you REALLY
> need the "gory details" about the one in any given IC? I don't think
> so. Think of ICs as "super components" which actually ease the
> task of building things. They aren't so "mysterious" if you read the
> data sheets and understand the underlying principles of the functional
> blocks they contain.

But if you're just trying to self-educate yourself, how are you going to learn how a VCO or mixer works by studying a block diagram? I'm trying to teach myself some electronics, and I've found that I learn a lot by building things I can "play with". It's kinda tough to change the way an IC works...

> The "physics and science" haven't changed ... mankind simply has
> a more complete and useful understanding of them and how to apply
> them. If anything, working with modern techniques will teach you
> more (and demand that you learn a bit of new stuff.)

Hmmm, I'm not so convinced that there's a "more complete ... understanding" of physics -- it seems that they just keep postulating smaller and smaller particles to explain why their theories aren't accurate. I'm reminded of the old "it's turtles all the way down" joke.

2334. Re: Favorite tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-30 00:00:00 UTC
From: Mike Silva <mjsilva@jps.net>
Message-ID: <dEzy3.89$313.41859@news.wenet.net>
Source record: 67480

I've heard that REAL HONEST-TO-GOODNESS MEN even ran metal 6L6s upside down in jugs of oil to squeeze extra Watts out of the poor things. Old wet socks slipped on the tubes was another quick and dirty trick, but required constant tending (put a dripper over it?). Then there was the CQ article about running 6AG7s at 1600V! Anybody got more abused tube stories?

73,
Mike, KK6GM

Roy Lewallen wrote in message <37BF03B1.334FD18D@teleport.com>...
>For audio output, you really need a metal 6L6 (better yet, a pair) to
>learn the true meaning of "hot". It also gives a pretty good idea of
>"loud". A metal 6V6 could be used, but REAL MEN use 6L6s. You can't see
>'em glow, but there's no problem convincing yourself that they are.
>
>Roy Lewallen

2335. Re: Help with VFO Buffer - load isolation needs improving - vfo+buffer.gif (0/1)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-30 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37CACE85.A371E4E2@teleport.com>
Source record: 67481

I've had quite a bit of trouble with VFO pulling when the VFO is used for a transmitter running at the VFO frequency. The cause was found to be feedback from the transmitter final, in the form of large currents flowing on the ground plane. This problem can be minimized by being very careful in how you physically lay out the VFO tank circuit. The capacitor and inductor should be connected to each other, and the combination connected to ground at only one point. This prevents circulating currents from entering the tank and shifting the frequency. Physically separating the VFO and the rest of the transmitter is also helpful.

The best solution I've found to this problem is to run the oscillator at half the transmitter frequency and use a frequency doubler following the oscillator.

If the oscillator is being used only for a receiver or a heterodyning transmitter, this problem won't occur and something else is causing the problem.

Roy Lewallen, W7EL

rjburden@bigpond.com wrote:
>
> Hi,
>
> I have a problem with the buffer in my VFO (3.6MHz) which has me
> stumped - it is being pulled from frequency far too easily. I am using
> a simple two transistor buffer from Solid State Design (the bible!),
> copied in the attached gif.
>
> Can any one suggest why this might be happenning? I didn't take a
> great deal of care in the selection of the transistors because I was
> under the impression that in this circuit configuration transistor
> parameters didn't matter.
>
> I conciously avoided FETS because I was using what I had to hand.
> Perhaps an alternative configuration - cascode? differential?
> What rules of thumb are there regarding the isolation different buffer
> configurations have?
>
> I have lots of questions, just no answers :)). Looking forward to your
> responses.
>
> ----------

> Regards,
> Richard VK5OO
> VK5OO @ yahoo.com.au
>
> "Nothing better than home-brew, except perhaps an absence of Spam"

2336. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-30 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <37CAE6AE.F5EB0D7A@midwestmicro-tek.com>
Source record: 67482
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Carl R. Stevenson wrote:

> -----BEGIN PGP SIGNED MESSAGE-----
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>
> . However, to "pigeon-hole" "radio" into just
> audible
> forms of communication is both unrealistic and too confining. And,
> yes,
> doing so will restrict the number of youth who will join our ranks ...
>

I'll bet you also think that "No Code" will cause more young people to join. When I was 15 it was the *code* that got me and others interested in hamming to begin with.

> "That's all there is???" reaction to today's ham radio,
> which
> is stuck in a time-warp of the 50's or 60's at best.
>
>

How so?

> "Plugging" it over and over again won't make it interesting,
> particularly
> to the youth of today. Enjoy it if you do, but don't bemoan the fact
> that
> virtually everyone else finds tubes and regen receivers boring and
> inferior.
>

Could I see the raw data on that statement please?Please, Please, Please do NOT *even* think to speak for me. I'll give you that regen receivers are infererior but boring is a state of mind that you seem to enjoy, not "everyone else". I'm 37 years old and I've got a masters in physics along with lesser degrees in math, EE, English, Military Science, and Fine Arts. I've been designing embedded computers and writeing operating systems for 12 years now and some of those computers have wireless componets in them. I have a good understanding of how to use modern radios but up to a few months ago I was as ignorant as a new engineer. (Every engineer that we hire finds two things on his desk on his first day, a resister color-code chart and a complete set of Forest Mimms project books from Radio Shack. Every one of them can write out the math equations for a feed back control circuit but not one of them could build one. It's sad when a person goes

to collage for 4 years for electronics and can't read a resister and doesn't know how to use a transitor.)

I say was ignorant because a few months ago I was cleaning out some old boxes and ran across some Gordon West code tapes that I had bought back in 1983. Even though I've been interested in ham radio since I was a teenager I never got licenced (my Elmer left suddenly and I had a car that needed "fixin'"). Three months ago when I found those tapes I got bitten by the bug again. This time I actually put the tapes in the tape player and started learning.

While learning code I decided to build a radio receiver so I could copy live code. I built a 5 tube super-het from an article I found in an 60's QST. I decided to use tubes because I had a bunch of them stored away from when I was 15 and I wanted to be entertained as well as to learn. Contrary to some people who seem to think that they can speak for an entire generation, tubes and hand wound coils are entertaining. After spending 20 years seeing electrons becoming more and more confined to "black boxes" it's fun to watch them "move".

Well, the radio didn't work and then I found I had no idea as to how to even begin trouble shooting it. I found that I was trying to stand on the shoulders of giants with no comprehension as to how they got to be giants. For all my vaunted education and experience I was ignorant. So I built a one tube regeny, it was simple, the theory was easy to understand and most importantly it worked.

I also built a transmitter (see my thread on this news group under "HELP Tube Guru advice needed.). It is a tube transmitter based on the 1625 using the 12BY7 for the oscilator-driver. Anyone interested in the circuit can find it in the 1967 Radio Amatuers Handbook, it is the Inexpensive 75-watter. With the help of some of the hams on this news group who know tubes and know how radio really works I will soon have it completely up and running too (Thanks Guys!).

I cannot begin to relate how much I've learned in the past few months about radio and how it works. I do know that I learned a lot more from that one tube regeny than I ever learned from that kit I got from Ramsey (it still doesn't work but with all I'm learning I'll fix it some day). Now that I understand how my transmitter works and how a regeny does what it does I'm ready to tackle my next radio. I built the Mate to the Mighty Midget (some of you people know what I'm talking about, if you do please read my next thread I'm planning on coming out with soon called "HELP More Tube Guru's needed") and I plan on learning a lot more. Maybe by the fall I'll be ready to tackle that 5-tube super-het, but I've got a lot more to learn. After I've mastered these fundamentals I fully intend to move on to transisters and IC, operating on the giga bands with tubes is not a good idea but when I get to that stage I'll know how I got there.

In short (which is how I should have keeped this) I'd like to say that it's okay to stand on the shoulders of giants with out knowing how the giants got there, just don't expect to ever become a giant one day

yourself, those that do not know there past, have no future. That's what tubes, and code, and sparkgaps, and the smell of high voltage ozone are all about. It has nothing to do with "reviveing dead technology". It has every thing to do with learning and building a foundation and *earning* the right to stand on those giants shoulders.

> 73,
> - --
> Carl R. Stevenson - WA6VSE
> mailto:wa6vse@fast.net
> http://www.users.fast.net/~wa6vse
> NCI #1052
> Director, NCI
> Fellow, Radio Club of America
> Senior Member, IEEE
> Member, ARRL
> Join NCI - Hams for the 21st Century!
> Help modernize ham radio and assure its future survival!
> http://www.nocode.org
>
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> =6Dn8
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2337. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-30 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7qf4drqqh1@news1.fast.net>
Source record: 67483
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

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<maddog@io.com> wrote in message news:37c99c3f.18741318@news.io.com...
>
> Now, I don't have a bunch of letters past my name (I'll offer just
the
> 4 the FCC granted me),

Gee, they gave me 6 ... I hope you don't feel cheated :-)

> so I won't try to refute the accuracy of your
> comments, they're probably technically correct. And I'll betcha
that
> you do something just for fun in your life, Carl, but apparently
it's
> not homebrewing electronics.

Correction ... I don't homebrew obsolete electronics.

> Really, what makes you smile, Carl?

Designing, simulating, implementing, and verifying something like
an FSK modem which performs within 1 dB of theoretical idea,
yet consists entirely of gates and has no multi-bit a/d or d/a
converters :-)

Designing a new radio architecture which outperforms the previous
one significantly, yet uses fewer discrete parts and costs less to
build :-)

Having my simulations agree within a dB or so of the measured
performance after the circuit's built and tested :-)

(starting to get the idea???)

73,

- --
Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI
Fellow, Radio Club of America
Senior Member, IEEE
Member, ARRL

Join NCI - Hams for the 21st Century!
Help modernize ham radio and assure its future survival!
http://www.nocode.org

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2338. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-30 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7qf4p7qva1@news1.fast.net>
Source record: 67484
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

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Hash: SHA1

Tracy Nelson <tnelson@fast.net> wrote in message
news:37CAA549.E09C7507@fast.net...
> "Carl R. Stevenson" wrote:
> > Most IC datasheets provide a complete functional block diagram,
> > theory of operation, and some even provide some transistor-level
> > description of at least parts of the internals. Once you
understand
> > how a Gilbert Cell double-balanced mixer works, do you REALLY
> > need the "gory details" about the one in any given IC? I don't
think
> > so. Think of ICs as "super components" which actually ease the
> > task of building things. They aren't so "mysterious" if you read
the
> > data sheets and understand the underlying principles of the
functional
> > blocks they contain.
>
> But if you're just trying to self-educate yourself, how are you
going to
> learn how a VCO or mixer works by studying a block diagram?

Gee, you read a book on VCOs or mixers (or study the sections
in the ARRL's "Radio Amateur's Handbook." Once you understand
the funamentals, then you can look at those block diagrams and
begin to understand how they all work together in that chip to make
the subsystem that it implements work.

> I'm trying
> to teach myself some electronics, and I've found that I learn a lot
by
> building things I can "play with". It's kinda tough to change the
way
> an IC works...

You don't need to "change the way an IC works" ... try gaining
enough of an understanding to be able to select one that does
what you want ... there are PLENTY to choose from.

> > The "physics and science" haven't changed ... mankind simply has
> > a more complete and useful understanding of them and how to apply
> > them. If anything, working with modern techniques will teach you
> > more (and demand that you learn a bit of new stuff.)
```

>
> Hmmm, I'm not so convinced that there's a "more complete ...
> understanding" of physics -- it seems that they just keep
postulating
> smaller and smaller particles to explain why their theories aren't
> accurate. I'm reminded of the old "it's turtles all the way down"
joke.

I'm not talking about cosmology, the big bang, quarks, etc. I'm
talking
about the basic physical laws, science, and math which govern the
behavior of radio/electronics. We have a much more complete and
useful understanding of those than we did 30-40 years ago ...
unfortunately, many hams are stuck at the level of 30-40 years ago
when they passed their tests (which many consider to be "graduation
certificates") and closed the books to chase wallpaper and "operate."

- --
Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI
Fellow, Radio Club of America
Senior Member, IEEE
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Join NCI - Hams for the 21st Century!
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2339. Re: Help with VFO Buffer - load isolation needs improving - vfo+buffer.gif (1/1)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-31 00:00:00 UTC
From: yvon roy <soj@sympatico.ca>
Message-ID: <37CB4C34.D31B36C0@sympatico.ca>
Source record: 67389

Hi! What is the frequency of this VFO? Pulling might be due to the feedback method
of your buffer arrangement via R-14; It is better to have no feedback applied to the gate but rather apply it to the emitter of your first transistor. I have a citcuit for this kind of
buffering, 2 transistors capable to swing 1 volt P to P into 75 ohms or 50 ohms with a lightly reduced output; but it is good only to 10 Mhz. For higher frequencies, you might want to use an integrated circuit which has a high reverse isolation. Regards. Y. VE2AUC

rjburden@bigpond.com wrote:

> [Image]

2340. Re: HF radio using MC1350 as IF amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-31 00:00:00 UTC
From: yvon roy <soj@sympatico.ca>
Message-ID: <37CB4E5A.6E2DA419@sympatico.ca>
Source record: 67390

Hi! Use a ground plane on the top surface of your board; dont operate with very high impedance circuit at the input because the circuit might become regenerative and may also osciilate. Use very short ground connections for the IC as well as the coils. Y. VE2AUC

David Cunningham wrote:

> I am considering making a simple homebrew HF radio using an MC1350 as the IF
> amplifier, with an IF of 1.6MHz. I do not have any suitable crystal or
> ceramic filters, but expect to get enough selectivity with the high IF and
> perhaps by preceding the MC1350 with a few transformer coupled stages of IF
> amplification. Does anyone have experience in using the MC1350, and what
> sort of performance should I expect from this setup.
>
> Thanks, best wishes from David.

2341. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-31 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19990830223128.14754.00003134@ngol05.aol.com>
Source record: 67391

In article <jbyrns-2808991143090001@216-80-34-29.d.enteract.com>,
jbyrns@enteract.com (John Byrns) writes:

>I think people are still building things, even things using tubes, they
>just aren't building tube radios.

It all depends where you hang out and who you hang out with. Take a look in the mag "Electric Radio" - all sorts of tube radio gear being built. Most of it is far beyond the one tube regen stage.

> If you want to see dozens of people
>building audio amplifiers with tubes, you have only to look in
>rec.audio.tubes.

Yup. Some folks just like that tube sound.

> In the realm radios, if you look around you can find a
>lot of people building crystal sets. I suspect the attraction of crystal
>sets lies in their ease of construction and tweaking, which is a result of
>their simplicity. Tube radio building seems to be a less popular
>avocation than building crystal sets, or tube audio equipment. There
>still people still building electronic equipment from parts.
>
Yup. Like me!

73 de Jim, N2EY

2342. FS Lot of 6 6AG7 Tubes.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-31 00:00:00 UTC
From: Larry Asp <larry.asp@sympatico.ca>
Message-ID: <37CB467B.71AA@sympatico.ca>
Source record: 67392
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.epuipment,rec.radio.swap,rec.radio.amateur.homebrew

Lot of 6 6AG7 Tubes, poplular in old ham transmitters. Used, tested Good. 5 or the 6 are Jan (military standard). I think the old Heatkit AT1 used one of these and a couple of other old rigs did too. Lots of circuits in the 40s and 50s ARRL Handbook with them in it. $12.00 plus postage.

2343. Re: Help with VFO Buffer - load isolation needs improving - vfo+buffer.gif (0/1)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-31 00:00:00 UTC
From: dbengtson@pobox.com
Message-ID: <37cc470b.14917964@netnews.worldnet.att.net>
Source record: 67393

On Mon, 30 Aug 1999 11:33:41 -0700, Roy Lewallen <w7el@teleport.com>
wrote:

>The best solution I've found to this problem is to run the oscillator at
>half the transmitter frequency and use a frequency doubler following the
>oscillator.

This is typically called "Load Pull", and shows up whenever you have a
transmitter around.

I have been told that load pull can still occur with a doubler, since
there is some feedback through a doubler.

Regards

Dave Bengtson

2344. wanted: Big IR Lamp for security camera

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-31 00:00:00 UTC
From: "Carel, PA0CMU" <cmulder@casema.net>
Message-ID: <37CBB819.15C7A45F@casema.net>
Source record: 67394

I'm searchin for a big IR lamp to can watch with a security camera at full darknes.
You can see them often in the neightbourhood of hospitals.
they look like a searchlight but they have a mirror in front of the lamp.
Who can help me?

Eric M.
Breda
Netherlands

2345. Scope Probes for TEK 485

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-31 00:00:00 UTC
From: af389@lafn.ORG
Message-ID: <37CBDAC7.33F11D16@lafn.org>
Source record: 67395

Hi,
Any TEK 485 scope owners out there?
Any 350 MHz or faster scope owners can help too.

What are you guys using for the HI Z 10MEG 350 MHZ or faster
probes? I need your help.

My probe grabber tips are just not holding onto wires.
Also, what is a good method to create a STABLE makeshift short ground
lead?

Did anyone figure how to make a socket to plug the probe into
on copper ugly board projects for hands free, short ground lead
operation?

The 485 SCOPE is a real sleep, fine scope....so handy!
It syncs on and displays local oscillators well above 400 mhz,
where SEEING waveshape is important and amplitude is NOT.

Thanks for any help.
73, W6MIK
--
David Shalita (Dave)
af389@lafn.org
Van Nuys, CA

2346. Serial port on computer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-31 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <37CBEB6F.167E@eece.maine.edu>
Source record: 67396

I'm not sure if this is the right ng to ask, but I have a program to do cw on a computer, and I'm wondering how to interface the computer to the outside world--there is no documentation w/the program, only a com port select. I saw the cw decoder in qst, and I'll just use the tone decoder from that, but what do I need as an interface between the serial port and the radio/tone decoder? (It's an old laptop btw.) Thanks.

--

****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

2347. Re: HF Panadapter plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-31 00:00:00 UTC
From: jjesson@ais.net
Message-ID: <0mTy3.1$WB4.71@news.ais.net>
Source record: 67397

73 Magazine had an interesting panadaptor article a few years ago (I need to look for the article and date). It described how to modify any portable HF receiver to sweep the 1st IF - it has to be HF of course - using a simple sweep ckt and looking at the X output and Y with any old scope.

The author uses a cheapo radio shack shortwave receiver to illustrate sweeping the LO.

Nifty and works great!

Joe

2348. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-31 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7qhb3j$518$1@nnrp1.deja.com>
Source record: 67398
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

In article <7q772t$9k2$1@autumn.news.rcn.net>,
"CommQuart" <commquart@erols.com> wrote:

> (snip...)
> I am wondering if anyone under the age of 50 is building radios
anymore, or
> is the "magic" of building a one-tube regenerative receiver using a
30 or
> '99
> tube reserved just for those of us with AARP membership. I am feeling
> kind of sad, because more than a few old timers have sent me the
> remains of their junkboxes because no one else is interested; and they
> didn't
> have the heart to take the stuff to the dump. (Nothing special, old
sockets,
> resistors, coils, etc.)
>
> I am wondering, are we really the
>
> Last American Dinosaurs

One tube regens? Yuck.

The Golden Age of Homebrewing is *now* - components are
available of unprecedented performance and sophistication,
and they're dirt cheap, too. Builders of today have options
folks in the past never did - witness that nifty DSP
transceiver in the September QST. Consider how much time,
money, effort and hassle it would take to duplicate its
DSP IF stage in analogue components...

"Magic" takes different forms. Like seeing the output from
my newly rewritten weather satellite program the other day,
with a more sophisticated AM detector than my old program
and LMS adaptive filtering for noise reduction. Gasp!

Builders are still around. Just because it isn't the kind
of radio *you* approve of doesn't mean it's not homebrew.
--
Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte
Satellite: VA3SFL on UO-22, KO-25

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2349. Re: Scope Probes for TEK 485

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-31 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37CC20AB.1DC55281@teleport.com>
Source record: 67399

Tek makes a little connector which just fits the probe tip, and this is the best I've found for a stable connection to an ugly project. It can be soldered into place in the project. The part number of one of them is 013-0240-00 -- there may be different sizes these days. I suggest you go to http://www.tek.com/Measurement/accessories/index.html, select "Passive voltage probes", find a probe type that's similar to the one you have, and click "Accessories" underneath the probe number. This will get you a picture of available accessories, which includes the connector for some probe types. There's also a connector made from a bent piece of thin metal and with a separate center pin. These are best used on a PCB, since there's no way to keep the center pin aligned in an ugly project. You'll also find a couple of accessories which make ground connections easier. One is a plastic gizmo the probe tip plugs into and which has two sharp pins, one of which is spring loaded. Another is a spring which fits around the ground part of the probe tip. Not all of these are available for all probes.

You'd better hurry, though, before Tektronix completes its self-destruction.

If the shape of a 400 MHz waveform is important to you, you'll need a scope with bandwidth of 2 GHz or so to get even a fairly decent representation of it.

Roy Lewallen, W7EL

David Shalita wrote:
>
> Hi,
> Any TEK 485 scope owners out there?
> Any 350 MHz or faster scope owners can help too.
>
> What are you guys using for the HI Z 10MEG 350 MHZ or faster
> probes? I need your help.
>
> My probe grabber tips are just not holding onto wires.
> Also, what is a good method to create a STABLE makeshift short ground
> lead?
>
> Did anyone figure how to make a socket to plug the probe into
> on copper ugly board projects for hands free, short ground lead
> operation?
>
> The 485 SCOPE is a real sleep, fine scope....so handy!
> It syncs on and displays local oscillators well above 400 mhz,

> where SEEING waveshape is important and amplitude is NOT.
>
> Thanks for any help.
> 73, W6MIK
> --
> David Shalita (Dave)
> af389@lafn.org
> Van Nuys, CA

2350. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-31 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <37CC2856.7179@ixpres.com>
Source record: 67400
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

An EE's job still
> demands creativity -- arguably more than ever, in fact -- but it also
> pretty much rules out most opportunities to stand back and appreciate
> the technology for its own sake. For all but a few lucky engineers,
> modern electronics as a career seems to be just another high-stress
> numbers game.
>

Hi OM,

As an EE with 41 (now going on 42) continuous years of earning my
living
in the electronics industry, and 44 years of ham radio enjoyment,
I heartily disagree!
My job has never been a "high stress numbers game", before or now.
To make this so, I have consciously avoided job "opportunities" that
involved higher level management or stressful, politically-oriented
jobs.
In other words, I stayed with technical work. I've never regretted it.
I still look forward to going to work in the morning, and I still use
daily
Ohm's Law and the other fundamentals I learned almost 4 decades ago,
while working with SMT devices and highly integrated analog and digital
circuit design. Contrary to what I have read occasionally, the
fundamentals of circuit design do not change, but the tools sure are a
lot better.
As I have stated here before, we are living now in a golden age for
ham radio homebrewing. Never has it been easier, or cheaper, to build
excellent performing receivers and transmitters, particularly for simple
modes like CW and FSK (the only two I use). Integrated devices have
made it easier to assemble functional circuits, not harder. Stuff that
I
throw together at home does not require anything but elementary
electronics
knowledge at the level of the ARRL Handbook or similar sources. But as
always, for those who do not have the interest and/or motivation to
learn,
most everything new is is impossible or "magic", or the realm of
"experts".
Lucky for me, I had no such preconceived opinions about electronics when
I got started at age 13.

73,
Don, W6JL

2351. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-31 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <37CC2B1F.4B17@ixpres.com>
Source record: 67401
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

>
> Yawn. Why in the heck would you waste time with something like that?
> Ever hear of an MC13155? Besides, nobody uses FSK anymore. Complete
> waste of spectrum space with no process gain.

Why indeed? For fun, actually. Gosh, my logbooks continue to fill up with worldwide QSO's on AMTO, PACTOR and CW, the only three modes I use. And Baudot RTTY remains by far the most heavily-used of the keyboard modes, far ouststripping all the Clover, Pactor, Amtor, PSK31, GTOR, etc so far.

Not all of us care about spectrum utilization or "process gain". Even AM has a following these days, remember. What is essential for competitive electronics in industry has, for me, little to do with hobby enjoyment of same. Not the same goals, or rewards, for me.

73,
Don, W6JL

2352. /\/\otorola SP50 help?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-31 00:00:00 UTC
From: Jim Devenport <jdport@xoommail.com>
Message-ID: <37CC2BAC.32729033@xoommail.com>
Source record: 67402

Any one of you whizzes familiar with the Motorola SP-50 handheld radio?
I have 2 that exhibit the same symptoms: Very weak trans and recieve,
as though the RF path from antenna socket to board input. No visible
breaks in the PC microstrip trace, etc. I've seen this problem
before. Batts are fully charged and the antennas are OK. Could anyone
point me toward a probable failure item?
Jim W5AOX

2353. Re: HF radio using MC1350 as IF amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-31 00:00:00 UTC
From: larryc@northwest.com
Message-ID: <37CC2F4A.1589@northwest.com>
Source record: 67403

other items to consider:

use a resistive load across the primary and secondary of transformers,
using 4.7K (10K max). this reduced Q but adds to stability. use plenty
of 0.1, 0.5, and 1uF bypassing caps (monolythic). PCB traces wherever
possible. you can also add brass shim stock as a physical shield between
gain stages. don;t use more than three mc1350 stages. the amp chain will
likely turn into an oscillator.

larryc
========

yvon roy wrote:
>
> Hi! Use a ground plane on the top surface of your board; dont operate with very
> high impedance circuit at the input because the circuit might become
> regenerative and may also osciilate. Use very short ground connections for the
> IC as well as the coils. Y. VE2AUC
>
> David Cunningham wrote:
>
> > I am considering making a simple homebrew HF radio using an MC1350 as the IF
> > amplifier, with an IF of 1.6MHz. I do not have any suitable crystal or
> > ceramic filters, but expect to get enough selectivity with the high IF and
> > perhaps by preceding the MC1350 with a few transformer coupled stages of IF
> > amplification. Does anyone have experience in using the MC1350, and what
> > sort of performance should I expect from this setup.
> >
> > Thanks, best wishes from David.

2354. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-31 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7qhfs8rca1@autumn.news.rcn.net>
Source record: 67404
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

```
-----Original Message-----
From: marsgal42@hotmail.com <marsgal42@hotmail.com>
Newsgroups:
rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.hom
ebrew,rec.radio.shortwave
Date: Tuesday, August 31, 1999 3:40 PM
Subject: Re: OTs: Where have all the builders gone?

>In article <7q772t$9k2$1@autumn.news.rcn.net>,
> "CommQuart" <commquart@erols.com> wrote:
>
>> (snip...)
>> I am wondering if anyone under the age of 50 is building radios
>anymore, or
>> is the "magic" of building a one-tube regenerative receiver using a
>30 or
>> '99
>> tube reserved just for those of us with AARP membership. I am feeling
>> kind of sad, because more than a few old timers have sent me the
>> remains of their junkboxes because no one else is interested; and they
>> didn't
>> have the heart to take the stuff to the dump. (Nothing special, old
>sockets,
>> resistors, coils, etc.)
>>
>> I am wondering, are we really the
>>
>> Last American Dinosaurs
>
>One tube regens? Yuck.
>
>The Golden Age of Homebrewing is *now* - components are
>available of unprecedented performance and sophistication,
>and they're dirt cheap, too. Builders of today have options
>folks in the past never did - witness that nifty DSP
>transceiver in the September QST. Consider how much time,
>money, effort and hassle it would take to duplicate its
>DSP IF stage in analogue components...
>

I've never even remotely suggested anything you are posting.
components! Clean your glasses and try again.... Was that
YOUR article in QST?
```

>"Magic" takes different forms.

No kidding, one thing you have correct...

>my newly rewritten weather satellite program the other day,
>with a more sophisticated AM detector than my old program
>and LMS adaptive filtering for noise reduction. Gasp!
>
>Builders are still around. Just because it isn't the kind
>of radio *you* approve of doesn't mean it's not homebrew.

No prize here, perhaps you need to reread exactly what I wrote.
I think I did a chapter on a solid state HF transceiver for the
ARRL handbook in the seventies, and have several QST cover
plaques for articles on a six meter solid-state 6 meter rig, and
an early article on 2-meter frequency synthesis. That,
besides hundreds of other articles in QST, Ham Radio, 73,
Communications Quarterly, etc....

Methinks you are being rather presumptious in your opinions.

>Share what you know. Learn what you don't.

2355. Source for Plans - 30 - 50 amp Pwr Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-31 00:00:00 UTC
From: RJ Scott <kf7qz@yahoo.com>
Message-ID: <37CC3E5D.5D48539F@yahoo.com>
Source record: 67405

I have an old stereo with quite a hefty Transformer in it that I think I want to use as a basis for a power supply (accesories getting a bit much). Ive looked for a FAQ before and dont seem to find one. I have Several ARRL Handbooks, but I just wonder if anyone has a neat 30 - 50 amp 12v supply schematics available.

Im going to check the transformer spec first though. What Im looking for is

Crowbar (over/under)
Current Limit
Current halt (if short occur's)

Easily obtainable parts (Local shop called Radar electronics has a ton of 6000 - 8000 uf/pf 35 - 50v caps) and Scr's and VR's

Thanks

Rick KF7QZ

2356. Tuned circuits (was Re: HF radio using MC1350 as IF amplifier)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-31 00:00:00 UTC
From: Mike Silva <mjsilva@jps.net>
Message-ID: <1HXy3.131$313.54351@news.wenet.net>
Source record: 67406

Michael Black wrote in message ...
>
>A single tuned circuit sets the bandwidth, and it will be too broad at
>that frequency.
>
>Additional tuned circuits will not narrow the bandwidth, only improve the
>skirt selectivity.

Is this really so? I seem to remember that the bandwidth went down roughly by the square root of the number of tuned circuits (depending on coupling, etc). I'll sure be looking this up when I get home!

73,
Mike, KK6GM

2357. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-31 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7qhhncfgq1@news1.fast.net>
Source record: 67407
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

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-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

John Miles <jmiles@pop.removethistomailme.net> wrote in message
news:37CB1E58.20C8@pop.removethistomailme.net...
> Carl R. Stevenson wrote:
> >
> > Correction ... I don't homebrew obsolete electronics.
> >
> > > Really, what makes you smile, Carl?
> >
> > Designing, simulating, implementing, and verifying something like
> > an FSK modem which performs within 1 dB of theoretical idea,
> > yet consists entirely of gates and has no multi-bit a/d or d/a
> > converters :-)
>
> Yawn. Why in the heck would you waste time with something like
that?
> Ever hear of an MC13155? Besides, nobody uses FSK anymore.
Complete
> waste of spectrum space with no process gain.

Not when it's frequency-hopped ... besides, M-ary FSK is good for
weak signal ... as M increases, the required Eb/No decreases ...

> Let us know when you have
> achieved something useful in a contemporary sense, like maybe a
256-QPSK
> modem, or (better yet) a correlated front end for an impulse-domain
> receiver.

I believe you mean 256-QAM ... QPSK implies 4 phase states and doesn't
go with "256" ... and the ultra-wideband stuff that I believe you are
referring
to as "impulse-domain" isn't approved by the FCC.

> > Designing a new radio architecture which outperforms the previous
> > one significantly, yet uses fewer discrete parts and costs less to
> > build :-)
> >
>
> "Fewer discrete parts" is right. Unless it consists of nothing but
an
> ADC and a DSP, it's already obsolete.
>
```

> > Having my simulations agree within a dB or so of the measured
> > performance after the circuit's built and tested :-)
> >
>
> Simulations? Yawn. Building:simulation :: sex:Playboy.

Simulation is a valuable design tool ... certainly better than "cut
and try and itterate." Modern designers don't build squat without
first simulating it.

> > (starting to get the idea???)
>
> Likewise, OM? :-)

Yea, I'm getting the idea that you "talks a good talk," but don't
actually
know how to "walk the walk" when it comes to actual design practices.
(I'll bet you can beep real fast, though ... :-)

- --
Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI
Fellow, Radio Club of America
Senior Member, IEEE
Member, ARRL
Join NCI - Hams for the 21st Century!
Help modernize ham radio and assure its future survival!
http://www.nocode.org

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=c6Ar
-----END PGP SIGNATURE-----

2358. Re: Public apology to readers of this thread

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-31 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <37CC3E86.5112@pop.removethistomailme.net>
Source record: 67408
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Don W6JL wrote:
>
> >
> > Yawn. Why in the heck would you waste time with something like that?
> > Ever hear of an MC13155? Besides, nobody uses FSK anymore. Complete
> > waste of spectrum space with no process gain.
>
> Why indeed? For fun, actually. Gosh, my logbooks continue to fill
> up with worldwide QSO's on AMTO, PACTOR and CW, the only three
> modes I use. And Baudot RTTY remains by far the most heavily-used of
> the keyboard modes, far ouststripping all the Clover, Pactor, Amtor,
> PSK31, GTOR, etc so far.
>
> Not all of us care about spectrum utilization or "process gain". Even
> AM has a following these days, remember. What is essential for
> competitive electronics in industry has, for me, little to do with
> hobby enjoyment of same. Not the same goals, or rewards, for me.
>
> 73,
> Don, W6JL

Sorry, from reading these responses I see I must've forgotten the
all-important HTML <sarcasm> ... </sarcasm> tags yesterday. :-)

It appears that my attempt to beat Carl at his own deprecation game has
backfired!

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

2359. Power Supply Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-31 00:00:00 UTC
From: dothetime@aol.com
Message-ID: <19990831173543.17425.00002836@ng-ck1.aol.com>
Source record: 67409

Hi Guys,
heres the question. I need 80 amps at 14 volts for a Ten Tec solid State KW amp.
I don't want to buy their $800 supply.
Is it possible to hook up two 50 amp supplies in parrallel, possibly with a couple of 100 amp diodes in series with the postive lines to prevent power feeding back?
I know I can use a car battery, but I have the two supplies already.
What the consensus?
Thanks
Dave dothetime@hotmail.com

2360. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-31 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <37CC3F8C.5DE5@pop.removethistomailme.net>
Source record: 67410
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Carl R. Stevenson wrote:
>
> <snip serious rebuttal of points made entirely in jest>

Sorry, guys, I'll do better next time!

-- jm
http://www.qsl.net/ke5fx

Note: My E-mail address has been altered to avoid spam

2361. Re: Help with VFO Buffer - load isolation needs improving - vfo+buffer.gif (1/1)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-31 00:00:00 UTC
From: Rocci <rocci@worldnet.att.net>
Message-ID: <37CC5E1D.6D996261@worldnet.att.net>
Source record: 67411

Feedback generally reduces the isolation of the amplifier to a factor not much larger than the closed loop gain. A much better topology for oscillator buffering is the common base configuration w/o feedback. You can achieve almost 60 dB of isolation at HF frwquencies. Once you have this much isolation, any significant load pulling will probably be due to transmitter output feeding back to the oscillator. When the Xmtr is keyed, a time delayed version of the oscillator frequency feeds back and mixes with the oscillator. This is results in a net phase shift, and the oscillator frequency changes to make the overall phase satisfy the conditions for oscillation with the fixed circuit components
Beware though, the CB amp has a very low input impedance, and a vey high output impedance. Otherwise, almost as easy as 'falling off a log'. 2N3904 or 2N2222 should work fine.

Joe
WA3CMQ

yvon roy wrote:

> Hi! What is the frequency of this VFO? Pulling might be due to the
> feedback method
> of your buffer arrangement via R-14; It is better to have no feedback
> applied to the gate but rather apply it to the emitter of your first
> transistor. I have a citcuit for this kind of
> buffering, 2 transistors capable to swing 1 volt P to P into 75 ohms or
> 50 ohms with a lightly reduced output; but it is good only to 10 Mhz.
> For higher frequencies, you might want to use an integrated circuit
> which has a high reverse isolation. Regards. Y. VE2AUC
>
> rjburden@bigpond.com wrote:
>
> > [Image]

2362. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-31 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <37CC585E.C7E8ADA6@mwci.net>
Source record: 67412
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

John Miles wrote:

> Sorry, guys, I'll do better next time!

I believe that some limited contact with the magic world of vacuum tube
circuit design, simulation and analysis can be a worthwhile experience
for amateurs and engineers.

My new Multisim 6.0 SPICE program has vacuum tube components included.

Bill W0IYH

2363. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-31 00:00:00 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <KQZy3.14304$ok3.4248@news.rdc1.il.home.com>
Source record: 67413
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

> > > > Really, what makes you smile, Carl?
> > >
> > > Designing, simulating, implementing, and verifying something like
> > > an FSK modem which performs within 1 dB of theoretical idea,
> > > yet consists entirely of gates and has no multi-bit a/d or d/a
> > > converters :-)

I've got a nice little audio amp that consists of an xtal, HC14, and an
HC74.

2364. Re: Favorite tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-31 00:00:00 UTC
From: Doug Smith <nospam@nospam.org>
Message-ID: <ORZy3.6993$F4.176447@news5.giganews.com>
Source record: 67414

Maybe not *abuse*, but...

I seem to remember seeing a picture in a 1959 QST of an amplifier using something like 50 807s in parallel. (they were *cheap* in the 1950s!) The idea was to dispense with any kind of output matching circuit, by using enough tubes in parallel that the total plate impedance dropped to 50 ohms. I presume (hope!) that some kind of bandpass filter was used though! (would also love to see that power supply...)

73 Doug

2365. Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-31 00:00:00 UTC
From: Paul Breed <Paul@Netburner.com>
Message-ID: <37CC6D21.F5C1D1D5@Netburner.com>
Source record: 67415

Has anyone build a really high performance I+Q direct conversion
receiver and followed it with a high performance A/D and DSP?

I would think that a pair of high level mixers
followed by a 24 bit 96Khz stereo audio A/D converter and DSP would
give you an unbeatable receiver for the HF bands.

Has anyone done this?

What are the drawbacks?

Paul (KL7JG)

2366. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-31 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7qhssi$93m$1@news1.fast.net>
Source record: 67416
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

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John Miles <jmiles@pop.removethistomailme.net> wrote in message
news:37CC3F8C.5DE5@pop.removethistomailme.net...
> Carl R. Stevenson wrote:
> >
> > <snip serious rebuttal of points made entirely in jest>
>
> Sorry, guys, I'll do better next time!
>
> -- jm
> http://www.qsl.net/ke5fx
>

John,

If your previous comments were indeed made in jest, I
apologize for my retort. I thought you were being serious.
(I guess it comes from dealing with some of the more rabid
pro-code/anti-technology folks around here.)

- --
Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI
Fellow, Radio Club of America
Senior Member, IEEE
Member, ARRL
Join NCI - Hams for the 21st Century!
Help modernize ham radio and assure its future survival!
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2367. Re: Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-31 00:00:00 UTC
From: Rocci <rocci@worldnet.att.net>
Message-ID: <37CC7832.3B0ABCA7@worldnet.att.net>
Source record: 67417

I've also been fascinated by this in recent years. There's some cool technology available that makes this not only feasable, but also makes the hardware very simple and eminently reproduceable. Any time you can trade in RF complexity for digital complexity, you generally get a cheaper and simpler product.
Problems I've struggled with are:
The mixers - How to build a pair of mixers whose gain (loss) and phase track over several octaves of RF and also give good intermod performance. My goal would be at least 50dB of unwanted sideband suppression, but this requires extraordinary amplitude and phase balance. I recently came across an article by Dan Tayloe on a 4-phase switching mixer that uses a single high speed bus multiplexer IC as a quadrature analog mixer. Dan posted measured intermod, blocking range, and noise performance that beats some of the best rigs on the market, yet the mixer is 'near digital' in implementation. It requires a 4x, 2-bit digital LO clock.
The RF phasing for the quadrature LO's (if required) - Most analog I/Q mixers require an accurate 90 deg phase shift network at the LO. This is a major source of phase mis-tracking over the wide HF range. New DDS technology from Analog Devices now makes it possible to generate numerically accurate quadrature RF signals up to 120 MHz. Only question mark is spectral purity.
The I & Q IF filters - Some filtering needs to be inserted in the I & Q outputs to prevent out of band signals from overloading the ADC. Since these filters are at audio, they need to have very good phase and amplitude tracking over nearly a decade of frequency.
AGC - This one make my gray matter smoke. Signal amplitude measurement is most commonly done on the post-filtered audio DSP output. This DSP output might be delayed many milli-seconds from the RF input that caused it. Consequently, the ADC input might be overloaded for a significant time before a measurable output from the DSP indicates that it is time to reduce the input signal. AGC has always been a problem for DC receivers, but it seems that it should be possible to build DSP algorithm that handles it effectively and smoothly.

I'd love to see a thread, or even a seperate group, for practitioners who'd like to work on this. The idea of a 'virtual project team' with contributions from a far flung group of expert hobbyists could yield a PC controlled "VolksRadio" that could rival anything the Japanese are making at a price we can all afford..

I'm in.

Joe
WA3CMQ

Paul Breed wrote:

> Has anyone build a really high performance I+Q direct conversion
> receiver and followed it with a high performance A/D and DSP?
>
> I would think that a pair of high level mixers
> followed by a 24 bit 96Khz stereo audio A/D converter and DSP would
> give you an unbeatable receiver for the HF bands.
>
> Has anyone done this?
>
> What are the drawbacks?
>
> Paul (KL7JG)

2368. Re: Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-31 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7qi2i2gqd1@news1.fast.net>
Source record: 67418

-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

Rocci <rocci@worldnet.att.net> wrote in message
news:37CC7832.3B0ABCA7@worldnet.att.net...
> I've also been fascinated by this in recent years. There's some cool
> technology available that makes this not only feasable, but also
makes
> the hardware very simple and eminently reproduceable. Any time you
can
> trade in RF complexity for digital complexity, you generally get a
> cheaper and simpler product.
> Problems I've struggled with are:
> The mixers - How to build a pair of mixers whose gain (loss) and
phase
> track over several octaves of RF and also give good intermod
> performance. My goal would be at least 50dB of unwanted sideband
> suppression, but this requires extraordinary amplitude and phase
> balance.

Yup ... 1 degree or better phase accuracy and 0.05 dB amplitude
balance ... tough specs. Virtually impossible to get without some
tweaking and then likely only over a narrow bandwidth.

This bodes in favor of converting to an IF, doing some filtering
(to improve intermod performance and eliminate aliasing problems),
then either do and I/Q mix to baseband and digitize or sub-sample
and derive the quadrature channel with a Hilbert transform.

> I recently came across an article by Dan Tayloe on a 4-phase
> switching mixer that uses a single high speed bus multiplexer IC as
a
> quadrature analog mixer. Dan posted measured intermod, blocking
range,
> and noise performance that beats some of the best rigs on the
market,
> yet the mixer is 'near digital' in implementation. It requires a 4x,
> 2-bit digital LO clock.

I'd be interested in a copy or a source for a copy of this article.

> The RF phasing for the quadrature LO's (if required) - Most analog
I/Q
> mixers require an accurate 90 deg phase shift network at the LO.
This is
> a major source of phase mis-tracking over the wide HF range. New DDS

> technology from Analog Devices now makes it possible to generate
> numerically accurate quadrature RF signals up to 120 MHz. Only
question
> mark is spectral purity.

The mixers will still introduce some amplitude inbalance (and probably
some phase mismatch, too) ... even with perfect quadrature LOs it'll
still be tough to get 50 dB over a wide range.

> The I & Q IF filters - Some filtering needs to be inserted in the I
& Q
> outputs to prevent out of band signals from overloading the ADC.
Since
> these filters are at audio, they need to have very good phase and
> amplitude tracking over nearly a decade of frequency.

Another thing that points to doing a single-ended conversion to IF,
doing analog bandlimiting, and using the sub-sample/Hilbert transform
routine.
That way you can do the majority of the filtering in DSP.

> AGC - This one make my gray matter smoke. Signal amplitude
measurement
> is most commonly done on the post-filtered audio DSP output. This
DSP
> output might be delayed many milli-seconds from the RF input that
caused
> it. Consequently, the ADC input might be overloaded for a
significant
> time before a measurable output from the DSP indicates that it is
time
> to reduce the input signal. AGC has always been a problem for DC
> receivers, but it seems that it should be possible to build DSP
> algorithm that handles it effectively and smoothly.

The delay is there and you're stuck with it ... audio-derived AGC
is not that effective ...

73,

- --
Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI
Fellow, Radio Club of America
Senior Member, IEEE
Member, ARRL
Join NCI - Hams for the 21st Century!
Help modernize ham radio and assure its future survival!
http://www.nocode.org

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2369. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-31 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <37CC84F5.2C45@pop.removethistomailme.net>
Source record: 67419
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

```
Carl R. Stevenson wrote:
>
> -----BEGIN PGP SIGNED MESSAGE-----
> Hash: SHA1
>
> John Miles <jmiles@pop.removethistomailme.net> wrote in message
> news:37CC3F8C.5DE5@pop.removethistomailme.net...
> > Carl R. Stevenson wrote:
> > >
> > > <snip serious rebuttal of points made entirely in jest>
> >
> > Sorry, guys, I'll do better next time!
> >
> > -- jm
> > http://www.qsl.net/ke5fx
> >
>
> John,
>
> If your previous comments were indeed made in jest, I
> apologize for my retort. I thought you were being serious.
> (I guess it comes from dealing with some of the more rabid
> pro-code/anti-technology folks around here.)
>

Mostly, the point I was trying to make with all the bogus technobabble
was that not many of us who _do_ build stuff can afford to throw rocks
at others for failing to advance the state of the art with every
project. If I mock someone for using a 12BE6 mixer instead of a Gilbert
cell in his radio project, you could turn around and mock me for using
FSK instead of M-ary Q-whatever modulation in mine.

IMHO it's better to refrain from criticizing others' homebrewing
preferences altogether, and save the flamage for more worthy causes.

I should have just said as much in the first place, I guess. :-)

-- jm
http://www.qsl.net/ke5fx

------------------------------------------------------
Note: My E-mail address has been altered to avoid spam
------------------------------------------------------
```

2370. Re: Favorite tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-31 00:00:00 UTC
From: Doug Smith <nospam@nospam.org>
Message-ID: <cF0z3.7232$F4.185723@news5.giganews.com>
Source record: 67420

>> I seem to remember seeing a picture in a 1959 QST of an amplifier using
>> something like 50 807s in parallel. (they were *cheap* in the 1950s!)
>The
>> idea was to dispense with any kind of output matching circuit, by using
>> enough tubes in parallel that the total plate impedance dropped to 50
>ohms.
>
>I just saw an audio amp today, made the same way. They want $20k per
>channel.
>Obviously made for silly audiophiles.. They say it's got response down to
>1Hz, but I really wonder just how much you are gaining here.

Yikes. To make 8 ohms it must take more than 100 tubes?<g>! (and 807s aren't 25 cents a pop anymore!)

I wonder *how much* response at 1Hz?? Sure, they get rid of the output transformer, but they still need one hilatious (sp?) DC blocking capacitor... Even if they run the plates at DC ground, (and drive the cathodes negative) they have to have either a plate load choke or one humongous resistor.. (either way, that load is going to be passing a LOT of current!)

I was about to say the *high* frequency response must be pretty good until one thinks about all the stray capacity<g>!

The circa-1956 original TV transmitter was still working at WISC-TV when I left in 1990. It used what was basically a tube implementation of the modern stacked-devices audio amplifier circuit, set up to grid-modulate a 10KW Class C amplifier at 61.25MHz. The devices -- six 807s, driven by two 6146s... (ironically, the whole mess then drove a 25KW linear using seven tubes in parallel in a circular box resembling a large water heater.)

73 Doug

2371. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-31 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7qi4lrifr1@news1.fast.net>
Source record: 67421
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

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Hash: SHA1

John Miles <jmiles@pop.removethistomailme.net> wrote in message
news:37CC84F5.2C45@pop.removethistomailme.net...
>
> Mostly, the point I was trying to make with all the bogus
technobabble
> was that not many of us who _do_ build stuff can afford to throw
rocks
> at others for failing to advance the state of the art with every
> project. If I mock someone for using a 12BE6 mixer instead of a
Gilbert
> cell in his radio project, you could turn around and mock me for
using
> FSK instead of M-ary Q-whatever modulation in mine.

The point that I was trying to make is that too many hams
limit themselves (either because they are just into nostalgia,
because they don't know any better, because they haven't
kept up with technology at all, or because someone else told
them that "SMT is too hard to work with" or "ICs are too
hard to understand, build everything with discretes.") to
doing little beyond regurgitations of things that were old
decades ago.

I really believe that we HAVE to modernize both our
rules and our technology to survive. Right now, too many
hams are happy back in the 50s and 60s ... that's unhealthy
for a technical service such as the ARS. It neglects the
majority of our Basis and Purpose ... the reason ham radio
exists and has bands of frequencies to use.

> IMHO it's better to refrain from criticizing others' homebrewing
> preferences altogether, and save the flamage for more worthy causes.

I certainly think that prompting ... even prodding if necessary ...
hams to move forward towards today instead of snoozing
in the past is a worthy cause. (you snooze, you lose ... in this
case our bands, eventually if we remain stagnant.)

Even the ARRL has recognized this as a major problem facing
the ARS in the coming decade.

- --
Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI
Fellow, Radio Club of America
Senior Member, IEEE
Member, ARRL
Join NCI - Hams for the 21st Century!
Help modernize ham radio and assure its future survival!
http://www.nocode.org

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2372. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-31 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <37CCA280.FB8@pop.removethistomailme.net>
Source record: 67422
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

H H Russell wrote:
> ...
> Vacuum tubes also exhibit a transfer speed in excess of
> 80 times that of a semi-conductor.
> ...
> The first color televisions still had better pictures than
> today's fancy monitors displaying a computer generated image.
> ...
> And I certainly don't care to work my butt off to get a
> new car that is designed to rust within three years.
> ...

Whoa! That must be some truly primo grass. Pass some over here, will ya?

(I actually agree with much of what you're saying, but ridiculous assertions like those above aren't much help in getting the point across.)

-- jm
http://www.qsl.net/ke5fx

Note: My E-mail address has been altered to avoid spam

2373. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-08-31 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <37CCAD70.395E@pop.removethistomailme.net>
Source record: 67423
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

```
.H .H Russell wrote:
>
> As a matter of fact yes. -To everybody, it did.
> See
> www.trufax.org
> for an elucidation on this outrageous claim.
> Hans
>

Well, I certainly found that site enlightening on the matters of "Chakra
points in the human body, relation to hyperbolic channels," "Gulf War
Syndrome as a step in global socialism," and the "Takyon capsule of Dr.
K. Lambrakis," but I was unable to uncover any evidence of the
superiority of early NTSC color sets to modern high-resolution graphics
displays. Perhaps you could be a bit more specific?

-- jm
http://www.qsl.net/ke5fx

------------------------------------------------------
Note: My E-mail address has been altered to avoid spam
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2374. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: ".H .H Russell" <koenen1@telusplanet.net>
Message-ID: <37CCB688.F0887232@telusplanet.net>
Source record: 67335
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Yeh. I suppose you've been brought up to still believe that all electron
movement is at the speed of light, right?
Some reading in scalar physics will dispel that notion in a hurry.
Hans

John Miles wrote:

> H H Russell wrote:
> > ...
> > Vacuum tubes also exhibit a transfer speed in excess of
> > 80 times that of a semi-conductor.
> > ...
> > The first color televisions still had better pictures than
> > today's fancy monitors displaying a computer generated image.
> > ...
> > And I certainly don't care to work my butt off to get a
> > new car that is designed to rust within three years.
> > ...
>
> Whoa! That must be some truly primo grass. Pass some over here, will
> ya?
>
> (I actually agree with much of what you're saying, but ridiculous
> assertions like those above aren't much help in getting the point
> across.)
>
> -- jm
> http://www.qsl.net/ke5fx
>
> --
> Note: My E-mail address has been altered to avoid spam
> --

2375. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: ".H .H Russell" <koenen1@telusplanet.net>
Message-ID: <37CCB6CD.88A24FE0@telusplanet.net>
Source record: 67336
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

As a matter of fact yes. -To everybody, it did.
See
www.trufax.org
for an elucidation on this outrageous claim.
Hans

maddog@io.com wrote:

> On Wed, 01 Sep 1999 01:58:58 GMT, ".H .H Russell"
> <koenen1@telusplanet.net> wrote:
>
> >[snip]
> >But hey.
> >The first color televisions still had better pictures than today's fancy
> >monitors displaying a computer generated image.
>
> you've gotta be kidding... maybe your eyes have changed with age.
> Did food used to taste better to you, too?
>
> 73,
> monty N5FC

2376. Re: wanted: Big IR Lamp for security camera

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: noone@nowhere.com
Message-ID: <37cdf555.458359011@news.squonk.net>
Source record: 67337

With a modern CCD IR camera, I wouldn't think you'd need
much light, but here are two ideas anyway:

1 - US company called "cheaper than dirt", I think they have
a website, sells psuedo-military surplus gear, including IR
filters for flashlights and hand held spotlights, as well as
the searchlights themselves. A say "pseudo", because they
mostly carry commercial items. Other surplus places
probably carry these, as IR searchlights used to be popular
with various militaries.

2 - Build something out of one or more IR LED's. Most
electronic parts have them, just use a resistor to set the
current to a bit below max. These are brighter than you'd
think.

On Tue, 31 Aug 1999 13:10:18 +0200, "Carel, PA0CMU"
<cmulder@casema.net> wrote:

>I'm searchin for a big IR lamp to can watch with a security camera at
>full darknes.
>You can see them often in the neightbourhood of hospitals.
>they look like a searchlight but they have a mirror in front of the
>lamp.
>Who can help me?
>
>Eric M.
>Breda
>Netherlands
>

Just random thoughts

2377. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: ".H .H Russell" <koenen1@telusplanet.net>
Message-ID: <37CCCD2D.515B4952@telusplanet.net>
Source record: 67338
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

You're sucking me in, here.
But okay.
The taste.
You snidely mentioned about taste as well as eyesight.
So go read.
Read about what is being done with food.
Never mind the references to the weird stuff.
The site is huge, and has nearly everything.
I have repaired and watched an early RCA color tv, the one with a round crt
in it.
I don't care to banter.
The picture, especially in motion, is superior.
End of communication with Mr. Miles.
Hans

John Miles wrote:

> .H .H Russell wrote:
> >
> > As a matter of fact yes. -To everybody, it did.
> > See
> > www.trufax.org
> > for an elucidation on this outrageous claim.
> > Hans
> >
>
> Well, I certainly found that site enlightening on the matters of "Chakra
> points in the human body, relation to hyperbolic channels," "Gulf War
> Syndrome as a step in global socialism," and the "Takyon capsule of Dr.
> K. Lambrakis," but I was unable to uncover any evidence of the
> superiority of early NTSC color sets to modern high-resolution graphics
> displays. Perhaps you could be a bit more specific?
>
> -- jm
> http://www.qsl.net/ke5fx
>
> ----------
> Note: My E-mail address has been altered to avoid spam
> ----------

2378. Re: Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: Frederic Rible <frederic.rible@ercom.fr>
Message-ID: <37CCDED7.707A146F@ercom.fr>
Source record: 67339

I am working on a I/Q homebrew receiver with DDS and DSP.

Please check http://www.teaser.fr/~frible

Currently, I use this receiver for EME operation. Requirements
are not the same as fo HF radio : dynamic range does need to be
very high because every EME signals are received with similar
power levels.

About phase/amplitude balance, I do not think that it is a major
issue : I believe that it is possible to tweak by software with
a formula like this one :

```
tweak_I = a*I + b*Q
tweak_Q = c*I + d*Q
```

With some trigonometric valuation, (a,b,c,d) can be reduced
to only two coefficients (phase, amplitude) correction.

By listening to a RF generator on several frequencies, and use a
calibration software, you can build a coefficient table. This
table, with proper interpolation, will give coefficients
as a function of rx frequency.

I do not have implemented this yet, and, if I am false, please
let me know before I code in a dead end !

For diagram and source code, be patient : I need some
free time to publish useful informations !

73's Frederic F1OAT.

--
Frederic RIBLE Tel : +33 1 39 46 50 50
ERCOM SA Fax : +33 1 39 46 25 25
13, Avenue Morane-Saulnier Email : frederic.rible@ercom.fr
F-78140 VELIZY Web : http://www.ercom.fr

2379. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: Will White <wcw@uswest.net>
Message-ID: <37CD0B5E.38301BD7@uswest.net>
Source record: 67340
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Tell it to the guy building TRF receivers with 01As. . .

Carl R. Stevenson wrote:

> What are you going to do in a few more years when through-hole
> parts are no longer available? Industry is going to SMT. Soon
> through-hole parts will be as scarce as octal tube sockets and
> Nuvistors ... if you want to build, you're going to have to learn,
> prepare, and adapt.

--
Will White, KD7BFX

to reply, please click this link mailto:wcw@uswest.net

2380. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: Will White <wcw@uswest.net>
Message-ID: <37CD1969.678D63E@uswest.net>
Source record: 67341
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Carl R. Stevenson wrote:

>
> <maddog@io.com> wrote in message news:37c99c3f.18741318@news.io.com...

> > so I won't try to refute the accuracy of your
> > comments, they're probably technically correct. And I'll betcha
> that
> > you do something just for fun in your life, Carl, but apparently
> it's
> > not homebrewing electronics.
>
> Correction ... I don't homebrew obsolete electronics.
>
> > Really, what makes you smile, Carl?
>
> Designing, simulating, implementing, and verifying something like
> an FSK modem which performs within 1 dB of theoretical idea,
> yet consists entirely of gates and has no multi-bit a/d or d/a
> converters :-)
>
> Designing a new radio architecture which outperforms the previous
> one significantly, yet uses fewer discrete parts and costs less to
> build :-)
>
> Having my simulations agree within a dB or so of the measured
> performance after the circuit's built and tested :-)
>
> (starting to get the idea???)

I get the idea, and that is fine. I even believe you, though I have little idea beyond a dim understanding of what you are talking about, technically speaking. I won't deny you your pleasure and satisfaction. Neither will I deny your work, amateur and professional, may have economic and social value at large. It probably does. Just don't attempt to deny me and others who are years behind you, by some combination of preference, talent, and training, our small happiness. Everyone doesn't have to be working on the same projects, with the same goals and methods, do they?

You mentioned relevance and value several times in this thread--Relevance to what? What sort of value? I commend your dedication to innovation and development of radio technology, I do. Clearly it is valuable to you, and such activity has much economic value as well. What I and some others value about hobby radio has little to do with new technology. I have no formal training

or education in engineering, RF or otherwise. Exploring and learning a little science and antique engineering, via technologies that are relatively simple and static, has ultimate value for me. Likewise, exploration of the social history of technology has supreme relevance to my work as a college teacher (of English composition, creative writing, and literature) and as a "literary" writer. Plus, I find it fun. Don't know quite why, don't care to know everything :) Forgive me, all, for even mentioning the term, but this thread rings a bit of the ceaseless CW debates. Can't we all just get along? I won't force CW and simple valve circuits on you, nor claim vague quasi-spiritual benefits accrue from them to all (though you will pardon me if I say that in some small ways both 'antiques' intimate to *me* the esoteric and sublime). What I keep forgetting is that it is a hobby *&%$-it, but for some it is also their actual profession, so that makes us somewhat like two Spaniards--a Catalan and a Castillian-- yelling at one another, each uncomprehending the other, claiming to know the only way to be Spanish.
--
Will White, KD7BFX

to reply, please click this link mailto:wcw@uswest.net

2381. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: Will White <wcw@uswest.net>
Message-ID: <37CD1D42.A470CE31@uswest.net>
Source record: 67342
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

That is still not the same thing as breadboarding a circuit (like a simple DC mono-band receiver, for ex.). You can visualize and conceptualize till you're blue in the face, but especially where fundamental principles or concepts are concerned, there are things only learned well and throughly where a strong element of experience/eperimentation is involved. I suppose that is why there are lab sections along with chemistry lectures, or why you build a prototype before your company invests in production of doohickey n.

Carl R. Stevenson wrote:

>
> Gee, you read a book on VCOs or mixers (or study the sections
> in the ARRL's "Radio Amateur's Handbook." Once you understand
> the funamentals, then you can look at those block diagrams and
> begin to understand how they all work together in that chip to make
> the subsystem that it implements work.

--
Will White, KD7BFX

to reply, please click this link mailto:wcw@uswest.net

2382. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: Will White <wcw@uswest.net>
Message-ID: <37CD2170.13D3BFB6@uswest.net>
Source record: 67343
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

That is right. A survey of the history of technology will demonstrate with frightening clarity how quickly the terms of the deal go from the machine serving people to people serving the machine. It has happened with every significant mechanical or electric/-onic device developed since the optical telescope. The good news is that we can find our own way out of this maze if we want to. I think it has to be an individual effort. I am trying, steadily simplifying my life discarding the trappings that don't hold true value.

Nostalgia, where it is active and thoughtful, isn't really nostlagia or 'retro' at all. For many of us, I see a keen interest in morse and simple, mainly valve technology as a technique in applying (self-medicating as it were) the method of escaping a future foisted upon us by taking the side-door out through the past. . .By reducing and simplifying our means, the *how* of our lives, we can clarify and have the real opportunity to choose the *what*--what we do, where we live, who is around us. For me, boatanchoring and CW-only (and 5% AM, that mostly 10- and 2-meter) is fun anyway, but shows me again and again how little I need, and how much of what I do with my life, how much of what I have is truly disposable. Take out the trash and have a nice life!

.H .H Russell wrote:
>
> Yes.
> I remember the good old days, and have hung on to them.
> I also explore these great new days.
> What I have noticed, is that information was more readily available on the
> Internet three years ago, in certain specialized areas.
> I have also noticed, that control is being removed from the user.
>
> You get up, you go to work, you go home, go to bed.
>
> Then you pay your bills, and buy some throwaway "fun".
> Comes the depression, us old dinosaurs :) will still be having fun, and be
> capable in the real world anytime anywhere, with stuff that's lying about.
>
> So we have the best of both the real world, and the 'real' world as it is
> perceived by the money-pumpers.
> A man never finds time for anything, he must make time.**********

--
Will White, KD7BFX

to reply, please click this link mailto:wcw@uswest.net

2383. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: Will White <wcw@uswest.net>
Message-ID: <37CD277B.895A50EB@uswest.net>
Source record: 67344
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Ken,

Here are a couple of parts sources to get you started. These outfits have the added benefit of stocking quite a few books on radio--history and technical.

Name says it all: http://www.tubesandmore.com/

Air variables: http://www.cardwellcondenser.com/

Surplus goodies and parts: http://www.fairradio.com/

Tubes, sockets, etc.: http://www.electron-valve.com/

Coils: http://www.bwantennas.com/coilcat.htm

New and NOS parts, all types: http://www.oselectronics.com/index.htm

Transformers: http://www.pwdahl.com/

Crystals: http://www.icmfg.com/

Ferrites: http://www.bytemark.com/amidon/

A list of more sources: http://www.repairfaq.org/filipg/LINK F_mail_order4.html

New parts, a lot of hard to find types, cheap: http://www.fix.net/dans.html

Lots of amazing parts and surplus: http://www.surplussales.com/

You will definitely find the tuning cap and sockets you seek at *several* of these places. You'll also find a bunch of good books, esp. at AES and Ocean State. Most of these outfits still have print catalogs free for the asking (via email if you like). All of them have links to more sites, of course. Good luck, and happy homebrewing!

Ken Knapp wrote:
>
> Hi!
>
> Can you recommend any good books on Major Armstrong? I for one would enjoy
> reading about him.
>
> The biggest problem I have with building some of the older circuits is parts
> availability. And I once had an electronics store. Tubes I have, sockets I
> don't. I have info on building an Ocean Hopper, but lack a source of the
> tuning capacitor. I do, however, have a repro front panel which I got from
> someone I read about in "CQ" several years ago.
>

> Ken Knapp, N3GBW

--
Will White, KD7BFX

to reply, please click this link mailto:wcw@uswest.net

2384. Ref Osc problem in FT-726R/6m

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: Scott Townley <nx7u@primenet.com>
Message-ID: <37CD464A.15123182@primenet.com>
Source record: 67345
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

<Exposing ignorance>

The reference oscillator in my FT-726R 6m unit PLL circuit (if you care, 6.4MHz xtal osc w/ 2SC945P transistor driving a divide-by-64 CMOS chip) doesn't have enough voltage output to drive the divider. Known working modules generate roughly 3Vp-p into the divider; this one is generating 0.3Vp-p...not enough to trigger the CMOS gates.

The osc circuit is very simple, XTAL is series with a tuning cap and hanging off the base of the transistor; base biased with resistive divider; emitter (output) AC-coupled to divider and a 3.9kohm emitter feedback resistor to ground.

One other symptom is that the DC emitter voltage is significantly lower than specified/measured on a working unit (broken is 3.5V/3.9k for an Ic=0.9mA; correct is 4.9V/3.9k for an Ic=1.25mA). Collector and base voltages are spot-on (should be since the collector is the power supply bus rail and the base is just divided down from the collector...common-emitter configuration).

How would one increase the amplitude of the osc to the correct level? The freq is right...I've replaced the transistor on general principles but that changed nothing. Weak crystal?? Lower the emitter resistor value to get more Ic flowing?
<Covering up now>
Thanks in advance!
--
Scott Townley
Gilbert, AZ
nx7u@arrl.net
-or-
nx7u@primenet.com

2385. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: lpdavies@bc.seflin.org
Message-ID: <7qjgof$mkm@nntp.seflin.org>
Source record: 67346
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

```
: That is still not the same thing as breadboarding a circuit (like a simple
: mono-band receiver, for ex.). You can visualize and conceptualize till you

For me, part of it is a matter
of scale. Running me flingers
along the wires, I "see" where
that cap or diode does its job.
It's oddly like being a human
signal tracer... "Here i am,
AF, RF, yup, here's where the
DC bails,..." It may have to do
with (forgive me, Pestalozzi,)
"learning styles."

I can link-up tinker-toy blocks
of IC sub-units, but something
about it is not satisfying in
the same way. We all adapt to
the extent that we must, but I
feel the same vague unease when
grabbing a chunk of code from
a software library.

GL
--
Paul W2SYF/4 Ft Lauderdale
"Heisenberg may have slept here... "
Leslie Paul Davies
lpdavies@bc.seflin.org
```

2386. Re: Rubber Duck for 2.4 GHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: Jpos <jpos@mobilemark.com>
Message-ID: <Hgcz3.4852$6k7.904@nntp0.chicago.il.ameritech.net>
Source record: 67347
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Look at www.Mobilemark.com, we manufature antennas like this.

Jerry N9DKQ

G. Marconi wrote in message <37ccacfc.3244675@news.fast.net>...
>I am modifying one of the Wavecom Jr. transmitters for use as a hat
>cam and I'd like to put a flexible rubber duck antenna on it. Any
>suggestions on where to find such a thing with say a BNC on it? I'd
>seen catalogs of this "spy" equipment where they do the same thing,
>and they have rubber duck antennas.... help.

2387. Re: Source for Plans - 30 - 50 amp Pwr Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: Grif <kgriffit@wolfenet.com>
Message-ID: <37CD4900.767D@wolfenet.com>
Source record: 67348

Look in the handbook in the late 80's or so for a ps that used 3055's in the output. Seems like they used 4 or 5 of them, but had enough drive and control stuff to add to really easy. I think that one used a darlington pair to drive the base of the series pass array, with a motorola single chip doing duty as the sense/drive for the darlington. They also did a nice job of descirbing the current balance and drive requirments along with the issues of thermal conduction and voltage drop.

RJ Scott wrote:
>
> I have an old stereo with quite a hefty Transformer in it that I think I
> want to use as a basis for a power supply (accesories getting a bit
> much). Ive looked for a FAQ before and dont seem to find one. I have
> Several ARRL Handbooks, but I just wonder if anyone has a neat 30 - 50
> amp 12v supply schematics available.

2388. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <37CD4A16.BDF57EFA@midwestmicro-tek.com>
Source record: 67349
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

.

> Vacuum tubes also exhibit a transfer speed in excess of 80 times that of a
> semi-conductor.
>

Ummmmmm..... Don't get me wrong, I agree with a lot of what you said, or at least what I think you said. But having done my masters paper on the break down of magnetic domains in high saturation metels under large EM pulses I had to work a lot with solid state theory and k-space transfer. Just exactly what to you mean by "80 times" "transfer rate"? Whether your talking about electron transfer in the valance band or end point emmision you've still got electrons traveling at about 70 times the speed of light. Now I realize that differences in packet speed and particle speed can boost transfer to over 1.6 times the speed of light (free space) but I have a problem with 70 times SofL. Now if you are refering to "Hot Electron" theory then your transfer gain can be increased due to the "excitation pool" but only by a few femto seconds when compared to most semi conductors. This still leaves you far short of "80 times". As I said, I may be missing what you are refering too. If so, could you elaberate on the theory?
Rick

2389. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <37CD53D7.CD75C98A@midwestmicro-tek.com>
Source record: 67350
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Will White wrote:

> Carl R. Stevenson wrote:
>
> >
> > <maddog@io.com> wrote in message news:37c99c3f.18741318@news.io.com...
>
>

{lot's of good stuff from Will snipped}

Thank's Will, you've put into words pretty much how I feel. I've been designing embbeded computers for 12 years now but I am a novice when it comes to radio (in fact I'm still waiting for my novice licence to come from the FCC). Why novice and not technician? I prefere to work code. No "nastalga" here, I just prefer code. I'm teaching myself by building tube receivers and transmitters (and asking a lot of questions on this NG). I work all day with ICs. CPUs, DSPs, ADs, DAs, DSS, 74s and 40s, Switchers and Mixers, bandanglers and ventuslers. If it's got letters instead of a name, I know how it works and I can program it.

So why work with tubes? Well besides the fact that I had a lot of them laying around from when I was a kid I like the simplicity of tubes and the fact that I can see the electrons "move". I am not at a point where I can design a packet xcvr yet, I need to build my fundamental knowlege and skills. When I looked into building my own stuff I tried both solid state and hollow state. Tubes offered, for me, an easier to understand approach with a more "hands on" feel. Any one who say's you cannot learn from "obsolete" technology has obviously never felt the thrill of hearing code coming out of a simple one tube regeny that you built yourself for the first time. My regeny didn't work at first and I had to dig into the theory and specs on the tube and the circuit, with a lot of study and even more help from the guys on this NG (they are helping with my transmitter, very relevant to how the RX works). I was able to experience that thrill a week ago. I could have taken the solid state approach and probably would have learned as much, but maybe not.

Some day after I've learned a lot more and worked for my General Class licence I just might build that Packet tranceiver. Will I build it from tubes? Probably not, but what a challange it would be. And I should hope that I don't have a self appointed techno-task master berating me for my choice of technologies. After all, it is my choice.

Rick

> Will White, KD7BFX
>

> to reply, please click this link mailto:wcw@uswest.net

2390. Re: Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <37CD42D5.76DC@pop.removethistomailme.net>
Source record: 67351

Frederic Rible wrote:
>
> I am working on a I/Q homebrew receiver with DDS and DSP.
>
> Please check http://www.teaser.fr/~frible
>
> Currently, I use this receiver for EME operation. Requirements
> are not the same as fo HF radio : dynamic range does need to be
> very high because every EME signals are received with similar
> power levels.
>
> About phase/amplitude balance, I do not think that it is a major
> issue : I believe that it is possible to tweak by software with
> a formula like this one :
>
> tweak_I = a*I + b*Q
> tweak_Q = c*I + d*Q
>
> With some trigonometric valuation, (a,b,c,d) can be reduced
> to only two coefficients (phase, amplitude) correction.
>
> By listening to a RF generator on several frequencies, and use a
> calibration software, you can build a coefficient table. This
> table, with proper interpolation, will give coefficients
> as a function of rx frequency.

I'm pretty sure that's what the Rockwell/Collins 95S-1 does
(http://www.collins.rockwell.com/government-systems/products/pdfs/comm/95s.pdf).
It doesn't even attempt to guarantee good I/Q phasing across its
synthesizer's 2 GHz operating range, but it does apply mathematical
compensation in the DSP, with excellent results. It'd be interesting if
the quadrature correction technique (which is undocumented in the 95S-1
manual) really does turn out to be as simple as that!

-- jm
http://www.qsl.net/ke5fx

Note: My E-mail address has been altered to avoid spam

2391. Re: Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7qjrkmvta1@nnrp1.deja.com>
Source record: 67352

In article <37CD42D5.76DC@pop.removethistomailme.net>,
jmiles@pop.removethistomailme.net wrote:

> (snip...)
> I'm pretty sure that's what the Rockwell/Collins 95S-1 does
> (http://www.collins.rockwell.com/government-
systems/products/pdfs/comm/95s.pdf).
> It doesn't even attempt to guarantee good I/Q phasing across its
> synthesizer's 2 GHz operating range, but it does apply mathematical
> compensation in the DSP, with excellent results. It'd be interesting
if
> the quadrature correction technique (which is undocumented in the 95S-
1
> manual) really does turn out to be as simple as that!

It's theoretically sufficient to use linear combinations of the
proto-I and proto-Q signals, and it's probably sufficient to do
so in practice too.

S53MV's zero-IF/Weaver radios do an analogue version of this.

Hmmm...
--
Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte
Satellite: VA3SFL on UO-22, KO-25

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2392. Re: HELP! Tube Guru's Advice Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <37CD5DA9.2DACACCC@midwestmicro-tek.com>
Source record: 67353

Okay, it's been a while since I posted any results but I've been busy. Also after spending an hour here and a couple of hour there on the transmitter I had thought that I was on my way to figuring it all out. I was at the point were, after trimming the tuning coil and working out the kinks with the loading and tuning caps that I was able to get about 25-30 watts (@20 watts on 40 meters) out to my dummy load. Then one night just for the heck of it decided to get the best responce dialed in using the dummy and then switch back to the light bulb and see what happend. The results were quite spectacular, The light burned as bright as any 100 watt light and the meter was pegged (100 watt pyrimid meter). Well needless to say this got me thinking about what one of the posters (I think it was Jim) who said something about overdriving the input of the 1625. When trying to get the most output to the dummy load I had routinely been turning the drive capaciter up to get those 25 watts. So I looked at the output of the driver on the built in meter and saw that I was driving about 8 mA out to the 1625. Just on a wild guess I'd say that that was too much. So I left the light bulb plugged in and retuned by the instructions with the bulb instead of the dummy. Using 3 mA drive and tuning for best dip I was getting about 80 watts on my meter and measuring the voltage at the antenna I was seeing about 850v pp. Another guess but I'd say this was too high for a rig rated at 75watts input. After thinking about it I came up with the idea that even though the light bulb was inaccurate in its loading effects, the dummy and/or my watt meter where also likly flawed. I was showing way too much with the bulb but way to little with the dummy. So I decided to build a new dummy based on a different design and use a watt meter barrowed from the local University. Well, even the best laid plans of mice and men go astray. Last night when I sat down to work out the relevant parameters as far as watts at dummy and bulb vs voltage output vs driver current and such the transmitter started acting strangly. Watts out started falling off and I could swear I heard a metalic "BING" noise coming from somewhere. Performance continued to fall off untill I got nothing at all. I tried changing out the 1625 and the 12BY7 and the OC3 and OD3 VR tubes but nothing help. At present this is what I'm seeing.

1) I still get the driver current from the 12BY7 to work correctly so I know I'm driving the 1625.

2) When I switch from TUNE to OP the OC3 tube stops glowing. The OD3 and the OC3 are in series with each other with the OD3 being grounded. When the mode switch is in the TUNE position I get 270v out of the OD3, which drives the 12BY7 and 375v out of the OC3 which drives the 1625. When I switch to OP I get 440v out of the OD3 and 450v out of the OC3.

3) If I key the circuit when I have the mode switch in the OP position the OC3 will start to glow again and the volages fall off to a little below the

TUNE posision readings.Switching to the 1625 plate reading on the internal meter shows that I'm getting about 120mA from the plate but no amount of fiddling with the tuning or load caps causes any effect, let alone a "dip" of any kind.

Okay guys, what did I do now. I'm going to look at it all tonight, maybe just a short or open line somewhere?

Thanks for the help.

Rick

Rick Haub wrote:

> I finished building a CW, 75 watt, 80m transmitter last night. I uses
> the 1625 final and it is crystal controlled at 3.710MHz. I got the
> design from the 1967 ARRL Radio Amatuer Handbook. I've never built a
> tranmitter before and I have some questions about its operation.
>
> After turning it on and then turning it off and installing the VR tubes
> so it would work properly then turning it back on again, I went through
> the tuning procedure described in the article. I used a 40 watt light
> bulb for the dummy antenna. After tuning around a bit I found that I
> could get the light bulb to light, but very dimmly. I guess that I had
> always assumed that the light should be very brite, is something amiss?
>
> I attached my oscilloscope to the antenna output and found that thier
> was about 80 volts pp on the output signal and that it was at about
> 4.44MHz. After attaching the o-scope probe I also noted that when I
> keyed that transmitter it turned my color TV into a black and white TV
> with lots of fuzz so obviously it is transmitting something.
>
> I think I have two probelms but they are probaly from the same error.
> First, the voltage output may be alright but maybe I'm not getting
> enough current? Second, how am I pulling a 3.710MHz crystal to 4.44MHz?
> Any help would be great.
>
> Rick

2393. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: "David M. Brodbeck" <dmbrodbe@mtu.edu>
Message-ID: <7qjpph$aj8$1@campus1.mtu.edu>
Source record: 67354
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

In rec.radio.shortwave Will White <wcw@uswest.net> wrote:
> That is right. A survey of the history of technology will demonstrate with
> frightening clarity how quickly the terms of the deal go from the machine
> serving people to people serving the machine. It has happened with every
> significant mechanical or electric/-onic device developed since the optical
> telescope. The good news is that we can find our own way out of this maze if
> we want to. I think it has to be an individual effort. I am trying, steadily
> simplifying my life discarding the trappings that don't hold true value.

--> It works both ways. Modern conveniences become necessities if you let
them, it's true. But that isn't necessarily a consequence of their design.

Technologies, I think, tend to go through four stages. Stage 1 is when
it's experimental and hardly works. For cars, this would be the very
early horseless carriages that were basically toys for the rich. Stage 2
is when the technology works reasonably well, but with a lot of effort.
For cars, this would be the Model T stage of development -- reasonably
reliable transportation, but you had to fix it often, hand crank it, and
adjust your own mixture and spark advance. Stage 3 is when the technology
reaches the point where it mostly takes care of itself, freeing the user
from many of the details. Cars probably reached that point in the 50's
or so, and have been being incrementally refined in this area ever since.
Stage 4 usually overlaps with 3, and is when unnecessary frills start being
added. A modern luxury SUV with shift-on-the-fly 4WD, active suspension,
power everything, and a 6-CD changer is a good example of Stage 4.

Personally, given the choice, I prefer to stick with stuff from Stage 3.
Cars I can fix in my driveway, radios that still came with schematics,
those kinds of things.

David Brodbeck, N8SRE dmbrodbe@mtu.edu
finger gull@cyberspace.org for my public key block.

"The hills are alive, with the sound of engineered teeny-bopper hip-hop!"
-- Nefaria

2394. RS BTX-120 battery question??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: Tim Shearer <timothy_shearer@mk.com>
Message-ID: <37CD6000.11C138D5@mk.com>
Source record: 67355
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I have several Radio Shack business band radios model BTX-120.
The battery packs are just like the ham rig HTX-202 and 404, and
also the Icom 2AT. The packs are 8.4 volt.

Does anyone know if this radio can handle up to 12 volts?

The BTX-120 is like the 121, 122 and 123 also.

Tim

2395. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: ".H .H Russell" <koenen1@telusplanet.net>
Message-ID: <37CD6E30.168B3ABE@telusplanet.net>
Source record: 67356
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Oh, alright, then.
You are using the speed of light as a base. and multiplying that.
You think that the speed of energy in magnetic circuits and solid state devices is happening at the speed of light constant, which is just not so.

The energy/effect transfer in a vacuum tube is closer to the speed of light, and really we should say that the transfer is 70 times slower in solid state.

There is, in quantum physics a hint, and scalar physics, an intriguing effect where the "projectile" strikes the target halfway across the universe, just BEFORE the projectile leaves the source.

Now thes peed of light, as you know, has been assigned a constant value.
Is it accurate and precise?
Under all circumstances?
No? Then it is not absolute.
Furthermore, what is light? Just what we can see, or the entire electromagnetic spectrum?

It has been assigned to the latter rather arbitrarily.
You can do the math to see that a sound wave travels slower than a radio wave which travels slower than infra-red light, which travels slower than cosmic rays and so on BEYOND the energies listed.

Light traveling through a medium will have a different velocity than that of light traveling through a different medium.
Same thing all the way down the scale to sound waves, and up the scale to gravity waves which are faster travelers than light or electrons.

Hans

Rick Haub wrote:

> .
>
> > Vacuum tubes also exhibit a transfer speed in excess of 80 times that of a
> > semi-conductor.
> >
>
> Ummmmmm..... Don't get me wrong, I agree with a lot of what you said, or at
> least what I think you said. But having done my masters paper on the break down
> of magnetic domains in high saturation metels under large EM pulses I had to
> work a lot with solid state theory and k-space transfer. Just exactly what to
> you mean by "80 times" "transfer rate"? Whether your talking about electron
> transfer in the valance band or end point emmision you've still got electrons
> traveling at about 70 times the speed of light. Now I realize that differences

> in packet speed and particle speed can boost transfer to over 1.6 times the
> speed of light (free space) but I have a problem with 70 times SofL. Now if you
> are refering to "Hot Electron" theory then your transfer gain can be increased
> due to the "excitation pool" but only by a few femto seconds when compared to
> most semi conductors. This still leaves you far short of "80 times". As I said,
> I may be missing what you are refering too. If so, could you elaberate on the
> theory?
> Rick

2396. Re: Public apology to readers of this thread

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <37CD7308.2B53@ixpres.com>
Source record: 67357
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

> Sorry, from reading these responses I see I must've forgotten the
> all-important HTML <sarcasm> ... </sarcasm> tags yesterday. :-)
>
> It appears that my attempt to beat Carl at his own deprecation game has
> backfired!
>
> -- jm KE5FX
>
> --
> Note: My E-mail address has been altered to avoid spam
> --

OOPS!

Y'mean, I over-reacted(!). I hate it when that happens <:)

73,
Don, W6JL

2397. Microwave Oven Transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: mradtke@oak.az05.bull.com
Message-ID: <FHE9GK.HnK@sundevil.az05.bull.com>
Source record: 67358

Hello,

I have been scrapping a few microwave ovens. It seems to me that the power transformers might be useful for folks building linears. I haven't measured the voltage, but it looks like is must be about 2KV.

Any thoughts?

Thanks,
Mike WA7ZPU

2398. Re: schematic for Wilson WE244

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.990901122642.7876G-100000@oso.slonet.org>
Source record: 67359
Cross-posted to:
alt.ham-radio.marketplace,alt.radio.cb.skip,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.cb,rec.radio.swap

Needed, a schematic for the 24 channel, 2 meter FM transceiver
model WE244. Can anyone help? Cliff K7RR

2399. W7PUA DSP Tranciever

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: Derek K7XD <dhutter@pacifier.com>
Message-ID: <37cd8cca.0@news.pacifier.com>
Source record: 67360

I am posting this to the group at the rquest of W7PUA.
Bob can reached at boblark@proaxis.com>

Happy building,

Derek K7XD

> To DSP-10 Interest Group:
>
> You have expressed interest in my DSP-Based Transceiver Construction
project.
>
> The first part of the construction article was in Sept 1999 QST and the
> remainder of the basic information is scheduled for the October and
November
> issues. If you don't have the September issue, I urge you to hunt one
down!
>
> I have placed a big pile of support info (but, not the article) on a new
Web
> Page (and associated links):
>
> http://www.proaxis.com/~boblark/dsp10.htm
>
> and I invite you to look it over, get ready to put one together and
download
> the software. This page will also steer you to all future notes and data
on
> the project. As I receive feedback from readers/users it will go to this
> page, ASAP.
>
> The current GNOME microwave page, www.ao.com/~gnome, will continue for
other
> projects, but the DSP-10 project will be at the URL above. Thanks to
> Alpha-Omega Computers for the GNOME page.
>
> As it stands, the DSP-10 is an all-mode 2 meter QRP transceiver with built
> in spectrum analyzer, etc. It is fine for use in this manner, but it is
> taylored for weak signal operation at VHF through microwave frequencies.
If
> this is your interest, be sure to go look at it. In addition, it will
soon
> be updated to include some really interesting special modes, other than
CW,
> SSB and FM, that are intended for communicationg well below the noise, as

we
> usually think of it.
>
> NOTE: An updated Audio Processor can be run, before the RF hardware is
> completed. This is on the Web page and includes many new weak signal
items,
> such as Sun/Moon tracking data and Binaural audio. This needs the Analog
> Devices EZ-KIT Lite, but is a great way to get one's feet wet!
>
> Enough here. Thanks to all for their comments and help. Send me email
and
> let me know about your experiences with this project.
>
> 73, Bob Larkin, W7PUA
>
> 2
>
>

2400. Re: HELP! Tube Guru's Advice Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: Mike Silva <mjsilva@jps.net>
Message-ID: <Jigz3.193$313.66210@news.wenet.net>
Source record: 67361

Holy Hotfoot, Batman! Those are some bizarre numbers, Rick! First off, the Wattmeter is designed for a given impedance, which the lightbulb no doubt does not come close to matching. That extremely high output voltage (850 P-P) also indicates a load very far from 50+j0.

Regarding the grid current, 8 mA is way high for a 1625, and will probably harm the tube. The 3 mA figure is a good one to use.

Now, about those VR tube voltages...very strange! There's no way I can imagine that you can get a voltage higher than the VR tube design voltage, assuming good tubes. Are you sure the 0D3 cathode is at ground? You should always get 150V across that tube. If the voltage is less it's because you're drawing too much current through the dropping resistor (the tube needs about 5 mA minimum through it). If the voltage is more than 150 something is very very wrong (bad or wrong tube, wrong meter scale, not really measuring voltage across the tube, RF getting into meter, ...?). The voltage on the cathode of the 0C3 should be the same as at the plate of the 0D3, and the voltage at the plate of the 0C3 should be about 255 (150 + 105). Since both voltages rise when you reduce the load, it really sounds like your 0D3 or related wiring is bad or wrong. Be sure your design current through the VR tubes is within limits (30 mA max). Don't assume anything at this point -- measure the voltages at each VR pin (first with the 12BY7 and 1625 removed) to confirm that things are right. Then see what happens when you put the other tubes back in (12BY7 first, then 1625).

That's about all I can think of at the moment. Be interesting to hear what you find.

73,
Mike, KK6GM

Rick Haub wrote in message <37CD5DA9.2DACACCC@midwestmicro-tek.com>...
>Okay, it's been a while since I posted any results but I've been busy. Also
>after spending an hour here and a couple of hour there on the transmitter I
>had thought that I was on my way to figuring it all out. I was at the point
>were, after trimming the tuning coil and working out the kinks with the
>loading and tuning caps that I was able to get about 25-30 watts (@20 watts
>on 40 meters) out to my dummy load. Then one night just for the heck of it
>decided to get the best responce dialed in using the dummy and then switch
>back to the light bulb and see what happend. The results were quite
>spectacular, The light burned as bright as any 100 watt light and the meter
>was pegged (100 watt pyrimid meter). Well needless to say this got me
>thinking about what one of the posters (I think it was Jim) who said
>something about overdriving the input of the 1625. When trying to get the
>most output to the dummy load I had routinely been turning the drive
>capaciter up to get those 25 watts. So I looked at the output of the driver

>on the built in meter and saw that I was driving about 8 mA out to the
>1625. Just on a wild guess I'd say that that was too much. So I left the
>light bulb plugged in and retuned by the instructions with the bulb instead
>of the dummy. Using 3 mA drive and tuning for best dip I was getting about
>80 watts on my meter and measuring the voltage at the antenna I was seeing
>about 850v pp. Another guess but I'd say this was too high for a rig rated
>at 75watts input. After thinking about it I came up with the idea that even
>though the light bulb was inaccurate in its loading effects, the dummy
>and/or my watt meter where also likly flawed. I was showing way too much
>with the bulb but way to little with the dummy. So I decided to build a new
>dummy based on a different design and use a watt meter barrowed from the
>local University. Well, even the best laid plans of mice and men go astray.
>Last night when I sat down to work out the relevant parameters as far as
>watts at dummy and bulb vs voltage output vs driver current and such the
>transmitter started acting strangly. Watts out started falling off and I
>could swear I heard a metalic "BING" noise coming from somewhere.
>Performance continued to fall off untill I got nothing at all. I tried
>changing out the 1625 and the 12BY7 and the OC3 and OD3 VR tubes but
>nothing help. At present this is what I'm seeing.
>
>1) I still get the driver current from the 12BY7 to work correctly so I
>know I'm driving the 1625.
>
>2) When I switch from TUNE to OP the OC3 tube stops glowing. The OD3 and
>the OC3 are in series with each other with the OD3 being grounded. When the
>mode switch is in the TUNE position I get 270v out of the OD3, which drives
>the 12BY7 and 375v out of the OC3 which drives the 1625. When I switch to
>OP I get 440v out of the OD3 and 450v out of the OC3.
>
>3) If I key the circuit when I have the mode switch in the OP position the
>OC3 will start to glow again and the volages fall off to a little below the
>TUNE posision readings.Switching to the 1625 plate reading on the internal
>meter shows that I'm getting about 120mA from the plate but no amount of
>fiddling with the tuning or load caps causes any effect, let alone a "dip"
>of any kind.
>
>Okay guys, what did I do now. I'm going to look at it all tonight, maybe
>just a short or open line somewhere?
>
>Thanks for the help.
>
>Rick

2401. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <37CD9604.257E82D3@midwestmicro-tek.com>
Source record: 67362
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

.H .H Russell wrote:

> Oh, alright, then.
> You are using the speed of light as a base. and multiplying that.
> You think that the speed of energy in magnetic circuits and solid state devices is
> happening at the speed of light constant, which is just not so.

Ahh..... no. I've done enough k-space calculations to know that electron or energy transfers do not take place at the speed of light.

>
>
> The energy/effect transfer in a vacuum tube is closer to the speed of light, and
> really we should say that the transfer is 70 times slower in solid state.
>

I'm really going to have to see the numbers on this. I'll do the calculations for the transfer speeds for a standard doped NPN transister substrait if you'll do the calculations for the vacuum tube. By which I mean I'll do the electron transfer rate in the valance band. Then we can compare math and numbers.

> There is, in quantum physics a hint, and scalar physics, an intriguing effect where
> the "projectile" strikes the target halfway across the universe, just BEFORE the
> projectile leaves the source.
>

Are you talking about Bell's theorum? The jury is still out on that. While getting my masters in physics, I had a mentor, Dr. George Duffy, who was heavily involved with Bell's theorum and published several papers on it. Besides, that theorum or any other really has nothing to do with calculating electron transfer rates in semiconductors or tubes.

> Now thes peed of light, as you know, has been assigned a constant value.
> Is it accurate and precise?
> Under all circumstances?

If you are refering to the Heisenberg uncertainty principle then of course precise measurment can never be obtained.

> No? Then it is not absolute.

Hmmmmm..... Yes it is an absolute if you assume free space and the engineering view that at some point you have to accept your numbers and use them.

> Furthermore, what is light? Just what we can see, or the entire electromagnetic
> spectrum?
>

> It has been assigned to the latter rather arbitrarily.
> You can do the math to see that a sound wave travels slower than a radio wave which
> travels slower than infra-red light, which travels slower than cosmic rays and so
> on BEYOND the energies listed.
>

This is only true for EM waves traveling in some medium and not free space. When traveling in free space all EM waves regardless of wavelength travel at C.

> Light traveling through a medium will have a different velocity than that of light
> traveling through a different medium.

True

> Same thing all the way down the scale to sound waves, and up the scale to gravity
> waves which are faster travelers than light or electrons.
>

I'm not sure what you are trying to say here. Sound waves are not EM in origin and there for you cannot compare thier propagation to EM or, if you prefer, light waves. The same holds true for gravity waves. They are not EM in origin either and as for the rate of propagation there is much debate by Roseburg, Wheeler, Thorn and others as to whether gravity waves propagate at all or if they exist within the frame work of the universe as part of the so called "frabric". In effect sound and gravity do not exist on the same "scale" as you put it.

As for electrons they enjoy the benifit of the duality. Are they particles or are they waves. The answere is, of course, both. An electron as a paticle can stand perfectly still as Millikin's oil drop shows. When electrons are accelerated as they are in a cyclotron they will show wave like properties but of course they can never get away from there particle nature as (if I am not mistaken) m=mo/(1-v^2/c^2)^1/2. As you can see, as v approches c, mass approches infinity. And in fact any one involved with electron acceleration in a cyclotron can tell you that as the elctrons approach @ 1/10 c they must begin to take the extra mass into account and increase the B field to the Dees to compensate not just for the velocity but for the mass increase as well. So again as you can see electrons cannot be treeted like EM waves and therefor they too do not excist on the same "scale".

However this does bring me back to my original observation. I really need to see the math as to how energy transfer within a tube is 80 times faster than in a semi conductor. Just so there is no ambiguity here I'm going to calculate the time it takes for electron flow to start out one end of a semi conductor (doped silicon) when an EMF is applied to the other end. That will be my "speed of emission" for lack of a better term. You can calculate the "speed of emission" for a tube then we'll compare math and see if energy transfer is really 80 times faster. Is this what you have in mind for energy/effect transfer or where you thinking of something else?

Rick

> Hans
>
> Rick Haub wrote:
>

> > .
> >
> > > Vacuum tubes also exhibit a transfer speed in excess of 80 times that of a
> > > semi-conductor.
> > >
> >
> > Ummmmmm..... Don't get me wrong, I agree with a lot of what you said, or at
> > least what I think you said. But having done my masters paper on the break down
> > of magnetic domains in high saturation metels under large EM pulses I had to
> > work a lot with solid state theory and k-space transfer. Just exactly what to
> > you mean by "80 times" "transfer rate"? Whether your talking about electron
> > transfer in the valance band or end point emmision you've still got electrons
> > traveling at about 70 times the speed of light. Now I realize that differences
> > in packet speed and particle speed can boost transfer to over 1.6 times the
> > speed of light (free space) but I have a problem with 70 times SofL. Now if you
> > are refering to "Hot Electron" theory then your transfer gain can be increased
> > due to the "excitation pool" but only by a few femto seconds when compared to
> > most semi conductors. This still leaves you far short of "80 times". As I said,
> > I may be missing what you are refering too. If so, could you elaberate on the
> > theory?
> > Rick

2402. Favorite tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: stoskopf@tri.NET
Message-ID: <37CD9FBE.D16DAF3E@tri.net>
Source record: 67363

20 years ago at CSVHF in Oklahoma there was a talk of putting an appropriate length of pipe tightly around the anode of a 4CX250, filling it with water and simply letting it boil out for cooling. Worked. The EIMAC crowd there was impressed!

N0UU

2403. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19990901005655704 32@zetnet.co.uk>
Source record: 67364

> These days the kids:
> a) Have a lot more interesting things to choose to spend their
> free time on.
> b) A lot less free time. ....

.................probably more free time ,but not for a dedicated hobby !

Frank , GM0CSZ / KN6WH

Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland UK
e-mail : gm0csz.kn6wh@ukrs.org

2404. Re: HELP! Tube Guru's Advice Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <37CDA032.262196F3@midwestmicro-tek.com>
Source record: 67365

A short but important P.S. here. I bought my 1625 and some other tubes from I *thought* Tubes and More or Antique Radio Supply out of I beleive Tempe Arizona. That was incorrect. I have since thrown away all the paper work but I bought them from a guy named Dave in I think New Hampshire or Vermont. He has a little tube buisness up there and he has a web page. I can't think of his buisness's name and I didn't bookmark his website but he was very helpful in getting me the tubes I needed and at a good price AND I owe him $9. I'd really like to get that money to him and I need to order more tubes. Does any one know who I'm talking about and can any one get me an address or web site? Many thanks to any one who can help.

Rick

2405. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: ".H .H Russell" <koenen1@telusplanet.net>
Message-ID: <37CDB31F.54A3555B@telusplanet.net>
Source record: 67366
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Rick Haub wrote:

> I'm really going to have to see the numbers on this. I'll do the calculations for the
> transfer speeds for a standard doped NPN transister substrait if you'll do the
> calculations for the vacuum tube. By which I mean I'll do the electron transfer rate in
> the valance band. Then we can compare math and numbers.

I really can't do the math anymore.I would look at a near vacuum, the charge attraction, and thermionic properties.
A vacuum would seem to be, under these circumstances, a clear path.
Any SEMIconductor would have resistive and capacitive properties causing a delay effect, I imagine.
Sort of like a luminance delay in television? It is needed because the chroma signals would not align with the b/w image due to delay.

>
>
> > There is, in quantum physics a hint, and scalar physics, an intriguing effect where
> > the "projectile" strikes the target halfway across the universe, just BEFORE the
> > projectile leaves the source.
> >
>
> Are you talking about Bell's theorum? The jury is still out on that. While getting my
> masters in physics, I had a mentor, Dr. George Duffy, who was heavily involved with
> Bell's theorum and published several papers on it. Besides, that theorum or any other
> really has nothing to do with calculating electron transfer rates in semiconductors or
> tubes.

That's true except it was used to show that there are more things possible than the layman would assume. I'm glad you have had the interest to pursue these things.Try to look for how it could work.
Try to find what the limiting factors are in mundane calculus.
Again off-topic, but the attractive force leading to acceleration is greater between a large mass and a constant, than a small mass and a constant.
This is only to show that the old line of thought and the usual formulae will always yield the confirmation they were designed for.

If you are referring to the Heisenberg uncertainty principle then of course precise

> measurment can never be obtained.

But I mean further to point out that there is a difference in propagation between various wavelengths, which appears to refuted below.

>
>

> > No? Then it is not absolute.
>
> Hmmmmm..... Yes it is an absolute if you assume free space and the engineering view
> that at some point you have to accept your numbers and use them.

So let's assume something else, and assign values which pertain specifically to each entity being considered.Constants have to be watched. And I think that possibly you might discover the key in the area of new technology, if you can differentiate between light and 'light', light and supersonics, the latter of which is both propagated physically and electromagnetically.
Just put a piece of wire on your signal generator, and approach your hearing high threshold.
There is a window in which you will hear the wire, without a sonic transducer.
But enfin.

This is only true for EM waves traveling in some medium and not free space. When

> traveling in free space all EM waves regardless of wavelength travel at C.

Check this out. In the entire known spectrum of wavelengths, at what clearly defined point does a radio wave become a sound wave?

>
>
> > Light traveling through a medium will have a different velocity than that of light
> > traveling through a different medium.
>
> True

So the same signal traveling through the vacuum of a tube, travels what- faster than through a semi-conductor?A superconductor, yes. The speed may well be higher.

I'm not sure what you are trying to say here. Sound waves are not EM in origin

Okay. I wind a huge coil with an impedance of four to eight Ohms.
I hook it up to a hundred Watt amplifier, and run 800 Hertz.
There is no vibration permitted.
Yet it WILL emit magnetic waves which you do not hear.
A tuned ELF RF circuit will detect this.
These waves travel at light speed?
Or does the EFFECT travel at light speed?
Or does the signature?
Start cranking up the frequency, and go all the way up the spectrum to visible light and beyond.
It has to be a really good amp to do this, and of course impedance matching.
Again at which point is sound not a radio wave.

and

> there for you cannot compare thier propagation to EM

I just did. Sound and EME are not mutually exclusive.

> or, if you prefer, light waves.

Same thing, almost.

> The same holds true for gravity waves. They are not EM in origin either

And here is the crux for deep thinking, imagination, and hard work.Break this taboo, or rather, find the conversion factor between gravity and magnetism.
You'll have the World and Solar System to do with as you please.
Inherent in the relationship between gravity and magnetism, you'll find time variations, which is also nothing to do with tubes, but perhaps the whole thing should be looked at in order to develop a conceptual basis for hypotheses.

> and as for the
> rate of propagation there is much debate by Roseburg, Wheeler, Thorn and others as to
> whether gravity waves propagate at all or if they exist within the frame work of the
> universe as part of the so called "frabric".

I believe that they exist mostly within the bath or fabric. The principles can be legally skewed somewhat to facilitate what some people refer to as free energy and/or cold F.

> In effect sound and gravity do not exist
> on the same "scale" as you put it.

All energy is convertible, and therefore connected somehow. Whether the scale needs modification, or the interpretation of the scale requires adjustment, doesn't matter.You shall find the flaws and correct them.
If I dip my brush into the same paint can all the time, my paintings will be very monotonous, and not progressive.
Just look at the transistor! What a development. How radically different it is, compared to the electron valve.
And yet . . .
Some principles in operation are very similar, if not apparently identical.
You KNOW that new formulae had to be developed to account for the differences inherent in the two examples.
Apply that knowledge to all other areas of knowledge, and adapt the formulae to fit the facts.

>
>
> As for electrons they enjoy the benifit of the duality. Are they particles or are they
> waves. The answere is, of course, both. An electron as a paticle can stand perfectly
> still as Millikin's oil drop shows. When electrons are accelerated as they are in a
> cyclotron they will show wave like properties but of course they can never get away
> from there particle nature as (if I am not mistaken) m=mo/(1-v^2/c^2)^1/2. As you can
> see, as v approches c, mass approches infinity. And in fact any one involved with
> electron acceleration in a cyclotron can tell you that as the elctrons approach @ 1/10
> c they must begin to take the extra mass into account and increase the B field to the
> Dees to compensate not just for the velocity but for the mass increase as well. So
> again as you can see electrons cannot be treeted like EM waves and therefor they too do
> not excist on the same "scale".

A bit deep, but what about the "spin" between widely separate neutron or electron pairs?Millions of miles apart, yet one knows the other. So there is more depth to nucleonics than merely particles and waves.
As for the mass increase, that is just another form of time conversion, and may be fudging,

to protect the constant.
Hey, if we lose our constant of time, everything goes wide open.
Most scientists cannot stand that.
But they must adapt to natural phenomena.
Here is another wild statement from me, but true nevertheless.
"The speed of light is changing."
I read on the Net coming from scientists, that time is slowing down. I'm not sure if I got it the right way around, but there it is.
Gravitational constant is also changing.

>
>
> However this does bring me back to my original observation. I really need to see the
> math as to how energy transfer within a tube is 80 times faster than in a semi
> conductor. Just so there is no ambiguity here I'm going to calculate the time it takes
> for electron flow to start out one end of a semi conductor (doped silicon) when an EMF
> is applied to the other end. That will be my "speed of emission" for lack of a better
> term. You can calculate the "speed of emission" for a tube then we'll compare math and
> see if energy transfer is really 80 times faster. Is this what you have in mind for
> energy/effect transfer or where you thinking of something else?

It is definitely what I had in mind.But the math, I would have to study for a year to bring it all back. I won't use incomplete bits and pieces if do calculations, and some of these calculations won't follow accepted standards.
So it is better left to you youngsters to find a way to make my statement true.

By the way, there is a perspective which would be called cheating by some, but in that perspective you enter three-dimensional mathematics.

You would have three ninety-degree angles within a circle.
So 270 degrees instead of 360.

One divided by zero equals one.
Zero divided by one equals zero.

When a mass unchanging approaches the speed of light, it begins to curve sharply at ninety degrees into the time line.

Consider the superstring theory, bosons, and singularities.
I am sharing this with a scalar physicist, address above, since you share with homebrew, okay?
Feel free to contact Zeropoint.
Find out about the Grand Unification of Everything Theory.

Regards,

Hans

>
>
> Rick
>
> > Hans

> >
> > Rick Haub wrote:
> >
> > > .
> > >
> > > > Vacuum tubes also exhibit a transfer speed in excess of 80 times that of a
> > > > semi-conductor.
> > > >
> > >
> > > Ummmmmm..... Don't get me wrong, I agree with a lot of what you said, or at
> > > least what I think you said. But having done my masters paper on the break down
> > > of magnetic domains in high saturation metels under large EM pulses I had to
> > > work a lot with solid state theory and k-space transfer. Just exactly what to
> > > you mean by "80 times" "transfer rate"? Whether your talking about electron
> > > transfer in the valance band or end point emmision you've still got electrons
> > > traveling at about 70 times the speed of light. Now I realize that differences
> > > in packet speed and particle speed can boost transfer to over 1.6 times the
> > > speed of light (free space) but I have a problem with 70 times SofL. Now if you
> > > are refering to "Hot Electron" theory then your transfer gain can be increased
> > > due to the "excitation pool" but only by a few femto seconds when compared to
> > > most semi conductors. This still leaves you far short of "80 times". As I said,
> > > I may be missing what you are refering too. If so, could you elaberate on the
> > > theory?
> > > Rick

2406. Re: Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <37CDAC08.7D10@pop.removethistomailme.net>
Source record: 67367

marsgal42@hotmail.com wrote:
>
> It's theoretically sufficient to use linear combinations of the
> proto-I and proto-Q signals, and it's probably sufficient to do
> so in practice too.
>
> S53MV's zero-IF/Weaver radios do an analogue version of this.
>

Sounds interesting, but what exactly do you mean by "proto-"?
Uncorrected?

-- jm

Note: My E-mail address has been altered to avoid spam

2407. How to use external FLP and S2P files in ARD ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: emr01@ms19.hinet.net
Message-ID: <37cdaa6a.2002226@news.hinet.net>
Source record: 67368

Can anyone show me how to use external databank files
in FLP or S2P format in ARRL Radio Designer? On page 17-9
of the manual, it only shows you how to put the data in
FLP or S2P format but it doesn't show you how to use (or call)
these external files in your .CKT design file!? Thanks.

Oliver

2408. Re: Microwave Oven Transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: "John Kirk, VE6XT" <jakirk@calcna.ab.ca>
Message-ID: <7qken0$79o@ds2.acs.ucalgary.ca>
Source record: 67369

The short answer is "yes, they are useful". The definitive answer can be
found in Jan/Feb 98 QEX, p47.
Have fun
John

On Wed, 1 Sep 1999, Michael Radtke X4897 wrote:

> Hello,
>
> I have been scrapping a few microwave ovens. It seems to me that the power
> transformers might be useful for folks building linears. I haven't measured
> the voltage, but it looks like is must be about 2KV.
>
> Any thoughts?
>
> Thanks,
> Mike WA7ZPU
>
>

2409. Re: Favorite tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37CDBEE9.4560EBBC@teleport.com>
Source record: 67370

A few weeks ago I went to an antique farm equipment show. Fascinating. There were lots of old (c. 1900) gasoline engines which used this cooling method. The cylinder was simply in the middle of an open-top pot of water which steamed away. (These "hit and miss" engines don't produce a lot of heat when lightly loaded, since they only fire often enough to keep the flywheel speed up. I timed one at one hit every 20 seconds.)

Many moons ago there was an article in QST or Ham Radio describing a cooling system for large tubes where water was dripped or sprayed on the heat sink. The idea was to regulate the temperature at or just above the boiling point of water. Boiling water takes a lot of heat, so this should be pretty effective.

Roy Lewallen, W7EL

Lawrence Stoskopf wrote:
>
> 20 years ago at CSVHF in Oklahoma there was a talk of putting an
> appropriate length of pipe tightly around the anode of a 4CX250, filling
> it with water and simply letting it boil out for cooling. Worked. The
> EIMAC crowd there was impressed!
>
> N0UU

2410. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37CDC0A9.F9925FEB@teleport.com>
Source record: 67371
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

.H .H Russell wrote:

>. . .

> Sort of like a luminance delay in television? It is needed because the chroma signals would
> not align with the b/w image due to delay.

>. . .

Yip. Color is a whole lot slower than black-and-white. They got black-and-white photography goin' in the late 1800's, but color didn't really catch up 'til the '30's or so. Same with TV. As I r'call.

Good thing they didn't have the delay thing figgered out back then, though, or we woulda hadta wait fer the color b'fore we got anythin' at all. Then we woulda missed all them Chaplin movies. To say nothin' of Dr. Strangelove.

Roy Lewallen, W7EL
Charter member, OFC

2411. 8873 tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: Jeremy Hopkins <jhopkins@toltbbs.com>
Message-ID: <37CDCCA0.42C49D21@toltbbs.com>
Source record: 67372

anyone know of any 8873's for sale or am i just dreaming?
--
Jeremy W. Hopkins
KC8GWH
Toledo Ohio USA
http://www.toltbbs.com/~jhop

2412. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7qkn1dcnk1@news1.fast.net>
Source record: 67373
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

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-----BEGIN PGP SIGNED MESSAGE-----
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<maddog@io.com> wrote in message news:37ccae72.1769983@news.io.com...
> On Tue, 31 Aug 1999 22:55:22 -0400, "Carl R. Stevenson"
> <wa6vse@fast.net> wrote:
>
> >[snip]that's unhealthy
> >for a technical service such as the ARS. It neglects the
> >majority of our Basis and Purpose ... the reason ham radio
> >exists and has bands of frequencies to use.
>
>
> FCC Title 47, Part 97.3(4) defines "Amateur (Radio) Service" as:
>
> "A radiocommunication service for the purpose of self-training,
> intercommunication and technical investigations carried out by
> amateurs, that is, duly authorized persons interested in radio
> technique solely with a personal aim and without pecuniary
interest."
>
> In other words, I take issue with the statement that technical
service
> is the "majority of our Basis and Purpose"; obviously, the FCC
> considers self-training (in radiocommunication), radiocommunication,
> "personal aims" and volunteerism to be well within the purpose of
> Amateur Radio. Certainly, we'll each lend more weight to that
portion
> that most interests us personally. And isn't that perfectly OK?

Read Part 97.1 "Basis and Purpose" ... that expands on what's
expected of us (and what's used as justification for our having
billions of dollars worth of spectrum at our disposal for free).
You'll find that the majority of that section is technically-based.

- --
Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI
Fellow, Radio Club of America
Senior Member, IEEE
Member, ARRL
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Join NCI - Hams for the 21st Century!
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http://www.nocode.org

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2413. FS: Tubes, Books, Microwave Components

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: MURRAY PASTERNACK <M.PASTERNACK@prodigy.net>
Message-ID: <7qkop2$76mq$1@newssvr04-int.news.prodigy.com>
Source record: 67374
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew

For Sale 44 year accumulation, e-mail to m.pasternack@prodigy.net to receive a 10 page list.

2414. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7qkpns$k1c$1@news1.fast.net>
Source record: 67375
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

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-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

Will White <wcw@uswest.net> wrote in message
news:37CD1969.678D63E@uswest.net...
>
> I get the idea, and that is fine. I even believe you, though I have
little
> idea beyond a dim understanding of what you are talking about,
technically
> speaking. I won't deny you your pleasure and satisfaction. Neither
will I deny
> your work, amateur and professional, may have economic and social
value at
> large. It probably does. Just don't attempt to deny me and others
who are
> years behind you, by some combination of preference, talent, and
training, our
> small happiness.

Nobody's trying to deny you happiness ... just trying to encourage
you to realize it's not 1930-50 and "get with it" on some up-to-date
stuff (for your own good and the good of the ARS).

> Everyone doesn't have to be working on the same projects,
> with the same goals and methods, do they?

No, but endless regurgitations of the projects of the 30s-50s
don't serve a very useful purpose. They result in inferior equipment
and don't teach much in the way of skills/knowledge which are truly
useful in today's world.

> You mentioned relevance and value several times in this
thread--Relevance to
> what? What sort of value?

Relevance and value in reference to the world we live in today. Only
a nostalgic "collectables value" makes old tube gear worth more than
a (very low) per pound scrap value. That's an intangible "value" that
is not going to impress the regulators ... particularly compared to
the
billions of dollars they could raise by auctioning off our spectrum.
However, the tangible value of people who understand and can use
modern technology to provide USEFUL voluntary communications
in times of need (and can/do build the infrastructrue necessary to do
```

that) WILL impress them.

> I commend your dedication to innovation and
> development of radio technology, I do. Clearly it is valuable to
you, and such
> activity has much economic value as well. What I and some others
value about
> hobby radio has little to do with new technology. I have no formal
training
> or education in engineering, RF or otherwise. Exploring and learning
a little
> science and antique engineering, via technologies that are
relatively simple
> and static, has ultimate value for me.

But can't you see that learning "antique engineering" is like learning
how to make fire with 2 sticks compared to today's technology?

I understand that you have no formal training or education in
engineering.
Guess what, neither do I to speak of ... I went to college at 16 and
attended
for 1-1/2 years until my Dad died when I was 18 ... I never was able
to finish
college ... but I've worked as an RF engineer for over 27 years now
... totally
self-taught. I've even taught college level courses in electronics.
(credentialed
in CA in the 80s on the basis of knowledge and experience which the
Board
of Education considered "at least equivalent to a Master's Degree")
I've
worked for or consulted for some of the most prestigious companies and
institutions in my field.

PLEASE UNDERSTAND that I'm NOT saying these things to "toot my
own horn" ... just to drive home the value and practicality of
self-education
and to encourage you to not settle for "only building simple old
stuff"
because you think it's somehow easier or that it's beyond your
capability
to design and build something more modern.

>Likewise, exploration of the social
> history of technology has supreme relevance to my work as a college
teacher
> (of English composition, creative writing, and literature) and as a
"literary"
> writer. Plus, I find it fun. Don't know quite why, don't care to
know
> everything :) Forgive me, all, for even mentioning the term, but

this thread
> rings a bit of the ceaseless CW debates. Can't we all just get
along?

I'm not trying to fight with you ... just to state the *serious* need
for
modernization in the ARS in terms of technology. Too many people
are stagnated in the past. If you find it fun to build/operate an old
one-tube radio, I have no problem with that. What I have a problem
with there being such a large body of hams who claim that's all there
is and all one needs to know.

> I won't
> force CW and simple valve circuits on you, nor claim vague
quasi-spiritual
> benefits accrue from them to all

I appreciate that statement.

>(though you will pardon me if I say that in
> some small ways both 'antiques' intimate to *me* the esoteric and
sublime).

Whatever "blows air up your skirt" as they say ... but I still
encourage you
(and everyone else) to broaden your horizons into more modern things
as well.

> What I keep forgetting is that it is a hobby *&%$-it,

Actually, it's defined as a service ... NOWHERE in the enabling
regulations are the words "hobby" of "fun" mentioned once. That's
not to say that it can't or shouldn't be fun. Of course it can or
few would become involved. However, it's PRIMARY intent
(government's reason for giving us all that valuable spectrum for
free) is self-education and training to maintain a pool of people with
USEFUL communications knowledge and skills ... and useful must
be continuously redefined in terms of comtemporary technology
and communcations methods in order to truly meet that public
interest aspect ... it's almost 2000, not 1930-50, and the
government and emergency services folks no longer need or
want a corps of telegraphers ... they need/want people who
understand and can provide modern communications services
when their normal means of communications go down.
We HAVE to keep up with the times or we'll become
worthless. Unfortunately, we're not keeping up, but
falling further and futher behind. Even the ARRL has
finally realized this and is grappling with how to go about
doing something about it ...

> but for some it is also their actual profession,

Yea, it's great getting paid very well for doing something I
enjoy enough that I do it for free for fun at home, too :-)
(I've been likened to "a mailman who takes a nice long walk
on his day off." :-)

> so that makes us somewhat like two Spaniards--a
> Catalan and a Castillian-- yelling at one another, each
uncomprehending the
> other, claiming to know the only way to be Spanish.

My wife is from Mexico ... she claims that people from Spain
(and other places ... Argentina in particular) "speak Spanish
with funny accents." :-)

Seiously though, all of my coments are intended to stimulate some
thought, awareness of the need for modernization, and to, hopefully,
prompt some folks to "think out of the box" and try some stuff that
they may have lacked the confidence to try to learn before.

73,

- --
Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI
Fellow, Radio Club of America
Senior Member, IEEE
Member, ARRL
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2415. Re: How to use external FLP and S2P files in ARD ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <37CDE30E.F54FC5FE@mwci.net>
Source record: 67376

Oliver Huang wrote:

> Can anyone show me how to use external databank files
> in FLP or S2P format in ARRL Radio Designer? On page 17-9
> of the manual, it only shows you how to put the data in
> FLP or S2P format but it doesn't show you how to use (or call)
> these external files in your .CKT design file!? Thanks.
>
> Oliver

Let's say you have a .ckt file that you want to add a .flp data set (or an .s2p data set) from the ARD data bank (or from any other location in your computer).

Shrink the ARD window to an icon.

Search the data bank and find the data set that you want to import into your .ckt file.

Use the mouse to "select" the data that you want to use, and "copy" it.

"Maximize" the ARD window and then "paste" the data at the location where you want it.

Bill W0IYH

2416. Good resources for learning electronics?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: Luke Seubert <lseubert@radix.net>
Message-ID: <37CDF07E.A1481F7E@radix.net>
Source record: 67377

Good day.

What are some good resources for learning electronics? I recently set up a new shortwave listening rig, and would like to build some of the simple circuits for little projects here and there - you know - those great little Arnie Coro projects.

As a youngster, I built a few Heathkits, and took the Heathkit DC electronics course, but have forgotten much of that.

Would folks on this group recommend going back to those Heathkit courses as a good means of learning electronics and pursuing the hobby once more? Any other good books or self-study courses out there?

Many thanks,
Luke Seubert

< Insert Pithy Quote Here >

2417. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: Will White <wcw@uswest.net>
Message-ID: <37CE0B34.A68474A6@uswest.net>
Source record: 67378
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Carl R. Stevenson wrote:
>

>
> Nobody's trying to deny you happiness ... just trying to encourage
> you to realize it's not 1930-50 and "get with it" on some up-to-date
> stuff (for your own good and the good of the ARS).

You presume to know what is best for me? Why? That's even funny! You do take what I pursue as a hobby *very* seriously indeed! I entered the ARS (got a ticket) after futzing around with BA recievers as a SWL for years. That's why I got a ticket--so I could futz around with BA transmitters, too, and "beep" back. I am uninterested in new circuits and materials et al. Totally. Had a few late-model radios, still have one, they're OK, <yawn>. I strive in all things for impracticality. You might try it. Yes, it is 1999, so what? If I can't play with My SX-28 and tinker with Grammer and Jones glowbug designs, then I forbid you to eat Baked Alaska, or any other dish that was concocted before 1990! I think the ARS can do without my technical innovation, wouldn't you agree? Obviously, you must, since my technical judgement is so lacking, as you have pointed out

>
> > Everyone doesn't have to be working on the same projects,
> > with the same goals and methods, do they?
>
> No, but endless regurgitations of the projects of the 30s-50s
> don't serve a very useful purpose. They result in inferior equipment
> and don't teach much in the way of skills/knowledge which are truly
> useful in today's world.

Useful? Useful to who? To me, a Drake R-4B is about the upper limit of what I consider useful in a radio. I don't do any of this because I need to communicate. The old Basis & Purpose argument wont work on me, not at least as far as "advancing the radio art" goes. I think that section in Part 97 ought to be stricken. It's about time, speaking of anachronisms. I refuse to be useful to you, or anyway to your notion of what the ARS and the wide world need done. So, 30, 40, or 50 year old radios and circuits are plenty useful to me. God, save me from any more efficiency!

>
> > You mentioned relevance and value several times in this
> thread--Relevance to
> > what? What sort of value?
>
> Relevance and value in reference to the world we live in today. Only
> a nostalgic "collectables value" makes old tube gear worth more than

> a (very low) per pound scrap value. That's an intangible "value" that
> is not going to impress the regulators ... particularly compared to
> the
> billions of dollars they could raise by auctioning off our spectrum.
> However, the tangible value of people who understand and can use
> modern technology to provide USEFUL voluntary communications
> in times of need (and can/do build the infrastructrue necessary to do
> that) WILL impress them.

Clearly we have a gulf between us--HF over here and VHF+ over there. You are quite right to be concerned about spectrum auctions at VHF+. Not so at HF, clearly not at all. I suppose you beleive all hams should be burning the midnight oil in basement labs in search of those VHF+ circuits and techniques which will wow the FCC into not proceeding with further auctions? And we should all be using those bands all the time, even when the propagation and the culture bores us, to demonstrate the bands are needed and used? What I think OM, is that the bird endangered is the ham/pro-engineer who lives above 144 MHz. Us glowbuggers and QRQ guys may be old-fashioned, but it aint our acre LEOs et al are after, is it?

> > I commend your dedication to innovation and
> > development of radio technology, I do. Clearly it is valuable to
> you, and such
> > activity has much economic value as well. What I and some others
> value about
> > hobby radio has little to do with new technology. I have no formal
> training
> > or education in engineering, RF or otherwise. Exploring and learning
> a little
> > science and antique engineering, via technologies that are
> relatively simple
> > and static, has ultimate value for me.
>
> But can't you see that learning "antique engineering" is like learning
> how to make fire with 2 sticks compared to today's technology?

Sure, but as a backpacker known to take 10 day and longer trips 100 miles from even a fire road, I can tell you just how valuable knowing how to get fire out of sticks or rocks can be. When will you get it (and it is obviously not just me singing this song): pragmatism, efficiency and such are out of mind for some hams where the hobby is concerned. That is not why we do it.

And it goes on and on and on (snip snip snip) like that, always back to the same disconnect: we are licensed by the same government authority and often keep company with RF. That is about the extent of what we have in common, in terms of ham radio. Don't change, really, don't, and I promise, I won't either.
--
Will White, KD7BFX

to reply, please click this link mailto:wcw@uswest.net

2418. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: nospam@mindspring.com
Message-ID: <37cdb624.11380535@news.mindspring.com>
Source record: 67379
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Rick Haub <rhaub@midwestmicro-tek.com> wrote:

>Some day after I've learned a lot more and worked for my General Class licence I
>just might build that Packet tranceiver. Will I build it from tubes? Probably not,
>but what a challange it would be.

Not wanting to join in the general fray, but man, that's one heck of a visual. I'm trying to picture some 21st Cent. Desert Warrior carefully loading his tube regen packet radio into his pack prior to evacuating post haste in a sandstorm. Tube packet : two paper cups connected by a billion dollar string. Why not just teach your camel to rollerskate? ;-)

ROTFLMAO! ;-)

Sorry, man, something about that concept just really, really struck a funny bone. No offense meant, if you want one, then I certainly hope you enjoy it. Good luck.

ss.

2419. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: nospam@mindspring.com
Message-ID: <37cdb218.10344787@news.mindspring.com>
Source record: 67380
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

".H .H Russell" <koenen1@telusplanet.net> wrote:

>There is, in quantum physics a hint, and scalar physics, an intriguing effect where
>the "projectile" strikes the target halfway across the universe, just BEFORE the
>projectile leaves the source.

Would you perhaps be interested in getting filthy rich making rifles
like that? I mean, why bother with breath control, trigger control,
perfect sight picture and the natural respiratory pause if one can
shoot deer with a time machine? ;-)

2420. Re: Favorite tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <X1_y3.14305$ok3.3913@news.rdc1.il.home.com>
Source record: 67424

> I seem to remember seeing a picture in a 1959 QST of an amplifier using
> something like 50 807s in parallel. (they were *cheap* in the 1950s!)
The
> idea was to dispense with any kind of output matching circuit, by using
> enough tubes in parallel that the total plate impedance dropped to 50
ohms.
> I presume (hope!) that some kind of bandpass filter was used though!
(would
> also love to see that power supply...)
>
> 73 Doug

I just saw an audio amp today, made the same way. They want $20k per
channel.
Obviously made for silly audiophiles.. They say it's got response down to
1Hz, but I really wonder just how much you are gaining here.

2421. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: ".H .H Russell" <koenen1@telusplanet.net>
Message-ID: <37CC7B2E.427D2B24@telusplanet.net>
Source record: 67425
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

What if someday, you have to do something for yourself? :)
Hans

Spunky, the Hookah Smoking Catapillar. wrote:

> The people who do things the hard way are the people who had no choice.
> In this modern age, things are not as hard and everything comes pre-made,
> thus people don't have to build radio's from scratch anymore.
> That is why old hams are the ones who build radios, because they had to.

2422. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: ".H .H Russell" <koenen1@telusplanet.net>
Message-ID: <37CC7EDF.9DF58AF5@telusplanet.net>
Source record: 67426
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Please tell me the turtles joke?
Hans

Tracy Nelson wrote:

> "Carl R. Stevenson" wrote:
> > Most IC datasheets provide a complete functional block diagram,
> > theory of operation, and some even provide some transistor-level
> > description of at least parts of the internals. Once you understand
> > how a Gilbert Cell double-balanced mixer works, do you REALLY
> > need the "gory details" about the one in any given IC? I don't think
> > so. Think of ICs as "super components" which actually ease the
> > task of building things. They aren't so "mysterious" if you read the
> > data sheets and understand the underlying principles of the functional
> > blocks they contain.
>
> But if you're just trying to self-educate yourself, how are you going to
> learn how a VCO or mixer works by studying a block diagram? I'm trying
> to teach myself some electronics, and I've found that I learn a lot by
> building things I can "play with". It's kinda tough to change the way
> an IC works...
>
> > The "physics and science" haven't changed ... mankind simply has
> > a more complete and useful understanding of them and how to apply
> > them. If anything, working with modern techniques will teach you
> > more (and demand that you learn a bit of new stuff.)
>
> Hmmm, I'm not so convinced that there's a "more complete ...
> understanding" of physics -- it seems that they just keep postulating
> smaller and smaller particles to explain why their theories aren't
> accurate. I'm reminded of the old "it's turtles all the way down" joke.

2423. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: ".H .H Russell" <koenen1@telusplanet.net>
Message-ID: <37CC8855.CBBE467@telusplanet.net>
Source record: 67427
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Yes.
I remember the good old days, and have hung on to them.
I also explore these great new days.
What I have noticed, is that information was more readily available on the Internet three years ago, in certain specialized areas.
I have also noticed, that control is being removed from the user.

You get up, you go to work, you go home, go to bed.

Then you pay your bills, and buy some throwaway "fun".
Comes the depression, us old dinosaurs :) will still be having fun, and be capable in the real world anytime anywhere, with stuff that's lying about.

So we have the best of both the real world, and the 'real' world as it is perceived by the money-pumpers.
A man never finds time for anything, he must make time.

And another thing.
The technology we use today, has flaws. Go way back to George Maxwell and check. Go back to to those great thinking philosophers which are still being revered today as infallible, and check.

Now piddling around with antique parts and technology is refreshing, when you catch the errors.
Let's use old tech with modern parts? Or remanufacture old components with today's expertise.
Let me tell you, there is a LOT of technology which has been restricted from today's textbooks.
Also, the old technology has not been completely researched due to the manufacturing processes of its time.
Vacuum tubes still have an advantage over EMP-sensitive solid-state materiel.
Vacuum tubes also exhibit a transfer speed in excess of 80 times that of a semi-conductor.
Vacuum tubes carry a nebulous "emotional factor", not possible with even the best solid-state devices.
Computers? I make my own, easy enough with building blocks.
But hey.
The first color televisions still had better pictures than today's fancy monitors displaying a computer generated image.

I go out and buy anything I want. But what fun is that?
I go and find discarded junk, and build stuff.
Sure, I like mathematics, also.
But well, you know.

Analog is strangely enough going to figure very highly in a new generation of computer technology, even as the biological chips will.
The old times are not dead.
Try to go back into the knowledge which was available in the 1800s.
See for yourself how brilliant people were with various sciences, not just electronics.
Try to get the textbooks.
Try to get.
This getting is becoming harder, leading to an almost total dependency on the system.
Hey, I don't want a computer or an air-bag in my car.
I don't want plastic pistons.
And I certainly don't care to work my butt off to get a new car that is designed to rust within three years.
A sewing machine? How many must you buy in your lifetime, while my mother's hand-cranked Singer still works?
My friend's Austin has been sitting in the rain for ages, and doesn't rust.
They used to put a little bit of nickel in the alloy, see.

As for obsolescence, there is far more obsolescence in today's stuff, everyone agrees, not because only the technological leaps are all that great, but because it is designed that the first stuff you get must be replaced.
They already HAVE the stuff made that you'll be buying ten years from now.
But you have to go through channels, and spend money and pay taxes.

I can fire up my tube HF set, and get stations anytime. It's great.
I can twirl knobs and dials, and kind of drive the machine.
My other equipment, I sit on my backside, and push a button on the remote control.
That's all I'm allowed to do with it.
And I'm stuck with the five kHz increments.

On the computers, I can talk to anyone in the world and with video, and no QRM.
That beats ham licenses all to heck. And it is fun.
It is great to have instant and accurate communications.
I love it.
But I also love doing it myself, and succeeding without dependence upon bits and bytes.

If we have an EMP, a lot of us can kiss our recreation goodbye, our jobs goodbye, and our finances goodbye.
I have wealth stashed outside of banks, and it can't be controlled because ostensibly it does not exist.
And I can Build a car from scratch out of junk.
And I can hunt and fight.
I can build transceivers and telescopes, do a fair bit of medical procedure, and a whole bunch of other neat stuff.
But the greatest of these lie in the magical realm of Tesla, Marconi, Fessenden, and myself.

So let's have a toast for the Old Dinosaurs.
We're not a bad bunch, and we'll still be around when digital has to marry analog.
Hans

JJ wrote:

> Carl R. Stevenson wrote:
> >
> > -----BEGIN PGP SIGNED MESSAGE-----
> > Hash: SHA1
> >
> > Edward J. Engelken <ed_engelken@my-deja.com> wrote in message
> > news:7qa3lb$4hc$1@nnrp1.deja.com...
> > >
> > > For starters, ask any new EE graduate the difference between a
> > superhet
> > > and a TRF receiver and you will find out quickly that the new EEs
> > don't
> > > have a clue how a radio works. The University of Texas at Austin
> > > recently changed the name of the EE department to Electrical and
> > > Computer Engineering. In the "good old days" Electrical Engineering
> > and
> > > Radio Engineering were basically the same thing. Now it's computers
> > and
> > > the Internet. Kiss radio goodbye!
> >
> > Not so ... perhaps the UT@A has chosen to focus on other specialty
> > fields. However, MANY universities have programs which are very
> > focused on wireless (radio) communications. (CALTECH, UC Davis,
> > UCLA, and many others) While I'll grant you that even the MSEEs
> > coming out of many of these programs need some practical, real world
> > experience to become seasoned engineers, they ARE well-grounded
> > in the fundamental technical knowledge.
> >
> > > The so-called Yuppie generation was brought up on television, a
> > visual
> > > medium. Computers are largely a visual medium, so someone brought
> > up on
> > > TV will follow right in to computers. Radio is an auditory medium
> > and
> > > just doesn't seem to generate much interest with the under 50 crowd.
> >
> > Your prejudices are showing ... "radio" (wireless in the RF frequency
> > range)
> > is a means of conveying information from one place to another without
> > wires.
> > TV is just a form of radio comunications, as is CW, SSB, FM, all the
> > digital
> > modes, cellphones, PCS, and every other form you could list.
> >

> > If you're saying that society's use of radio communications is
> > changing and
> > maturing, that's correct. However, to "pigeon-hole" "radio" into just
> > audible
> > forms of communication is both unrealistic and too confining. And,
> > yes,
> > doing so will restrict the number of youth who will join our ranks ...
> > being
> > used to the "content rich" multi-media experience of the internet and
> > the
> > instant availability of cellphone communications, they can
> > understandably
> > be left with a "That's all there is???" reaction to today's ham radio,
> > which
> > is stuck in a time-warp of the 50's or 60's at best.
> >
> > Go to your local movie rental place and rent "Pleasantville" ... it's
> > entertaining,
> > but it might also open your eyes a bit to the fact that change is
> > inevitable and
> > that fighting it only results in unnecessary conflict which won't stop
> > change
> > anyway.
> >
> > > I am a member of the Texas Antique Radio Club and the average age of
> > our
> > > membership is around 60 - 65. Our youngest active member is in his
> > late
> > > 30s and we have several members in their 80s. Unfortunately, we
> > have no
> > > female members. We are basically just a bunch of hairy-legged old
> > > farts. How about plugging a few of the Antique Radio Clubs in your
> > > column each month and help us bring in some younger (and female)
> > > members.
> >
> > "Plugging" it over and over again won't make it interesting,
> > particularly
> > to the youth of today. Enjoy it if you do, but don't bemoan the fact
> > that
> > virtually everyone else finds tubes and regen receivers boring and
> > inferior.
> > To do so will only cause you more frustration and disappointment
> > because
> > the world is NOT going to go back to "the good old days" and you can't
> > keep it from advancing.
> >
> >
>
> You can only expect a negative response from Carl, who must really lead
> a lonely life.

>
> ************************************
> * cirdehsoc@alltel.ne *
> * nufo40@server.virtual.net.au *
> * trewq@liquidinformation.com *
> * dave@maloney.com *
> * makelotsofmoneynow@usa.net *
> * 3624@earthlink.ne *
> * sales@advancedmachine.com *
> * mrbill2u@bustamail.com *
> * ab12715@aol.com *
> * bb8874@ausi.com *
> * pwaremove@mythirdage.com *
> * prewrittenads@bigfoot.com *
> * sushi27@iname.com *
> * aies@aies.net *
> * testcom@tin.it *
> * af4k@earthlink.net *
> * sabbatai_zvi@hotmail.com *
> * fraudinfo@psinet.com *
> * ju7676767@surfree.com *
> * cybernet101@bigfoot.com *
> * dfghrwt4354.com@earth.iaonline.com *
> * 2Fs9381Sy@surfree.com *
> * jccheezum@uspis.gov *
> * jquello@fcc.gov *
> * sness@fcc.gov *
> * rchong@fcc.gov *
> * rhundt@fcc.gov *
> * tracyd@fbi.gov *
> ************************************

2424. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <_30z3.14328$ok3.4191@news.rdc1.il.home.com>
Source record: 67428
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

> We're not a bad bunch, and we'll still be around when digital has to marry
> analog.
> Hans

Digital is just a special case of analog :)

2425. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: ".H .H Russell" <koenen1@telusplanet.net>
Message-ID: <37CC8E43.4010A35@telusplanet.net>
Source record: 67429
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Exactly right, as a component of analog.
Which is the greater paradigm?
Hans

Dave VanHorn wrote:

> > We're not a bad bunch, and we'll still be around when digital has to marry
> > analog.
> > Hans
>
> Digital is just a special case of analog :)

2426. Re: Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: kjhales@aol.com
Message-ID: <19990831224413.08352.00002753@ng-cc1.aol.com>
Source record: 67430

Rocci says:

>The mixers - How to build a pair of mixers whose gain (loss) and phase
>track over several octaves of RF and also give good intermod
>performance. My goal would be at least 50dB of unwanted sideband
>s
Intermod is a problem, because it is non-linear. The other issues are linear and can thus be fixed anywhere in the system (i.e. in the DSP). This isn't exactly true, because incomplete nulling of the unwanted sideband makes the A/D deal with a bigger signal, but it is close to true.

>The I & Q IF filters - Some filtering needs to be inserted in the I & Q
>outputs to prevent out of band signals from overloading the ADC. Since
>these filters are at audio, they need to have very good phase and
>amplitude tracking over nearly a decade of frequency.

Adaptive filters in the dsp make this easy to deal with. The coefficients would be a semi-fixed set derived from a test signal (calibrator sig gen built into equipment). The receiver could go thru a calibration sequence every time it's turned on, or when the user presses a CAL button.

Different sets of canned filter coefficients may be needed for mixer correction at different freq ranges, but memory is cheap as beach sand....

>AGC - This one make my gray matter smoke. Signal amplitude measurement
>is most commonly done on the post-filtered audio DSP output. This D

With a complex representation, you have instantaneous measurement of signal power, the need for averaging over time is greatly diminished. AGC response time mostly limited by sample rate.

Be careful when you read the spec sheets for those magical 24-bit A/D converters. The THD and SNR specs aren't always what you would hope for.

KH
KF4REA

2427. FS:ATV downconvertor, 410-440mhz to CH3

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: tnjent98@aol.com
Message-ID: <19990831231813.29469.00002322@ng-bk1.aol.com>
Source record: 67431

I have a nice atv downconvertor, used it a while, just run out of time for atv.
Its a modified uhf tuner, all solid state, covers 410-440, witha tweaked front
end for low noise figure, with ten turn tune pot and agc pot on front panel,
all in nice box with power supply.
can email picture if interested.
$25.00, easy way into atv
thanks
tf

2428. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: maddog@io.com
Message-ID: <37ccab48.960118@news.io.com>
Source record: 67432
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

On Wed, 01 Sep 1999 01:58:58 GMT, ".H .H Russell"
<koenen1@telusplanet.net> wrote:

>[snip]
>But hey.
>The first color televisions still had better pictures than today's fancy
>monitors displaying a computer generated image.

you've gotta be kidding... maybe your eyes have changed with age.
Did food used to taste better to you, too?

73,
monty N5FC

2429. Rubber Duck for 2.4 GHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: kleptein@hotmail.com
Message-ID: <37ccacfc.3244675@news.fast.net>
Source record: 67433
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

I am modifying one of the Wavecom Jr. transmitters for use as a hat cam and I'd like to put a flexible rubber duck antenna on it. Any suggestions on where to find such a thing with say a BNC on it? I'd seen catalogs of this "spy" equipment where they do the same thing, and they have rubber duck antennas.... help.

2430. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-01 00:00:00 UTC
From: maddog@io.com
Message-ID: <37ccae72.1769983@news.io.com>
Source record: 67434
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

On Tue, 31 Aug 1999 22:55:22 -0400, "Carl R. Stevenson"
<wa6vse@fast.net> wrote:

>[snip]that's unhealthy
>for a technical service such as the ARS. It neglects the
>majority of our Basis and Purpose ... the reason ham radio
>exists and has bands of frequencies to use.

FCC Title 47, Part 97.3(4) defines "Amateur (Radio) Service" as:

"A radiocommunication service for the purpose of self-training,
intercommunication and technical investigations carried out by
amateurs, that is, duly authorized persons interested in radio
technique solely with a personal aim and without pecuniary interest."

In other words, I take issue with the statement that technical service
is the "majority of our Basis and Purpose"; obviously, the FCC
considers self-training (in radiocommunication), radiocommunication,
"personal aims" and volunteerism to be well within the purpose of
Amateur Radio. Certainly, we'll each lend more weight to that portion
that most interests us personally. And isn't that perfectly OK?

73,
monty N5FC

2431. Help Identify Old Frequency Counter IC's

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: jjesson@ais.net
Message-ID: <o5mz3.6$236.69@news.ais.net>
Source record: 67285
Cross-posted to: sci.electronics.equipment,sci.electronics,sci.homebrew,sci.electronics.repair,sci.electronics.misc,rec.radio.amateur.homebrew,sci.electronics.components

```
| I am trying to preprogram a display's offset but the counter ICs are
|strange and cant find in my IC data books. The displays are NIXIE and
each driver
|board are on individual small PC boards. The freq counter is a WJ/CEI
|dro-307-1.
|
|Anyway the ICs have these numbers on 'em and would appreciate any ref
|pinouts, crosses, etc...
|
| F 996079
| F 996079
| F 820
| SIG N8280A
```

My guess is that they are Fairchild and Signetics ICs and out of production.

2432. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: normlehf@pacbell.net
Message-ID: <37cdedad.42130442@news.pacbell.net>
Source record: 67286
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

I am being subjected to all this hot air in rec.antiques.radio+phono--a
group clearly dedicated to interest in antique technology. If you are not
interested, just go away, rather than waste all this bandwidth.

Norm Lehfeldt

"Carl R. Stevenson" <wa6vse@fast.net> wrotf:

>Nobody's trying to deny you happiness ... just trying to encourage
>you to realize it's not 1930-50 and "get with it" on some up-to-date
>stuff (for your own good and the good of the ARS).
>

2433. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: dmoisan@shore.net
Message-ID: <37ce02fb.2047957@news.shore.net>
Source record: 67287

On Mon, 30 Aug 1999 11:37:45 -0400, Tracy Nelson <tnelson@fast.net>
wrote:
>
>But if you're just trying to self-educate yourself, how are you going to
>learn how a VCO or mixer works by studying a block diagram? I'm trying
>to teach myself some electronics, and I've found that I learn a lot by
>building things I can "play with". It's kinda tough to change the

As Carl explains, the Handbook has an explanation, a good one. But
don't overlook the manufacturers; many of them have excellent
tutorials available on line. (I'm thinking of HP's great app note on
digital communications basics.) Any ham that loves to learn will
seek this stuff out. I am not an EE by training, probably never will
be, but I *can't* be stopped from learning.

Even "macro" parts like a big IC can be tweaked; who hasn't debugged
an IC opamp design by adjusting the feedback resistors? I'm sure
engineers would wish it if they could drop the parts on the board
without thinking, but that's not so.

Where the benefit is for me is that modern parts are most readily
available for the things I want to do (digital comms., video.) and
there are reference designs available. I don't enjoy the prospect of
reinventing the wheel not once but multiple times in an endless
progression of ontogeny (making leyden jars, then alternators, then
1-tube radios, then 5-tubes, then ??? Someday I'll get to AM if I've
been a *really* good boy...)

(Besides, I *hate* point-to-point construction. And I have a laser
printer for PC layouts and all the stuff I need for SMD... Rule One
for any ham projects should be: Use What You Have.)

Re Carl's argument: I have an argument I use against Luddites (not to
claim that of anyone here): In a technological society like ours,
people are free to use as much or as little tech as they want. No
one's making you put together a 256-QAM modem, I certainly have far
better things to do than shove a databook CD at you at gunpoint. :)
Or take away your 6L6's or your discretes, let alone your key. I'll
defend anyone's right to build amps out of three dozen 2N2222's.

But, if the reverse position is held, and I'm enjoined or discouraged
from using "newer" technology because it "isn't done" or that I
"didn't do it the old fashioned way" or "it's not pure, noble, or
simple", that's bad for me. And probably bad for amateur radio.

I've had a negative image of hams of late. Too often, I'm reminded of the Florida citrus commercial you may have seen on TV, depicting an old man in a musty back room, thumping an equally musty, thick book, shouting "GRAPEFRUITS *MUST* BE EATEN IN HALVES!"

Do I hear that old man shouting, "*REAL* HAMS DON'T DO NO (silicon) CHIPS!" or "REAL HAMS DO <insert favorite good-old-day-ism>"? I fear that's the perception.

I don't believe in the "Good Old Days". Memories are rose-colored, true, but they're painful to behold when an idealistic past is held to our imperfect present. People turn bitter not only because the present isn't as "good" as the past, but also because *their* past isn't as good as The Past.

We patronize, as well, those earlier times, believing that the likes of Maxim and Marconi somehow knew that *they* were in *their* Good Old Days and never had to change, as if their hard-won experience and expertise were somehow bestowed on them from God.

These days *are* (or should be) the "good old days" for me. Building "new-fangled" things is just the easiest way for me to get started and have fun. I'd love, for instance, to talk to people like Gary who are doing digital comms. with just a few chips. PSK31 with a good, cheap, small HF rig. Or to repeat the experiment someone did that carried an H.323 videoconferencing system over the ham bands. THOSE things intrigue me (and anyone else I could elmer.) These things are the future for me.

I *understand* and *respect* that people like the old things. But it's just not in my heart to do, and if I were *made* to do such things as learn 30WPM CW, or build 1-tube rigs until I was deemed worthy of higher things, I would lose all that made me get my ticket in the first place. (Did anyone make you build an alternator, ignoring the regulations against spark?)

To paraphrase Churchill, when we fight over the Good Old Days, we lose the future. If all hams resist change such as some have here, then we're losing the future.

73, Dave N1KGH

P.S. Anyone else interested in the same things, I'd like to hear from you privately. I'm in the Internet Elmers' directory

David Moisan, N1KGH, GROL n1kgh@amsat.org
Invisible Disability: http://www1.shore.net/~dmoisan/invisible_disability.html
GE Superradio FAQ: http://www1.shore.net/~dmoisan/faqs/superradio/gesr_faq.html
Sangean ATS-909 FAQ: http://www1.shore.net/~dmoisan/faqs/sangean/ats909faq.html

2434. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: ".H .H Russell" <koenen1@telusplanet.net>
Message-ID: <37CE30C0.BE62A3B3@telusplanet.net>
Source record: 67288
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Here's the scoop, one way I see it.
Nowadays, we have state of the art SWL radios.
So something goes wrong.
The fix?
Plug in another IC.
If that doesn't work, plug in another complete chassis.
Finally, just buy another radio.

All told, the old guys have been there, and they are here.
The newbies are only here, and don't even know what a pornograph is.
They've never seen one, so they don't believe in wax cylinders being played on a wind-up machine.

They've seen CD players. And know all about them.
So do the old timers.
There are so many ICs in there, numbers so and so.
Same with cell phones.
Just look in the book and quote numbers like mad, the way we used to do about Hemis, 327s,
quadrajet carburators. Four on the floor! Hurst shift!
Wow.
Today? Aim the remote control at the car and it starts for you.
Stuck? Call the automobile assn.
Everything is throwaway.

Now, WE know how to actually take a Mason wide mouth canning jar, and build some structures inside, evacuate the air, and rig up a thousand Watt transmitter post-haste, using coils from the vacuum cleaner and home-made condensers.
The thing can be fine-tuned against spurious emissions, or just left however it works in an emergency to save a life.
And no cell-phone will function anywhere nearby, in that case.
Not a good idea.

But the things that can be done.
And then we can always go out and buy the same darn stuff the young whippersnappers do, anyway.
So we got both.

We can BUY what we can't figure out.
But can the contemporaries purchase a regen that easily?
Oh, boy! Did you know that the Military is using tube transceivers as back-ups, just like the Russians do?
Some kids today seem to be walking pincushions and porcupine lookalikes.
Paintbrushes in the biggest pants made.

At least the visible ones on the corner by the pop-shop.
The intellectuals are social outcasts.
The druggies don't care about nothin', man.

The city I'm in for five years, has plenty of kids.
They're all good.

But some of them, you know are going places.
I have not found even a single one, and I've been looking, which seems to be even remotely interested in anything other than to feel cool and find money.

Most of them are alright until they get to school.
Then very rapidly they can change forever.
I read about the process in Karl Marx's Communist Manifesto, where he goes on about planned decadence.

The kids who did make decent marks in spelling and grammar, went on to succeed in college and university, where soon they were given passing grades.
Some few of these still don't know nothing.

Everything taught today is engineered only toward one bottom line, and that is efficiency in money-pumping for someone else.

There are the cream of the crop, who actually understand what they were taught.
And these have much more to learn, but don't think so.

One in a blue moon graduate continues to actually think for himself, instead of parrotting pet phrases.
It is this rare creature, who might very well be interested in learning things considered archaic.
That is, if he can find the time, which is unlikely with the system we've got.

There are recruiters roaming the schools, looking for candidates to serve their agendae.

How many people actually escape all the traps?
Probably none.
The system is very efficient unto itself.
It is an entity, a monster.

Work, and you shall have toys.
Get sick, and it's off to the abatoir.

So with so little to to look forward to in life, I can't blame all the kids, not really.
I get so pig-biting mad, when I stop to think about technology.
It has advanced tremendously, yes.
But it serves finance, and that is all.

Remember, all you old guys, the promises about labor-saving devices?
The American Dream?
A hot rod Chevy which didn't crumple up if you looked at it?

Real American products, made to last.
Good old American know-how.

Could we get a Cadillac with a Mitsubishi engine back in the fifties or sixties?

We've come a long way.
And of course, to those who haven't experienced the past, everything is great,
and right how it should be.
Where are my dentures.
A while back you could get porcelain teeth in dentures.
Today they talk about it, but give you plastic chiclets.

Ever notice how more and more is said about less and less?

Now I am listening to Radio Hilversum, and tinkering away building a hyperspace
window with which to save the world from the Dracos.
I guess . . .

It is nice to be retired, for the time it gives one.
It is nice to be single and not dependent upon the goodwill of associates.
It is nice to be able to go out and buy anything you want.

Life is good.
And we made it that way.

Hans

CommQuart wrote:

> I do a small radio restoration column for a "popular" non-ham
> SWL/Scanner orientated magazine. After offering some simple projects, I've
> noticed a fantastic response from the readers; but, I am slowly
> realizing that the median age of most people I hear from falls
> between 65 and 72! It's interesting when you receive long, handwritten
> letters
> from Old-Timers, but never even an email from someone younger showing an
> interest in the old technologies or proper restoration techniques.....
>
> I am wondering if anyone under the age of 50 is building radios anymore, or
> is the "magic" of building a one-tube regenerative receiver using a 30 or
> '99
> tube reserved just for those of us with AARP membership. I am feeling
> kind of sad, because more than a few old timers have sent me the
> remains of their junkboxes because no one else is interested; and they
> didn't
> have the heart to take the stuff to the dump. (Nothing special, old sockets,
> resistors, coils, etc.)
>
> I am wondering, are we really the
>
> Last American Dinosaurs

2435. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: ".H .H Russell" <koenen1@telusplanet.net>
Message-ID: <37CE3333.6FDB3DF5@telusplanet.net>
Source record: 67289
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Wait til I get offa my rollerskating camel and wind up the string of my packet kit.
Okay. You must be a skateboarder, right? sensory surfer-
Here is the scoop for that question, which you can verify.
I put out an idea on my website three years ago, regarding a concept I came up with way back before you were even a glint in your pappy's eye, that is 1988.

The Trifilar Diamond Laser weapon.
Something told me to take it off "post haste", and I did.
Just last week I came across an article on the Net describing the strange tubules found within diamonds.
Think on that, and you'll see I was not very far off the mark.

As to your question perse, the phenomenon is valid and can be verifies, which I'm not going to do for you.
As to making money, I don't need it.
And as in regen receivers, hey. It is more fun to lie still for eight hours peering through a scope, waiting for the target.
I can still plink, if you have any idea what that means.
But killing is a waste of time.
Besides, it's illegal unless the government has a war.

Pretty well at any time, there are 84 wars going on in the world.

Not a pretty pic.
Chiao.
Hans
sensory surfer wrote:

> ".H .H Russell" <koenen1@telusplanet.net> wrote:
>
> >There is, in quantum physics a hint, and scalar physics, an intriguing effect where
> >the "projectile" strikes the target halfway across the universe, just BEFORE the
> >projectile leaves the source.
>
> Would you perhaps be interested in getting filthy rich making rifles
> like that? I mean, why bother with breath control, trigger control,
> perfect sight picture and the natural respiratory pause if one can
> shoot deer with a time machine? ;-)

2436. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: ".H .H Russell" <koenen1@telusplanet.net>
Message-ID: <37CE3DE5.5F8C0D2F@telusplanet.net>
Source record: 67290
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Just finished a little nap, and thinking about your question some more.
Getting filthy rich isn't my idea of time well spent.
Making rifles like those you refer to, would amount to the point being made in all these posts.
It's just no fun.
Press a button, ten deer bleed to death for your pleasure.
Yuck!
The way we used to do n the old days, was to strip naked and put a knife between our teeth.
Then we'd lie in wait for the deer.
When one came, we'd chase it down on foot, and kill it.
That was fun for sport and food. But as we grew older to say about sixty or so, we'd have to resort to rifles.
And then only to eat, since the running sport was out of the picture.
Breath control can be very important in many areas. Good to learn and practice.
Trigger control is something my concubine is muttering about.
Perfect sight pictures were found on TVs when they were first produced.
The natural respiratory pause and breathing control were not mandatory for an adept.

I used a Weller soldering gun for years, and ended up being able to shoot a rifle or pistol without sighting.
I would hit the target every time. Wherever I looked, that is where the lead landed.
That is called "plinking".
Clocks are time machines.
But the kind you mean do exist.
Not for killing perse, but for travel.
You'd have to understand 3D math to grok that precept.
The Philadelphia experiment and the Montauk Project were real, and in fact Montauk has been revived in the last few years.
Has to do with the time loop we're stuck in now.
The world has already ended and vanished along with 'heaven' and everything else in this dimension.
We're still here, most of us blissfully unaware of the countless repetitions we've already made of our lives.
The push is on to break the time loop and enter another dimension with the so-called help of the Dracos.
The Dracos won't help us, they help only themselves, to us as their snacks.
So you may be in your last cycle, finally.
This conclusively proves that we are ALL old-timers, even one as young as yourself.
You've done this trip many times, and are probably well over four thousand years old like the rest of us.

The only way to escape the finality, is to use my hyper space window.
But everyone laughs, doesn't care much.

Strange.
Hans
sensory surfer wrote:

> ".H .H Russell" <koenen1@telusplanet.net> wrote:
>
> >There is, in quantum physics a hint, and scalar physics, an intriguing effect where
> >the "projectile" strikes the target halfway across the universe, just BEFORE the
> >projectile leaves the source.
>
> Would you perhaps be interested in getting filthy rich making rifles
> like that? I mean, why bother with breath control, trigger control,
> perfect sight picture and the natural respiratory pause if one can
> shoot deer with a time machine? ;-)

2437. Re: HELP! Tube Guru's Advice Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.SOL.4.10.9909020730460.20912-100000@Ocean.CAM.ORG>
Source record: 67291

On Wed, 1 Sep 1999, Rick Haub wrote:

>[stuff deleted, but I may get back to it later]
>
> 2) When I switch from TUNE to OP the OC3 tube stops glowing. The OD3 and
> the OC3 are in series with each other with the OD3 being grounded. When the
> mode switch is in the TUNE position I get 270v out of the OD3, which drives
> the 12BY7 and 375v out of the OC3 which drives the 1625. When I switch to
> OP I get 440v out of the OD3 and 450v out of the OC3.
>
> 3) If I key the circuit when I have the mode switch in the OP position the
> OC3 will start to glow again and the volages fall off to a little below the
> TUNE posision readings.Switching to the 1625 plate reading on the internal
> meter shows that I'm getting about 120mA from the plate but no amount of
> fiddling with the tuning or load caps causes any effect, let alone a "dip"
> of any kind.
>
Where did the voltage regulators come from?

I don't have the exact diagram you are using. The 1961 edition has
something similar, though I'm beginning to think that the function
switches aren't quite the same, and it has no VR tubes.

What voltage do you measure out across the filter capacitor in the power
supply? Be careful! What does the schematic show the voltage being at
that point? It's bound to be somewhat different, but if there's a big
variation...

If the schematic is like all the variations I have around here, there
should be a variable resistor of some sort between the high voltage line
in the power supply and the voltage regulator tubes. If that isn't
adjusted right, the regulators aren't going to work properly. There
should be something in the text about adjusting this for proper operation.

Don't adjust the resistor with the power on. And short the filter
capacitor before making any adjustments.

If by chance it's a fixed resistor there, it may need changing if the
power supply output differs from what's shown in the schematic.

If you look at the back of the Handbook, there is data for common
tubes. Mine shows the plate voltage for the 12BY7 as 250volts, and the
screen as 150volts. Something has to be wrong, either in your meter, or
the power supply and voltage regulator section.

The tables show the 0D3 to be a 150volt regulator, and the 0C3 to be a
105volt regulator. So the voltage across the 0D3 should be 150volts.

The table shows the 1625 maximum plate voltage to be 750 volts, and it's maximum screen voltage to be 300volts. I'm assuming the plate of the 1625 gets fed directly from the output of the rectifiers in the power supply, and it's the regulated 255volts from the anode of the 0C3 that feeds the screen grid. Again, the voltages you show are too high.

The voltage across the filter capacitor in the power supply probably will vary some between key up and key down. And between the tune and operate position, since in the tune position the 1625 gets no screen voltage (unless that's different from the transmitters I'm looking at). But the VR tube voltages should stay constant no matter what else, which is the point of the regulators.

We can work on the rest once the power supply is putting out the correct voltages.

Michael VE2BVW

2438. Re: 8873 tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <7qlut5$fo2$1@nnrp1.deja.com>
Source record: 67292

In article <37CDCCA0.42C49D21@toltbbs.com>,
Jeremy Hopkins <jhopkins@toltbbs.com> wrote:
> anyone know of any 8873's for sale or am i just dreaming?
> --
> Jeremy W. Hopkins
> KC8GWH
> Toledo Ohio USA
> http://www.toltbbs.com/~jhop
>
Dear Jeremy, 73's.

8873 is manufactured by EIMAC (www.eimac.com, where you can even get
the data sheet for it).

Try the Dayton Sales Office:
Communications and Power Industries
4130 Linden Avenue #255
Dayton, OH 45432
Phone: (937) 258-3930
FAX: (937) 256-3484

Contacts

Sue Dugan -- E-mail: sdugan@attmail.com
Terry Kuck -- E-mail: tkuck@attmail.com
Judy Loofboro -- E-mail: jloofboro@attmail.com

Or any other distributor listed on the EIMAC homepage.

Good luck (and price!)

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2439. Re: Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7qlvcb$g5l$1@nnrp1.deja.com>
Source record: 67293

In article <37CDAC08.7D10@pop.removethistomailme.net>,
jmiles@pop.removethistomailme.net wrote:
> marsgal42@hotmail.com wrote:
> >
> > It's theoretically sufficient to use linear combinations of the
> > proto-I and proto-Q signals, and it's probably sufficient to do
> > so in practice too.
> >
> > S53MV's zero-IF/Weaver radios do an analogue version of this.
> >
>
> Sounds interesting, but what exactly do you mean by "proto-"?
> Uncorrected?

Yep. The output from each mixer, before correction for amplitude
and phase.

Sorry...
--
Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte
Satellite: VA3SFL on UO-22, KO-25

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2440. Re: Good resources for learning electronics?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: k7on@arrl.net
Message-ID: <MPG.1238859c42315a5d989799@news.speedchoice.com>
Source record: 67294

Try: http://www.qex.net/k7on/books/

> Would folks on this group recommend going back to those Heathkit courses
> as a good means of learning electronics and pursuing the hobby once
> more? Any other good books or self-study courses out there?

--
Brian Short, K7ON 1994 E. Laguna Dr. Tempe, Az 85282
bshort@speedchoice.com >or< http://www.qex.net/k7on/
--

2441. re: Help with VFO Buffer - load isolation needs improving - vfo+buffer.gif (0/1)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: rjburden@bigpond.com
Message-ID: <37ce8032.887759@news.bigpond.com>
Source record: 67295

Hi,

thanks to all those who offerred their assistance in this matter.
Having weighed the pro's and con's of each suggested solution I'm
going to look for a topology with greater isolation.

Thanks for all your help to date!

Regards,
Richard VK5OO
VK5OO @ yahoo.com.au

"Nothing better than home-brew, except perhaps an absence of Spam"

2442. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: "Laszlo I. Morocz" <kf4pv@SPAMMENOTlmorocz.com>
Message-ID: <hGvz3.5744$Xz1.10046@jump.innerx.net>
Source record: 67296
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Please use your hyperspace window to go back in time and kill this thread
before it ever started

--
To reply, remove the text SPAMMENOT from the e-mail address.

.H .H Russell wrote in message <37CE3DE5.5F8C0D2F@telusplanet.net>...

<snip>
>The only way to escape the finality, is to use my hyper space window.
<snip>

2443. Re: 8873 tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <7qm52tkra1@nnrp1.deja.com>
Source record: 67297

In article <37CDCCA0.42C49D21@toltbbs.com>,
Jeremy Hopkins <jhopkins@toltbbs.com> wrote:
> anyone know of any 8873's for sale or am i just dreaming?
> --
> Jeremy W. Hopkins
> KC8GWH
> Toledo Ohio USA
> http://www.toltbbs.com/~jhop
>

Jeremy, you may try Richardson people (U$624 each tube):

Richardson Electronics Ltd.
40W 267 Keslinger Road
LaFox, IL 60147
Phone: 800-238-7661
Web: http://www.rell.com

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2444. Re: Microwave Oven Transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: Patrik Arvhult <elt95pat@mds.mdh.se>
Message-ID: <Pine.GSO.4.10.9909021622440.28380-100000@legolas.mdh.se>
Source record: 67298

I have one of those marked:

Primary 220V 50Hz 1100VA
Secondary 2100V
Extra coil (some turns) 3.15V

Don't get zapped! / Patrik, Sweden

On Wed, 1 Sep 1999, Michael Radtke X4897 wrote:

> Hello,
>
> I have been scrapping a few microwave ovens. It seems to me that the power
> transformers might be useful for folks building linears. I haven't measured
> the voltage, but it looks like is must be about 2KV.
>
> Any thoughts?
>
> Thanks,
> Mike WA7ZPU
>
>

--
.

2445. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: GG <nbc_red@mailcity.com>
Message-ID: <37CE7BEB.1E14@mailcity.com>
Source record: 67299
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Carl R. Stevenson wrote:
>
> -----BEGIN PGP SIGNED MESSAGE-----
> Hash: SHA1
>
> Will White <wcw@uswest.net> wrote in message
> news:37CD1969.678D63E@uswest.net...
> >
> > I get the idea, and that is fine. I even believe you, though I have
> little
> > idea beyond a dim understanding of what you are talking about,
> technically
> > speaking. I won't deny you your pleasure and satisfaction. Neither
> will I deny
> > your work, amateur and professional, may have economic and social
> value at
> > large. It probably does. Just don't attempt to deny me and others
> who are
> > years behind you, by some combination of preference, talent, and
> training, our
> > small happiness.
>

<rest of blah, blah, blah snipped>

Will you please take the rec.antiques.radio+phono out of the groups
being posted to. We haven't any interest in this thread at all.

2446. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: maddog@io.com
Message-ID: <37ce9123.2021087@news.io.com>
Source record: 67300
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

On Thu, 02 Sep 1999 08:09:48 GMT, ".H .H Russell"
<koenen1@telusplanet.net> wrote:

>Ever notice how more and more is said about less and less?

Yes.

2447. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <37CE915A.D09DD398@midwestmicro-tek.com>
Source record: 67301
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

sensory surfer wrote:

> Rick Haub <rhaub@midwestmicro-tek.com> wrote:
>
> >Some day after I've learned a lot more and worked for my General Class licence I
> >just might build that Packet tranceiver. Will I build it from tubes? Probably not,
> >but what a challange it would be.
>
> Not wanting to join in the general fray, but man, that's one heck of a
> visual. I'm trying to picture some 21st Cent. Desert Warrior carefully
> loading his tube regen packet radio into his pack prior to evacuating
> post haste in a sandstorm. Tube packet : two paper cups connected by a
> billion dollar string. Why not just teach your camel to rollerskate?
> ;-)
>
> ROTFLMAO! ;-)
>
> Sorry, man, something about that concept just really, really struck a
> funny bone. No offense meant, if you want one, then I certainly hope
> you enjoy it. Good luck.

No offense taken as I ment it with tounge in cheek. Kind of reminds me of Back to the Future II when the '55 version of Dr. Brown had to reconstruct the microchip from tubes and coils. They show the Delorian driving off with 3x2 foot bread board of tubes on the hood. Now that was funny.

>
>
> ss.

2448. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <37CE95F7.EA12E7FC@midwestmicro-tek.com>
Source record: 67302
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Loud cheers and stamping of feet. Whooa! Whooa! Whooa!

Rick

Will White wrote:

> Carl R. Stevenson wrote:
> >
>
> >
> > Nobody's trying to deny you happiness ... just trying to encourage
> > you to realize it's not 1930-50 and "get with it" on some up-to-date
> > stuff (for your own good and the good of the ARS).
>
> You presume to know what is best for me? Why? That's even funny! You do take
> what I pursue as a hobby *very* seriously indeed! I entered the ARS (got a
> ticket) after futzing around with BA recievers as a SWL for years. That's why
> I got a ticket--so I could futz around with BA transmitters, too, and "beep"
> back. I am uninterested in new circuits and materials et al. Totally. Had a
> few late-model radios, still have one, they're OK, <yawn>. I strive in all
> things for impracticality. You might try it. Yes, it is 1999, so what? If I
> can't play with My SX-28 and tinker with Grammer and Jones glowbug designs,
> then I forbid you to eat Baked Alaska, or any other dish that was concocted
> before 1990! I think the ARS can do without my technical innovation, wouldn't
> you agree? Obviously, you must, since my technical judgement is so lacking, as
> you have pointed out
> >
> > > Everyone doesn't have to be working on the same projects,
> > > with the same goals and methods, do they?
> >
> > No, but endless regurgitations of the projects of the 30s-50s
> > don't serve a very useful purpose. They result in inferior equipment
> > and don't teach much in the way of skills/knowledge which are truly
> > useful in today's world.
>
> Useful? Useful to who? To me, a Drake R-4B is about the upper limit of what I
> consider useful in a radio. I don't do any of this because I need to
> communicate. The old Basis & Purpose argument wont work on me, not at least as
> far as "advancing the radio art" goes. I think that section in Part 97 ought
> to be stricken. It's about time, speaking of anachronisms. I refuse to be
> useful to you, or anyway to your notion of what the ARS and the wide world
> need done. So, 30, 40, or 50 year old radios and circuits are plenty useful to
> me. God, save me from any more efficiency!
> >

> > > You mentioned relevance and value several times in this
> > thread--Relevance to
> > > what? What sort of value?
> >
> > Relevance and value in reference to the world we live in today. Only
> > a nostalgic "collectables value" makes old tube gear worth more than
> > a (very low) per pound scrap value. That's an intangible "value" that
> > is not going to impress the regulators ... particularly compared to
> > the
> > billions of dollars they could raise by auctioning off our spectrum.
> > However, the tangible value of people who understand and can use
> > modern technology to provide USEFUL voluntary communications
> > in times of need (and can/do build the infrastructrue necessary to do
> > that) WILL impress them.
>
> Clearly we have a gulf between us--HF over here and VHF+ over there. You are
> quite right to be concerned about spectrum auctions at VHF+. Not so at HF,
> clearly not at all. I suppose you beleive all hams should be burning the
> midnight oil in basement labs in search of those VHF+ circuits and techniques
> which will wow the FCC into not proceeding with further auctions? And we
> should all be using those bands all the time, even when the propagation and
> the culture bores us, to demonstrate the bands are needed and used? What I
> think OM, is that the bird endangered is the ham/pro-engineer who lives above
> 144 MHz. Us glowbuggers and QRQ guys may be old-fashioned, but it aint our
> acre LEOs et al are after, is it?
>
> > > I commend your dedication to innovation and
> > > development of radio technology, I do. Clearly it is valuable to
> > you, and such
> > > activity has much economic value as well. What I and some others
> > value about
> > > hobby radio has little to do with new technology. I have no formal
> > training
> > > or education in engineering, RF or otherwise. Exploring and learning
> > a little
> > > science and antique engineering, via technologies that are
> > relatively simple
> > > and static, has ultimate value for me.
> >
> > But can't you see that learning "antique engineering" is like learning
> > how to make fire with 2 sticks compared to today's technology?
>
> Sure, but as a backpacker known to take 10 day and longer trips 100 miles from
> even a fire road, I can tell you just how valuable knowing how to get fire out
> of sticks or rocks can be. When will you get it (and it is obviously not just
> me singing this song): pragmatism, efficiency and such are out of mind for
> some hams where the hobby is concerned. That is not why we do it.
>
> And it goes on and on and on (snip snip snip) like that, always back to the
> same disconnect: we are licensed by the same government authority and often

> keep company with RF. That is about the extent of what we have in common, in
> terms of ham radio. Don't change, really, don't, and I promise, I won't
> either.
> --
> Will White, KD7BFX
>
> to reply, please click this link mailto:wcw@uswest.net

2449. Re: Favorite tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <37CE74D2.5FAC@pacbell.net>
Source record: 67303

Roy Lewallen wrote:
> A few weeks ago I went to an antique farm equipment show. Fascinating.
> There were lots of old (c. 1900) gasoline engines which used this
> cooling method. The cylinder was simply in the middle of an open-top pot
> of water which steamed away. (These "hit and miss" engines don't produce
> a lot of heat when lightly loaded, since they only fire often enough to
> keep the flywheel speed up. I timed one at one hit every 20 seconds.)
>
> Many moons ago there was an article in QST or Ham Radio describing a
> cooling system for large tubes where water was dripped or sprayed on the
> heat sink. The idea was to regulate the temperature at or just above the
> boiling point of water. Boiling water takes a lot of heat, so this
> should be pretty effective.
>
> Roy Lewallen, W7EL
>
> Lawrence Stoskopf wrote:
> >
> > 20 years ago at CSVHF in Oklahoma there was a talk of putting an
> > appropriate length of pipe tightly around the anode of a 4CX250, filling
> > it with water and simply letting it boil out for cooling. Worked. The
> > EIMAC crowd there was impressed!
> >
> > N0UU

The old Eimac book, Care and Feeding of Power Grid Tubes has
a section entitled "Vapor-Phase cooling" that discusses this
subject.

To quote: "Raising the temperature of one gram of water from
forty deg. C to 70 deg. C (as in a water system) requires 30
calories of energy. Transforming one gram of water at 100 deg.
C to steam vapor requires 540 calories. In a vapor-cooling
system, then, a given quantity of water will remove nearly
twenty times as much energy as in a water-cooling system."

It seems Eimac knew all about boiling water type cooling.

Tom Donaly KA6RUH

2450. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: Mike Silva <mjsilva@jps.net>
Message-ID: <u6yz3.243$313.78960@news.wenet.net>
Source record: 67304

Honestly, David, I think this is a myth, an invention that has taken on a life of its own. I have *never* heard or read of somebody *seriously* saying hams shouldn't use this or that new technology, or *must* use this or that old technology. What I *have* seen many times is that somebody asks about building a simple tube or transistor project and they get a response like "regens, yuck!" or "get with it on some up-to-date stuff" What bigotry I see is against old technology, not new technology. (Me, I make my living with the latter, but prefer the smell of the former <g>.)

73,
Mike, KK6GM

David Moisan wrote in message <37ce02fb.2047957@news.shore.net>...

>I've had a negative image of hams of late. Too often, I'm reminded of
>the Florida citrus commercial you may have seen on TV, depicting an
>old man in a musty back room, thumping an equally musty, thick book,
>shouting "GRAPEFRUITS *MUST* BE EATEN IN HALVES!"
>
>Do I hear that old man shouting, "*REAL* HAMS DON'T DO NO (silicon)
>CHIPS!" or "REAL HAMS DO <insert favorite good-old-day-ism>"? I fear
>that's the perception.

2451. Mapper87 were archived?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: pmarkham@newsguy.com
Message-ID: <8E359259Cpmarkhamnewsguycom@news.newsguy.com>
Source record: 67305

Please pardon the off topic post but .misc appears to be far more
irrelevant, judging by the posts and responses.

I am looking for a web accessible archived copy of:

MAPR87.ARC

MAPPER86/87 .. A DX MAP Drawing and Propagation Program
for IBM PC Compatibles with graphics capability.

Version 8.0

by
Dennis P. Murray
11165 McDonald Street
Culver City, Ca. 90230
CompuServ 72770,2765
2 August, 1992

Any url pointers will be appreciated. Searching by the means I have
available have been fruitless.

TIA,
Pete/wa4hei

2452. Re: Scope Probes for TEK 485

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: david@slack.com
Message-ID: <37cecce8@news.spies.com>
Source record: 67306

In article <37CBDAC7.33F11D16@lafn.org>, David Shalita <af389@lafn.ORG> wrote:
>Hi,
>Any TEK 485 scope owners out there?
>Any 350 MHz or faster scope owners can help too.
>
>What are you guys using for the HI Z 10MEG 350 MHZ or faster
>probes? I need your help.

The 485 has "only" 250MHz bandwidth with high impedance probes. To get
350MHz BW you have to turn on the 50 ohm terminators and use low impedance
probes (Tek P6056, P6057, or home-made).

You should be able to find used Tek P6106 or P6106A probes at a reasonable
price ($30?), or P6130 series probes for somewhat more.

You can get new no-name 250MHz probes from Alfa ($29), BelMerit ($34) or
Farnell ($29). For details see: http://www.spies.com/dd/probes.html
I don't know of any low cost probes with the readout pin though.

2453. WANTED

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: "Dennis A. Homerick" <w8nw@richnet.net>
Message-ID: <37CED291.4EB3DCE4@richnet.net>
Source record: 67307

Thanks for reading my message. I need a 19 pin plug for Motorala
Mitrek.

Thanks
Dennis

2454. MC145170 PLL Programming

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: quinnja@my-deja.com
Message-ID: <7qms0d$73i$1@nnrp1.deja.com>
Source record: 67308

If you are interested in using the Motorola MC145170 PLL chip in VCO projects but had been scared off by the difficulties in programming the PLL then have a look at http://www.qsl.net/zl1wjq for details of programming the MC145170 with your PC.

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2455. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: BOB DUCKWORTH <bob@atl.org>
Message-ID: <37CE8F9F.1F30@atl.org>
Source record: 67309
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

(Newsgroups edited)

This has got to be one of the oldest threads in ham radio.
I'm reading letters to the editor in a 1923 QST and someone
is bitching about the guys who don't build their own stuff!

My brother is an archeologist working with SE USA aborigine sites
and has found glyphs strings on soapstone. 3,000 years old,
depicting the man who doesn't grow his own tobacco and
make his own pipe as a slug ;-)

Hey, anyone got any sockets to fit WE 231D?

Have a dozen 7027A. They are used but I don't have any
use for them so if anyone wants to swap some older transmitting
tubes that have good emission for some good used RCA 7027A's
send me some mail.

-bob

2456. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <IjBz3.15778$ok3.4673@news.rdc1.il.home.com>
Source record: 67310
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

> The newbies are only here, and don't even know what a pornograph is.

??? I've seen a pornograph, but not in a ham store!

2457. Turn your PC into s DSP for SWL!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: "Thomas F. Swezey" <swezeyt@winternet.com>
Message-ID: <37CEE40D.76EF83F9@winternet.com>
Source record: 67311

I am a professional software engineer and a long time short wave
listener.

I have developed a Windows program that allows you to filter audio in
real time.

Connect the "Line Out" on your short wave radio to the "Line In" on your
PC's sound card.

The program takes the signal, digitally enhances it and plays it out
through your PC's speakers!

No special hardware or modifications needed.

It does require a fast PC - 200 Mhz or better.

For more information and a free Shareware copy of the program visit my
web site:

http://www.winternet.com/~swezeyt/dsp.htm

Thanks a lot,
Tom Swezey

--
**** Signature **** (KISS: Keep It Simple, STUPID!) ****
Check out my Web Site: http://www.winternet.com/~swezeyt
E-mail me at swezeyt@winternet.com (o o)
oOO**( )**OOo*

2458. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: ".H .H" <koenen1@telusplanet.net>
Message-ID: <37CEFBD9.AC6DB658@telusplanet.net>
Source record: 67312
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

I mean a Victrola type of doohicky.
Hans

Dave VanHorn wrote:

> > The newbies are only here, and don't even know what a pornograph is.
>
> ??? I've seen a pornograph, but not in a ham store!

2459. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: ".H .H" <koenen1@telusplanet.net>
Message-ID: <37CEFBF3.EEEBB7BF@telusplanet.net>
Source record: 67313
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Except by me, of course.
Hans

maddog@io.com wrote:

> On Thu, 02 Sep 1999 08:09:48 GMT, ".H .H Russell"
> <koenen1@telusplanet.net> wrote:
>
> >Ever notice how more and more is said about less and less?
>
> Yes.

2460. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: ".H .H" <koenen1@telusplanet.net>
Message-ID: <37CEFC4D.76ECCE38@telusplanet.net>
Source record: 67314
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

I tried.
but the whole thread takes up only one line if contracted . . .
Hans

Laszlo I. Morocz wrote:

> Please use your hyperspace window to go back in time and kill this thread
> before it ever started
>
> --
> To reply, remove the text SPAMMENOT from the e-mail address.
>
> .H .H Russell wrote in message <37CE3DE5.5F8C0D2F@telusplanet.net>...
>
> <snip>
> >The only way to escape the finality, is to use my hyper space window.
> <snip>

2461. Shortwave up Converter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: alg460@aol.com
Message-ID: <19990902185420.23296.00003967@ng-cm1.aol.com>
Source record: 67315

Does anyone have a schematic for a simple converter that will convert shortwave frequencies to something that a scanner can pick up? I know this can be done with the Phillips SA-602 Mixer but I just can't remember how. Also do scanners automatically distinguish between AM an FM on any frequency?

Tony

2462. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <37CEFA57.4B897E12@midwestmicro-tek.com>
Source record: 67316
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

.H .H Russell wrote:

> To wit,
> Black and white is a whole lot faster than color.

Sorry Hans, nosale. Back up your statements with numbers and science please. Just what is "a whole
lot faster".

The time issues with B&W vs. color has to do with how the human eye response to light stimulus and
the fact that color tv's incorporate 3 electron guns instead of one and the added amount of information needed to be decoded by a color tv. It has nothing to due with your unfounded statement
of "black and white is a whole lot faster than color". I am of course assuming that you are refering
to the actuall EM propagation.

2463. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <37CF0D01.6A2B@pop.valley.net>
Source record: 67317
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Dave VanHorn wrote:
>
> > The newbies are only here, and don't even know what a pornograph is.
>
> ??? I've seen a pornograph, but not in a ham store!

Hello--
...Which made me recall a very old joke:

The scene: a dock in a harbor, where a customs agent is interviewing
sailors as they debark:

"Sailor, do you have any pornographic literature in your seabag?"
"Hell, no! I ain't even got a pornograph!"

73,
Brad AA1IP

2464. Re: Help Identify Old Frequency Counter IC's

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <37CF0F47.5ED5@pop.valley.net>
Source record: 67318
Cross-posted to: sci.electronics.equipment,sci.electronics,sci.homebrew,sci.electronics.repair,sci.electronics.misc,rec.radio.amateur.homebrew,sci.electronics.components

jjesson@ais.net wrote:
>
> | I am trying to preprogram a display's offset but the counter ICs are
> |strange and cant find in my IC data books.
> | F 996079
> | F 996079
> | F 820
> | SIG N8280A
>
> My guess is that they are Fairchild and Signetics ICs and out of
> production.

Hello--

Right! The "F" is Fairchild, and the 9960 was a component of their "counter micrologic" family-- symbols cul where the "u" is a lower-case Greek "mu". Hope that helps further--
73,
Brad AA1IP

2465. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <37CF0DC1.BFCD5AF7@midwestmicro-tek.com>
Source record: 67319
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

.H .H Russell wrote:

> I really can't do the math anymore.

Really? I havn't pickup a physics text in ten years. One of the other engineers here had his
freshman text so I just barrowed it and solved for the vacuum tube over my lunch hour. The math
is pretty simple, algabra only and all classical. I should think that you could do simple algabra.

> I just did. Sound and EME are not mutually exclusive.
>

I got a whole floor of physicist a mile away from me who say your wrong. I can give you names
and addresses if you wish. I prefer the consol of real people and not "this scientist on a web
site says".

> It is definitely what I had in mind.But the math, I would have to study for a year to bring
> it all back.

Hmmmm.... took me about half an hour. Really now, is algabra that tough?

> I won't use incomplete bits and pieces if do calculations, and some of these
> calculations won't follow accepted standards.

They better if you want any one to take you seriously.

> So it is better left to you youngsters to find a way to make my statement true.
>

Sorry Hans, your theory, your proof. Put up or shut up as they say. BTW you cannot "make" a
statement true. It either is or it isn't. That reminds me of the church in the dark ages. They
new that the earth revolved around the sun but for social/religious reasons they keeped it away
from the common man and went so far as to persecute Gallilao. They "made" thier untrue
statement "the sun revolves around the earth" true. But it still didn't alter the fact that the
earth revolves around the sun.

> By the way, there is a perspective which would be called cheating by some, but in that
> perspective you enter three-dimensional mathematics.

Hmmmm..... I studied n-dimensional math and tensor calculus, I don't recall seeing anything in
the nominclature about "cheating".

>
>

Okay, here are the numbers for the tube

I will be using F=ma given by Newton in his Pricapia (SP sorry Issic) and the following:
E=F/qo (eq. 18.2) where E=electric field in N/C, F=force, and qo= charge of the electron
E=V/d (eq. 19.7) where E= electric field, V=applied volage, and d= the distance between two plates.
and d=1/2at^2 (eq. 2.8) d=distance, a=acceleration, and t=time
The last three can be found in Cutnell and Johnson's 3rd addition of *PHYSICS* published by Wiley in 1995.

So assume we have a triode tube where the plates are .5 cm apart and we have an applied voltage
of 200V. I think these are reasonable paramaters.

Then by 19.7 we have

E=200V/.005m=40,000 N/C

sub into 18.2 gives

F=Eqo = 40,000 x 1.602xE-19 = 6.408xE-15

now sub F=ma and we get

a=F/m = 6.408xE-15/9.109xE-31 = 7.0348xE15 m/s^2

now by using d=1/2at^2 we get

t=sqr(2d/a) = sqr(2x .005/7.0348xE15) = 1.19xE-9

or about 1.19 nano seconds.

I have of course, not taken into account the setup time of the the E field after the grid potential is dropped nor have I added in the slew rate of the grid drop. I merely assume that
the grid drop is instantanious and that when the electrons strike the other side they will immediatly began "energy transfer".

Now I have decided not to do the math for the semiconductor since it involves quantum mechanics
and if you can't do algabra I don't think you'll follow the math. You could just say that I'm
"cheating". For those that are interested the flow of electrons in a semi conductor is discussed in detail in Omar's text Elementary Solid State Physics published by Addison Wesley.
I used the first addition published in 1975. I will give a short discription though.

In order to conduct, the electrons in the valance shells (valance band) of a semi conductor must absorb enough energy to make the jump into the conductance band. The distance between

the
the two bands is not physical but electrical in nature and is know as the Energy gap. It's value is given in eV and for Silicon the value is 1.1eV. The time that it take for the electron
to make the energy jump can be calculated like all energy state shift. Any one interested in
these calculations are refered to Kenneth Krane's, Introductory Nuclear Physics, published by
Wiley. It is known that these jumps take place in the sub nano second range and once the jump
is made, I am assuming, as I did with the tube that flow begins when the electrons jump from
the the valance band (cathode) to the conductance band (anode) (I could be wrong about the cathode/anode direction, I always get them confused).

In other words the time it takes to get conduction or "energy transfer" within a semi conductor
is in the sub nanoseconds. Of course this works on a quantum basis and therefor it must be treated statisticaly since not all electrons make the jump at the same time.

At this point since I did not do the complex math you may be temped to call me a cheater. So
instead I will point to an imperical proof. Go to Pericoms web page and down load thier PDF file ps2011b.pdf. You will find a data sheet on the 74FCT240T line driver. If you look at the
switching characteristics you will see that the propagation delay time from off to on for any
given gate is a maximum of 3.6ns.

In other words, from the time that I apply a volage on the input of a gate it will take no more
than 3.6ns for the electrons to flow.

I offer this as my proof.

Your original assumption was that a tube could provide transfer rates 80 times faster than semiconductors. I submit that the difference is actually about 3 times faster using the best
case senario for a tube and the worst case for a semiconductor. At this point I would ask that
any one out there who has a really fast digital storage scope could test actual conditions by
getting a suitable high speed transister and a triod tube and actually measure the time it takes for current flow vs gate on for the transister and grid drop for the tube. Real world proof would be interesting.

If you don't agree with my math or my statements then please feel free to refute them, but please do so with hard science and good math, not with "some scientist on a web page says".

Rick

2466. Like to build prototypes? Like spare $$? Live in Si Valley, CA?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: MICHAEL NEIDICH <neidich@worldnet.att.net>
Message-ID: <7qndi4$78d$1@bgtnsc03.worldnet.att.net>
Source record: 67320
Cross-posted to: rec.ham-radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.video.dvd.tech

Like to build prototypes? Like spare $$? Live in Si Valley, CA?
Need experienced technician to build prototypes, from scratch. No prima
donna's need call.
FT/PT/Flex Hours
Call 408 919 4280. Mike Neidich/Zoran Corp.

Sorry for off topic posting.

2467. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: Will White <wcw@uswest.net>
Message-ID: <37CF6273.CAA12744@uswest.net>
Source record: 67321
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Ah, you write like Don DeLillo, Jr. . .See me, as I whiz along the empty Interstates in my 1965 Impala SS (with a Hurst, and sorry, no Q-Jet, got an AFB when the 327 got rebuilt. . .) Here is a picture of me sending QRQ CW via the dash mounted MAC bug, and the Gonset mobile rig. . .[jpg] Oh, wait, there goes my great-uncle Fil in his 1946 Hudson pick-up (Hudson green), with the CE 100V, crystal box on the hump, tuning the homebrew HF converter hung off the dash AM radio. . .ah, Y2K was wonderful, for those of us who didn't go with the Pleiadeans when they landed. . .Isn't that an Ethel Merman song?

.H .H Russell wrote:

>
> All told, the old guys have been there, and they are here.
> The newbies are only here, and don't even know what a pornograph is.
> They've never seen one, so they don't believe in wax cylinders being played on a
> wind-up machine.
>
> They've seen CD players. And know all about them.
> So do the old timers.
> There are so many ICs in there, numbers so and so.
> Same with cell phones.
> Just look in the book and quote numbers like mad, the way we used to do about
> Hemis, 327s,
> quadrajet carburators. Four on the floor! Hurst shift!
> Wow.
> Today? Aim the remote control at the car and it starts for you.
> Stuck? Call the automobile assn.
> Everything is throwaway.

--
Will White, KD7BFX

to reply, please click this link mailto:wcw@uswest.net

2468. Re: Homebrew HF Transciver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: jjesson@ais.net
Message-ID: <eojz3.3$236.69@news.ais.net>
Source record: 67381

Many of us have to deal with large RF fields... Chicago in the loop and adjacent to the Sears tower offer approximately 1 volt of RF (thats IS 1,000,000 uV). All of my handheld radios are completely useless and when I worked at Motorola we used to take commercial gear by the Sears Tower for evaluation. Have not had a chance to drag my WJ gear downtown :)

Joe

2469. Info on monitering Mil Sat Comm?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: dr.dongle@juno.com
Message-ID: <7qkkkg$ih1$1@nnrp1.deja.com>
Source record: 67382

Does any one have any info on monitering military comm satalites?
frequencys? latitued and longitude? modes of operation? any info
appricated.
dr.d

--
Kiss Technologys
The more complicated the plumbing
the easer it is to stop up the pipes M. Scott

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2470. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: ".H .H Russell" <koenen1@telusplanet.net>
Message-ID: <37CDD568.91F9CA20@telusplanet.net>
Source record: 67383
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

So attention, Rick Haub!
Here we have empirical proof that the speed of light is not absolute, and certainly therefore by
the law of commutation and the axiom of permutative stabilization, also not those pesky electrons.
To wit,
Black and white is a whole lot faster than color.
White is light, and color is light.
Yet there is a difference.
Now consider, if you will, that black is commonly thought of as the absence of light.
But is that really true?
Black may be filled to the brim with colors which escape the human eye.
Just horsing around here. But Einstein did say that imagination is more important than dentures,
did he not?
-Something like that.
Thanks for the come-back, Roy!
de Old Man
Hans

Roy Lewallen wrote:

> .H .H Russell wrote:
>
> >. . .
>
> > Sort of like a luminance delay in television? It is needed because the chroma signals would
> > not align with the b/w image due to delay.
>
> >. . .
>
> Yip. Color is a whole lot slower than black-and-white. They got
> black-and-white photography goin' in the late 1800's, but color didn't
> really catch up 'til the '30's or so. Same with TV. As I r'call.
>
> Good thing they didn't have the delay thing figgered out back then,
> though, or we woulda hadta wait fer the color b'fore we got anythin' at
> all. Then we woulda missed all them Chaplin movies. To say nothin' of
> Dr. Strangelove.
>
> Roy Lewallen, W7EL
> Charter member, OFC

2471. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-02 00:00:00 UTC
From: maddog@io.com
Message-ID: <37cddd3f.3571686@news.io.com>
Source record: 67384
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

On 1 Sep 1999 15:29:19 GMT, lpdavies@bc.seflin.org (Leslie Paul Davies) wrote:

>: That is still not the same thing as breadboarding a circuit (like a simple
>: mono-band receiver, for ex.). You can visualize and conceptualize till you
>
> For me, part of it is a matter
> of scale. Running me flingers
> along the wires, I "see" where
> that cap or diode does its job.
> It's oddly like being a human
> signal tracer... "Here i am,
> AF, RF, yup, here's where the
> DC bails,..." It may have to do
> with (forgive me, Pestalozzi,)
> "learning styles."
>
> I can link-up tinker-toy blocks
> of IC sub-units, but something
> about it is not satisfying in
> the same way. We all adapt to
> the extent that we must, but I
> feel the same vague unease when
> grabbing a chunk of code from
> a software library.
>

Bravo! (and a poet, too...)

monty N5FC

2472. Help identifying Audio Transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: nunnelly@aol.com
Message-ID: <19990903081451.28283.00002909@ng-fl1.aol.com>
Source record: 67235

I have two 1k:8 ohm audio transformers from Dan's. Three taps on each side.
How can I identify the 1k side from the 8 ohm side.

Thanks
Chuck Nunnelly

2473. Re: Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: Frederic Rible <frederic.rible@ercom.fr>
Message-ID: <37CFBDB1.C43591F0@ercom.fr>
Source record: 67236

Rocci wrote:
>
> After reviewing my own comments, as well as the other responses, I'd like to
> throw out the idea of using the 'Weaver' method. The Weaver method has
> traditionally been regarded as a mtehod for generating and recovering SSB,
> but it is probably usable as a generalized HF receiver demodulator.
> The beauty of the Weaver method, as I see it, is that responses due to
> signals outside the information bandwidth ('out of band') are inherently
> filtered out and do not rely on complex phase and amplitude balance in order
> to be rejected.
>
> Consider how the Weaver method works:
> A Weaver receiver is what I would call "Dual Direct Conversion".
> In a first set of I/Q mixers, the LO frequency is inserted not at the
> carrier frequency, but in the middle of the information channel. For SSB
> with a nominal 2.4 khz BW, this means the LO is injected at 1.2 KHz above
> (or below, depending on which sideband contains the information) the carrier
> frequency, and the outputs of the two mixers are each processed by steep
> skirted 1.2 KHz lowpass filters. Voila! Any signals outside the information
> channel are instantly eliminated from the equation. Only remaing problem is
> that we have 'scrambled' the information we wanted to recover. In the case
> of a 2.4 khz SSB audio bandwidth, information that was originally in the
> range of 0-1200 hz is now at inverted at 1200-0 hz, and original information
> in the range 1200-2400 hz is now frequency shifted down to 0-1200 hz. The
> whole audio spectrum has been folded in half on top of itself and jamed into
> a 1200 hz bandwidth. Now comes the second half of the 'dual direct
> conversion process':
> In a second set of I/Q mixers, the folded and scrambled audio spectrum is
> processed with a 1.2 khz quadrature LO, and the mixer outputs are summed.
> This process restores the folded 1.2 kHz spectrum to its original 2.4 kHz
> shape.
>
> No complex wideband audio phase shifters were used in the entire process.
> Also, any imbalances in the phase or amplitude of the I/Q processes merely
> result in non-infinite suppression of the in-band components that were
> 'folded' back into the spectrum. This is distortion, not interference, and
> as long as it is 30 dB or so down it should be inaudible.
>
> So, it seems to me that the Weaver method makes the process of building a
> direct conversion receiver more practical. With DSP lowpass filters after
> the first set of I/Q mixers, and a complete DSP implementation of the second
> I/Q process, many of the problems associated with hardware imperfections
> should be alleviated. The only 'fly in the ointment' that I can see is that
> AC circuit coupling will produce a small 'hole' in the frequency spectrum at

> mid-way in the audio band. For speech and CW reception, this will probably
> be in-audible. The only place I can see where it might be a problem is when
> trying to pass data information through the de-mod.
>

As I remember, the hole center frequency is choosen so that it is were
there is a minimum of energy in the spectrum for a "standard" human
voice.

I plan to build a 1.3 GHz weaver method transceiver as described in
dubus
and use my DSP in place of the original audio section. But currently, I
assume that I will not use it in "weaver mode" because I suspect some
problem
with digital transmissions like PSK31. You must tune the LO, so that the
hole
does not affect the modem signal, so you tune below or above the digital
channel. Then you go back to imbalance problems because the image is not
in the channel !

> Comments?
>
> Rocci wrote:
>

--
Frederic RIBLE Tel : +33 1 39 46 50 50
ERCOM SA Fax : +33 1 39 46 25 25
13, Avenue Morane-Saulnier Email : frederic.rible@ercom.fr
F-78140 VELIZY Web : http://www.ercom.fr

2474. Re: More scope Probes- 485

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: af389@lafn.ORG
Message-ID: <37CFCA26.E9AD4A87@lafn.org>
Source record: 67237

> From: david@slack.com (David DiGiacomo)
> Subject: Scope Probes for TEK 485

David Slack:
Thanks for the sources for Hi Z Scope Probes.
VERY Helpful.

> David Shalita W6MIK wrote:
> >Hi,
> >Any TEK 485 scope owners out there?
> >
> >What are you guys using for the HI Z 10MEG 350 MHZ or faster
> >probes? I need your help.
>
> The 485 has "only" 250MHz bandwidth with high impedance probes. To get
> 350MHz BW you have to turn on the 50 ohm terminators and use low
> impedance
> probes (Tek P6056, P6057, or home-made).
>
OPPS, I did forget about 250 MHZ BW limit for Hi Z.

Thanks for the Hi Z Probe sources.
Test Probe Inc. (TPI)and Probe Masters also need to be checked.

Can you provide a little more info about how to
make the "home-made Low Z probe" you mentioned?

73, W6MIK

--
David Shalita (Dave)
af389@lafn.org
Van Nuys, CA

2475. Re: More scope Probes- 485

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: Nick Caruso <nick.caruso@software.com>
Message-ID: <37CFDC95.1BAAC9F7@software.com>
Source record: 67238

David Shalita wrote:
>
>
> Can you provide a little more info about how to
> make the "home-made Low Z probe" you mentioned?
>
> 73, W6MIK

I, too, would be interested in reading about techniques for making lo-z probes with wide bandwidth; I've got a Tek 7904 with 400 Mhz timebase and a couple 50 Ohm fast vertical amps, but no probes rated faster than 100Mhz.

73

nick kb1dej

2476. Re: Wanted: schematics/diagram of 70cm PA amp.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: Derek K7XD <dhutter@pacifier.com>
Message-ID: <37cfe3c3.0@news.pacifier.com>
Source record: 67239

Christian,

Try this link.

http://escriba.cfn.ist.utl.pt/cupido/gs35amp.html

Derek K7XD

Christian Andresen <daejml@post7.tele.dk> wrote in message
news:7qo0r1$l2l$1@news.inet.tele.dk...
> Are there any one who has got a schematics/diagram of a 70cm PA amp ?
>
> regards
>
> Christian Andresen Denmark
> OZ5CHR
> ---------------------------------------
> company phone: +45 87 37 65 47
> ---------------------------------------
> private homepage: http://home7.inet.tele.dk/daejml
> mail me at: daejml@post7.tele.dk
> view us at: http://www.dae.dk leaders in slotmachines
> find me at: ICQ#: 4937239
> ---------------------------------------
> Do not ask what You can do for The Net,
> ask what The Net can do for You !
>
>
>

2477. Re: Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7qovdc$mn4$1@nnrp1.deja.com>
Source record: 67240

Weaver vs. Phasing isn't something I'd worry about. It's
in software: if you don't like it, change it.
--
Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte
Satellite: VA3SFL on UO-22, KO-25

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2478. Re: Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: rick@area.com
Message-ID: <7qop51$qq9$1@vax.area.com>
Source record: 67241

The Weaver system has its pluses for ham radio where you can stand some distortion of the recovered audio, which at least in analog modes is the case. Nowadays, you can even build a DSP notch filter to remove the midband whistle.

However, the Weaver system is still direct conversion, with all the same problems any DC receiver potentially has: microphonics, ground loops, 1/f noise, the requirement for a DC coupled IF (probably ruling out the use of triple balanced mixers), and conversion of AM noise on the LO to bandband.

And you do have to worry about amplitude balance between the two paths to minimize audio aliasing.

You also have to consider that if you are building a simple receiver, you can probably use a CB radio IF filter to do the SSB so why bother with Weaver. If you are building a high performance radio, the low pass audio filtering is going to get complex so again you might be better off building a homebrew crystal filter from microprocessor xtals.

Another isse, is: what are you going to do on xmit? If you use the Weaver system there, you have the whistle problem. This is even worse than the carrier suppression problem in phasing type SSB, which is what effectively killed it for all non-ham radio uses where there is an FCC spec on carrier suppression. You see, in those services, they rely on the SSB filter to also help suppress the carrier. In ham use, they just put a pot on the front panel to null the carrier and/or drove the modulator higher (to make the carrier look smaller) and let the intermods fall where they may.

Rick Karlquist N6RK
rick@area.com

2479. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <37CFE6CB.4ED9CCBB@midwestmicro-tek.com>
Source record: 67242
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Aaahhh, yes Hans, exacly the response I expected from you. Now that you've been cornered your rhetoric
is your only defence. You know I agree with you about the value of imagination. Imagination is the
door to inovation, it is the "what could be". But between "what could be" and "what is" is a large gap
of truth. These truths must be discovered and laid bare. The gap can be spanned and the men who do it
use the tools of math and known principles of physics to build the bridge. They use the references of
the men before them like Archimedes, Newton, and Einstein. Those equations I used where not mine, they
were Maxwell's, a revered man of science, not "this scientist on this web site".

If you want to place your ideas out in a public forum for all to see, fine, go ahead. The other
engineers here have gotten quite a few laughs from your latest post. As for me the entertainment value
of an intelectually frustrated individuals posts have worn quite thin. And since you have nothing else
to offer, welcome to my kill file.

Next!

To the rest of the community here I'd like to apologize for letting this get so far off-topic. Thank
you for your patience.

Rick

.H .H wrote:

> Well, what can I say except the permitted nothing.
> I am oppressed with restrictions and impositions.
> Only your formulae and math.
> Only your processes.
> Naturally anyone's conclusion would be the same as yours under these conditions.
> It is a wonder to me -now that I'm reduced to semantics- that any new discoveries can be made at
> all, what with all the answers all known already.
> So your challenge to me is to provide proof to you, using only your acceptable methods?
> -Can't be done for just that reason.
> And my statement requiring my proof according to you, really should be regarded as a stimulating
> area of interest for you to pursue.

> That is all it is for.
> We are not on trial here in Kangaroo Courthouse.
> Say I report having seen an UFO.
> You want a print-out of mathematics to prove that I'm telling the truth, the authorities will want
> third-degree cross-examinations and psychiatric evaluations, and so on.
> In the meantime, some other country drops a bomb on us from a new type of aircraft which I could
> not identify.
> Sensible?
> Re-reading my past postings will help to reduce the necessity for my repeating my arguments in the
> general sense.
>
> One plus one equals two every time?
> So I know arithmetic.
> Then they come and say I must learn math, then the "new" math, and algabra or algebra, calculus
> dating all the way back to, did you say Archimedes?
> Then Quantum mechanics, then Scalar physics.
> Is that it finally?
> Do we know everything there is to know?
> Come on.
> Your tone in this last letter is entirely posturing, as compared to your seeming interest at the
> onset.
> Is it peer pressure?
>
> Not to worry.
> Sometime soon, a new discovery will be announced.
> Why haven't you already found it?
>
> This is becoming tedious.
> My statement stands as presented, and even if I'm corrected about eighty times when it is three, so
> what.
>
> Tell us (notice the process of bonding here) what you know about Barkhausen oscillations, and the
> Caduceus (sp) coil.
>
> Thank you for calling. *click*
> Next!
>
> Hans
>
> Rick Haub wrote:
>
> > .H .H Russell wrote:
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> > > I really can't do the math anymore.
> >
> > Really? I havn't pickup a physics text in ten years. One of the other engineers here had his
> > freshman text so I just barrowed it and solved for the vacuum tube over my lunch hour. The math
> > is pretty simple, algabra only and all classical. I should think that you could do simple
> > algabra.
> >
> > > I just did. Sound and EME are not mutually exclusive.
> > >
> >
> > I got a whole floor of physicist a mile away from me who say your wrong. I can give you names
> > and addresses if you wish. I prefer the consol of real people and not "this scientist on a web
> > site says".
> >
> > > It is definitely what I had in mind.But the math, I would have to study for a year to bring
> > > it all back.
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> > Hmmmm.... took me about half an hour. Really now, is algabra that tough?
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> > They better if you want any one to take you seriously.
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> > > So it is better left to you youngsters to find a way to make my statement true.
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> > statement true. It either is or it isn't. That reminds me of the church in the dark ages. They
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> > from the common man and went so far as to persecute Gallilao. They "made" thier untrue
> > statement "the sun revolves around the earth" true. But it still didn't alter the fact that the
> > earth revolves around the sun.
> >
> > > By the way, there is a perspective which would be called cheating by some, but in that
> > > perspective you enter three-dimensional mathematics.
> >
> > Hmmmm..... I studied n-dimensional math and tensor calculus, I don't recall seeing anything in

> > the nominclature about "cheating".
> >
> > >
> > >
> >
> > Okay, here are the numbers for the tube
> >
> > I will be using F=ma given by Newton in his Pricapia (SP sorry Issic) and the
following:
> > E=F/qo (eq. 18.2) where E=electric field in N/C, F=force, and qo= charge of the
electron
> > E=V/d (eq. 19.7) where E= electric field, V=applied volage, and d= the distance between
two
> > plates.
> > and d=1/2at^2 (eq. 2.8) d=distance, a=acceleration, and t=time
> > The last three can be found in Cutnell and Johnson's 3rd addition of *PHYSICS*
published by
> > Wiley in 1995.
> >
> > So assume we have a triode tube where the plates are .5 cm apart and we have an applied
voltage
> > of 200V. I think these are reasonable paramaters.
> >
> > Then by 19.7 we have
> >
> > E=200V/.005m=40,000 N/C
> >
> > sub into 18.2 gives
> >
> > F=Eqo = 40,000 x 1.602xE-19 = 6.408xE-15
> >
> > now sub F=ma and we get
> >
> > a=F/m = 6.408xE-15/9.109xE-31 = 7.0348xE15 m/s^2
> >
> > now by using d=1/2at^2 we get
> >
> > t=sqr(2d/a) = sqr(2x .005/7.0348xE15) = 1.19xE-9
> >
> > or about 1.19 nano seconds.
> >
> > I have of course, not taken into account the setup time of the the E field after the
grid
> > potential is dropped nor have I added in the slew rate of the grid drop. I merely
assume that
> > the grid drop is instantanious and that when the electrons strike the other side they
will
> > immediatly began "energy transfer".
> >
> > Now I have decided not to do the math for the semiconductor since it involves quantum

mechanics
> > and if you can't do algabra I don't think you'll follow the math. You could just say that I'm
> > "cheating". For those that are interested the flow of electrons in a semi conductor is
> > discussed in detail in Omar's text Elementary Solid State Physics published by Addison Wesley.
> > I used the first addition published in 1975. I will give a short discription though.
> >
> > In order to conduct, the electrons in the valance shells (valance band) of a semi conductor
> > must absorb enough energy to make the jump into the conductance band. The distance between the
> > the two bands is not physical but electrical in nature and is know as the Energy gap. It's
> > value is given in eV and for Silicon the value is 1.1eV. The time that it take for the electron
> > to make the energy jump can be calculated like all energy state shift. Any one interested in
> > these calculations are refered to Kenneth Krane's, Introductory Nuclear Physics, published by
> > Wiley. It is known that these jumps take place in the sub nano second range and once the jump
> > is made, I am assuming, as I did with the tube that flow begins when the electrons jump from
> > the the valance band (cathode) to the conductance band (anode) (I could be wrong about the
> > cathode/anode direction, I always get them confused).
> >
> > In other words the time it takes to get conduction or "energy transfer" within a semi conductor
> > is in the sub nanoseconds. Of course this works on a quantum basis and therefor it must be
> > treated statisticaly since not all electrons make the jump at the same time.
> >
> > At this point since I did not do the complex math you may be temped to call me a cheater. So
> > instead I will point to an imperical proof. Go to Pericoms web page and down load thier PDF
> > file ps2011b.pdf. You will find a data sheet on the 74FCT240T line driver. If you look at the
> > switching characteristics you will see that the propagation delay time from off to on for any
> > given gate is a maximum of 3.6ns.
> >
> > In other words, from the time that I apply a volage on the input of a gate it will take no more
> > than 3.6ns for the electrons to flow.
> >
> > I offer this as my proof.
> >
> > Your original assumption was that a tube could provide transfer rates 80 times faster

than
> > semiconductors. I submit that the difference is actually about 3 times faster using the best
> > case senario for a tube and the worst case for a semiconductor. At this point I would ask that
> > any one out there who has a really fast digital storage scope could test actual conditions by
> > getting a suitable high speed transister and a triod tube and actually measure the time it
> > takes for current flow vs gate on for the transister and grid drop for the tube. Real world
> > proof would be interesting.
> >
> > If you don't agree with my math or my statements then please feel free to refute them, but
> > please do so with hard science and good math, not with "some scientist on a web page says".
> >
> > Rick

2480. Re: Help identifying Audio Transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: "H. P. Friedrichs" <" HPeter.Friedrichs"@alliedsignal.com>
Message-ID: <37CFEE1B.631AF5F4@alliedsignal.com>
Source record: 67243

You have a 125:1 difference between the primary and secondary in the transformer you specified, two orders of magnitude.

True, coil impedance is not exactly the same as (dc) resistance, but I think a simple check with an ohmmeter should make it obvious which is which.

Nunnelly wrote:

> I have two 1k:8 ohm audio transformers from Dan's. Three taps on each side.
> How can I identify the 1k side from the 8 ohm side.
>
> Thanks
> Chuck Nunnelly

--

```
-----------------------------------------------
| The opinions expressed here are my own, |
| and not necessarily those of my employer. |
-----------------------------------------------
```

2481. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: ".H .H" <koenen1@telusplanet.net>
Message-ID: <37CFFC76.82BC5CD3@telusplanet.net>
Source record: 67244
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

I am certain your apology is well founded, and really not necessary.
If I restrict you with rhetoric or anything else, you are likewise cornered.
In fact, you are cornered, and are using the worst,most hideous and pompous form of rhetoric yourself.
The large percentage of religious people know exactly what they believe in, and you would attack all of
them with your stipulations for proof of the truth.
Maxwell made mistakes, and you still use them.
The second law of thermodynamics is fallacious.
Come on. Your so-called scientific method which as used by you, is hardly more than another fanatical sort
of religion, a shield for your delicate ego and shattered intellect.
The falseness of your approach as indicated by the sudden turn to visciousness is what is really
ridiculous.
You are one who can imitate the truly great men, whom you deign to emulate for succor.
There are failings within your psyche, probably due to overwork at social acceptance.
You crave recognition as at least an equal in society.
But your methods are deplorable and meant to be destructive.
Incidentally, I aced mathematics, and this can be proven, although I shall not do so to your ilk.
I am lazy.
Therefore I don't revive the process.
I have done many things, and more than even you will ever dream of, with your stultified and atrophied
flair for originality, as well as your utter refusal to look at anything which you can not understand due
to a vitamin shortage or something.

The same laughing colleagues you speak of laugh not only at that which you presume, make no mistake.
They laugh also at you, either because they consider you ignorant to be sucked in by a stupid old man, or
because they know you merely wish for a cracker.
You have led me into a soap-operatic paradigm, to divert attention which you crave from your ineptitude,
to a social situation of mudslinging old hags.
This is not my preferred activity.
You are a fomentor, a trouble maker.
You attack everyone and everything you happen to stumble across in your relent search to elevate your
petty ego.
Your mathematics and arguments are pathetic and no more than I would expect from a Military

McCaw.

You have no originality.
You have no basis in fact OR imagination, what you have is a repertoire of cliches and verbal
abuse.
You begin politely and interestingly, then as soon as you think you spot a weakness, your true destructive
yearning rears its ugly cranium.
This is borne out and provable even to you, by reading your past postings to other people.
Incidentally, all postings on newsgroups are archived and accessible by and at DEJANEWS.
Prove that to yourself, and learn social skills.
Whether I choose to do your mathematical hoop-jumpings or not, does not change what is true.

You have absolutely no interest in anything except recognition.
While it may be true that you attained master standing in your courses, nevertheless a modicum of spelling
would seem to be essential in the higher forms of mathematical endeavors.

A lack of spelling talent clearly demonstrates a lack of spatial awareness and the ability to utilize
mental imagery effectively.
Therefore I would say that you like to process along a linear fashion.
Now I take all of the above back, as it is not my nature to be insulting even to people such as yourself.
I also wish to not allow you to corrupt me into your area of socialism.

So back to square one.
Vacuum tubes transfer faster than solid state by a factor of up to eighty.
It is so.
You want it, earn it.

When you started out in life, you did not demand proof of everything your teachers told you.
You just learned and tried to pass grades.
Eventually, you bought into the system and made their thoughts your own.
All of a sudden, everything coming from outside of those thoughts must be proven.
Not for the reasons you stipulate, but to protect your form of religion,
your treasured petrified mindset.

You seem to be incapable of accepting newness within your delicately structured fortress.
You mentioned about the sun and the earth and the revolving relationship.
The earth revolves about the sun but not vice-versa?
Check the galactic cycles.
There may be one turn of the sun around the earth every so often.
At the same time, you say that two multiplied by three is the same as three multiplied by two.
The process is not the same, although the numerical result seems to be.
I can't seem to teach nuclear physics to my cat.
I should learn to not bother.
Again, all of the above is just playing into your hands, and I apologize.
But please, all bantering aside, do continue to think about the speed.

Please.
I know I have faults, everyone does.

But I have an ego just like you.
So research, Rick.
You're halfway there.
Hans

Rick Haub wrote:

> Aaahhh, yes Hans, exacly the response I expected from you. Now that you've been cornered your rhetoric
> is your only defence. You know I agree with you about the value of imagination. Imagination is the
> door to inovation, it is the "what could be". But between "what could be" and "what is" is a large gap
> of truth. These truths must be discovered and laid bare. The gap can be spanned and the men who do it
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> the men before them like Archimedes, Newton, and Einstein. Those equations I used where not mine, they
> were Maxwell's, a revered man of science, not "this scientist on this web site".
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> you for your patience.
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> > Well, what can I say except the permitted nothing.
> > I am oppressed with restrictions and impositions.
> > Only your formulae and math.
> > Only your processes.
> > Naturally anyone's conclusion would be the same as yours under these conditions.
> > It is a wonder to me -now that I'm reduced to semantics- that any new discoveries can be made at
> > all, what with all the answers all known already.
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> > We are not on trial here in Kangaroo Courthouse.
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> > You want a print-out of mathematics to prove that I'm telling the truth, the authorities will want
> > third-degree cross-examinations and psychiatric evaluations, and so on.
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> > not identify.
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> > general sense.
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> > One plus one equals two every time?
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> > Come on.
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> > Not to worry.
> > Sometime soon, a new discovery will be announced.
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> > what.
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> > Tell us (notice the process of bonding here) what you know about Barkhausen oscillations, and the
> > Caduceus (sp) coil.
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> > Thank you for calling. *click*
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> > > algabra.
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> > > > I just did. Sound and EME are not mutually exclusive.
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> > > and addresses if you wish. I prefer the consol of real people and not "this scientist on a web
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> > > > plates.
> > > > and d=1/2at^2 (eq. 2.8) d=distance, a=acceleration, and t=time
> > > > The last three can be found in Cutnell and Johnson's 3rd addition of *PHYSICS* published by
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> > > > a=F/m = 6.408xE-15/9.109xE-31 = 7.0348xE15 m/s^2
> > > >
> > > > now by using d=1/2at^2 we get
> > > >
> > > > t=sqr(2d/a) = sqr(2x .005/7.0348xE15) = 1.19xE-9
> > > >
> > > > or about 1.19 nano seconds.
> > > >
> > > > I have of course, not taken into account the setup time of the the E field after the grid
> > > > potential is dropped nor have I added in the slew rate of the grid drop. I merely assume that
> > > > the grid drop is instantanious and that when the electrons strike the other side they

will
> > > immediatly began "energy transfer".
> > >
> > > Now I have decided not to do the math for the semiconductor since it involves quantum mechanics
> > > and if you can't do algabra I don't think you'll follow the math. You could just say that I'm
> > > "cheating". For those that are interested the flow of electrons in a semi conductor is
> > > discussed in detail in Omar's text Elementary Solid State Physics published by Addison Wesley.
> > > I used the first addition published in 1975. I will give a short discription though.
> > >
> > > In order to conduct, the electrons in the valance shells (valance band) of a semi conductor
> > > must absorb enough energy to make the jump into the conductance band. The distance between the
> > > the two bands is not physical but electrical in nature and is know as the Energy gap. It's
> > > value is given in eV and for Silicon the value is 1.1eV. The time that it take for the electron
> > > to make the energy jump can be calculated like all energy state shift. Any one interested in
> > > these calculations are refered to Kenneth Krane's, Introductory Nuclear Physics, published by
> > > Wiley. It is known that these jumps take place in the sub nano second range and once the jump
> > > is made, I am assuming, as I did with the tube that flow begins when the electrons jump from
> > > the the valance band (cathode) to the conductance band (anode) (I could be wrong about the
> > > cathode/anode direction, I always get them confused).
> > >
> > > In other words the time it takes to get conduction or "energy transfer" within a semi conductor
> > > is in the sub nanoseconds. Of course this works on a quantum basis and therefor it must be
> > > treated statisticaly since not all electrons make the jump at the same time.
> > >
> > > At this point since I did not do the complex math you may be temped to call me a cheater. So
> > > instead I will point to an imperical proof. Go to Pericoms web page and down load thier PDF
> > > file ps2011b.pdf. You will find a data sheet on the 74FCT240T line driver. If you look at the
> > > switching characteristics you will see that the propagation delay time from off to on for any
> > > given gate is a maximum of 3.6ns.
> > >
> > > In other words, from the time that I apply a volage on the input of a gate it will take no more

> > > than 3.6ns for the electrons to flow.
> > >
> > > I offer this as my proof.
> > >
> > > Your original assumption was that a tube could provide transfer rates 80 times faster than
> > > semiconductors. I submit that the difference is actually about 3 times faster using the best
> > > case senario for a tube and the worst case for a semiconductor. At this point I would ask that
> > > any one out there who has a really fast digital storage scope could test actual conditions by
> > > getting a suitable high speed transister and a triod tube and actually measure the time it
> > > takes for current flow vs gate on for the transister and grid drop for the tube. Real world
> > > proof would be interesting.
> > >
> > > If you don't agree with my math or my statements then please feel free to refute them, but
> > > please do so with hard science and good math, not with "some scientist on a web page says".
> > >
> > > Rick

2482. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <5kTz3.16076$ok3.4900@news.rdc1.il.home.com>
Source record: 67245
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

.H .H <koenen1@telusplanet.net> wrote in message
news:37CEFBD9.AC6DB658@telusplanet.net...
> I mean a Victrola type of doohicky.
> Hans

I once repaired a 1902 Victrola. Not an edison cylinder unit, but 78 RPM.
(I have an edison unit)

It needed a new spindle for the spring assembly, so that you could wind it
up properly. A little lathe work, and it was as good as new.
I also discovered the origin of the term "Stick a sock in it!" as the only
volume control possible is mechanical, and they are suprisingly loud.
My mom asked me to "turn it down".. :)

This of course was before I got my ham licence, now that I've passed the
code test, I doubt I could do it again ;-P

2483. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: ".H .H" <koenen1@telusplanet.net>
Message-ID: <37D0163C.3955E6A4@telusplanet.net>
Source record: 67246
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

What's that- pass the code test, make a spindle, or put a sock in?
:)
Hans

Dave VanHorn wrote:

> .H .H <koenen1@telusplanet.net> wrote in message
> news:37CEFBD9.AC6DB658@telusplanet.net...
> > I mean a Victrola type of doohicky.
> > Hans
>
> I once repaired a 1902 Victrola. Not an edison cylinder unit, but 78 RPM.
> (I have an edison unit)
>
> It needed a new spindle for the spring assembly, so that you could wind it
> up properly. A little lathe work, and it was as good as new.
> I also discovered the origin of the term "Stick a sock in it!" as the only
> volume control possible is mechanical, and they are suprisingly loud.
> My mom asked me to "turn it down".. :)
>
> This of course was before I got my ham licence, now that I've passed the
> code test, I doubt I could do it again ;-P

2484. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: ".H .H" <koenen1@telusplanet.net>
Message-ID: <37D015C5.765BF139@telusplanet.net>
Source record: 67247
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Mathematics?

Hokai Maru.
Three Apples multiplied times two Oranges equals what?
(3A)(2O)
Equals six quantities of fruit.
Who said you can't do that?
The point is coloring.

Now this:
(3R)(2Y)
> R+R+R+Y+Y
But.
It is not the same as in:
R+Y+R+R+Y
The point is position.
And also leads to procession.
I apply three coats of red paint and also two of yellow paint.
The order in which I apply them, determines different resultant tones.
The point was procession.

Further:
Temporal placement.
If I apply any two coats before the first one dries, we will have a mixing.
Extend this to any combination or permutation of wet/dry applications.

Add to this the sequence, and you have many resultant outcomes from a simple basis.

If I divide one apple by nothing, I still have one apple.
But if I divide no apple by one, I have nothing.
So 1/0 is not the same as 0/1, but you swear that it is.

One can not look only at the results of one particular arrangement, and claim that it is true in all
cases.

Three apples multiplied by nothing is still three apples.
But nothing multiplied by three apples is nothing.

So I would say that you cannot multiply a nothingness by a something.
And you can't multiply a something be a nothingness.

Yet what you had at the onset, is what you have at the end.
So this expands an earlier statement into:
You had a nothingness, and tried to multiply that by three apples.
So you must have had three apples to multiply by.

Thus the process is semi-prohibitive.
But the results still exist.

In order for this to be clear, we have to determine the field of operation.
It does no good to multiply an orange in New York by an Apple in Amsterdamn.
Placement is important.
You have to think locally, or globally.

What is the parameter of influence.
The world, the universe, your lunch-box, your imagination?

By the same token, Rick, we can do mathematics with values now, and pertaining values in an other time
arena.

Thirty pennies multiplied by two acquisitions equals a total reap of sixty pennies.
Yet you might not actually HAVE the sixty pennies, since you got thirty of them ten years ago, and thirty
today.
So math can be spaced over various time domains, yet apparently still yield identical values as if the
time domain were a constant and the same for all components.
Hence it is critical that to effect a computation for an instantaneous occurrence, the factors involved
must be at that same instant.
Enter phase-shifting, vectors and determinants, matrices, and so on.

If one travels at sixty miles per hour, it matters very much whether an hour was measured, or another
length of time.
It matters too, where in the time line that hour was placed.

Sixty mph for ten minutes is the same as 60 mph for two hours insofar as a speed designation is concerned.

It is not the same if we are considering distance.
So it is important to always look at the forensics of the intrinsic values and appellants.

I can't say to the peace officer who caught me, that I was doing only forty-five miles per hour
because I was doing thirty yesterday when he wasn't around and sixty today.
Yet the average speed says so.
Nevertheless, I might have been doing thirty yesterday for ten hours!
And sixty today for four minutes.
The fact is, I was speeding, and for how long is relevant.

We can average the speed.
Now what about the distance?
No. That totals up.
It does not seem useful to average the distance and claim that I traveled so many miles per day when in
fact I did not, I traveled so far today, and a different distance yesterday.

Brings to mind, this averaging does, about the rounding out of numbers?
Where does the accuracy go but out the window, when we round numbers?
And how can you avoid doing so, especially with decimal fractions involved instead of common fractions?
The accuracy and precision of measurement is not perfect.
Therefore the results of any computation based upon measurement is not perfect.
You mentioned the fellow's name-
Combine this imperfection with rounding out, and you compound the error factor.
Further complicate matters by using limitations in appellation, and it is worse yet.
More problems added to the soup with faulty theory and formulae.

Throw in a few spelling mistakes, and it is a mess.
Yet you ask me to use this system?
Your position is shaky, just as much as mine is.

More to the point, I know something which you don't, yet.
I try to communicate this knowledge to you.
You don't speak the language, and want me to use yours.
I don't speak the language you want in this case, because it is not the right language for the claim.
I am a lettered physicist, right?
I go to Papua New Guinea, and start to teach.
Nobody will understand me at all without knowing the language I'm teaching in.
Okay. So we end up speaking the same language, but they still don't get it, this time because the
mathematics is different.
Or the conceptualization.
Much too difficult.
So they ask for a prototype, and I set off a Cobalt bomb to demonstrate.
The proof was there, but we ended up too dead to appreciate it.
Now another country from afar, witnessed the explosion, and identified it as being that of a Cobalt bomb.
So they know it exists.
But they missed the process of construction, and can't prove it.

The onus of proof can be a pain.
That is why in the military, we have the system of commanders.
These men know, the guys below don't need to know, only follow orders on how to do things.
They don't need to know.
The results derive.

If the men want to know how something worked, they can go figure.

We can have a person who discovered how to do something, yet had no knowledge of science or mathematics.
He/she can repeat the process any time.
You would lose out if you demanded mathematical proof.

So alright, you say, "Hans, that's fine. if you're too stupid to do algabra, show me physically!" .
When I ask how, you want a digital storage oscilloscope.
Well. I just happen to have one, and believe it or not I can prove it.
In fact i already proved it, but you may have missed it.

Check this thread near the end.
There is a jpg. In the jpg is the scope.
However, rhetorics permitting, I don't know if the scope would be an accurate demonstration.
I don't know everything, and you won't ask for proof of that of course, so I want someone else to do my
homework and prove that valves are faster.
I want someone else to do the homework for you too, so that you will know also.
Post script:
There are ways and means of accomplishing short-wave communications which have slight precious
differences.
Those differences lead to enHansment of the enjoyment factor of SWL.

Hans

2485. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: "M.J.Powell" <mike@pickmere.demon.co.uk>
Message-ID: <abvCafAu+B03EwXY@pickmere.demon.co.uk>
Source record: 67248
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Drivel snip

>I have done many things,

But not got your line-length right.

Even bigger drivel snip

Mike
--
M.J.Powell.

2486. Re: Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37D02A77.F2CBE8A@teleport.com>
Source record: 67249

It's been many years since I've looked at the Weaver approach, so I'm a little vague about how you'd apply modern DSP techniques to it. But even with DSP, can you make a Weaver-method and conventional phasing receiver with the same hardware topology?

Roy Lewallen, W7EL

marsgal42@hotmail.com wrote:
>
> Weaver vs. Phasing isn't something I'd worry about. It's
> in software: if you don't like it, change it.
> --
> Laura Halliday VA3LDH "Que les nuages soient notre pied
> Grid: FN03gs a terre..." - Hospital/Shafte
> Satellite: VA3SFL on UO-22, KO-25
>
> Sent via Deja.com http://www.deja.com/
> Share what you know. Learn what you don't.

2487. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <37D02577.8B7C7AC6@midwestmicro-tek.com>
Source record: 67250
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Sorry guys I didn't get my filter in place in time and, of course, I took the bate (shame on me).

.H .H wrote:

{bunch of amatuer psycho crap snipped}

> So back to square one.
> Vacuum tubes transfer faster than solid state by a factor of up to eighty.
> It is so.

You know Hans, I really thought for a second there that you were actually going to get back on topic. I
thought you might even have a proof of your own.

I'm caught within the stricture of a pathetic scientific religion? What about you Hans? Read your own
statement,

"Vacuum tubes transfer faster than solid state by a factor of up to eighty."
"It is so."

Your proof is "It is so."? Is this *your* religion Hans?

"Vacuum tubes transfer faster than solid state by a factor of up to eighty. I am Hans and as I speak it, it is
so."

Remember the teachings of Mark Knoffler Hans, When you point a finger you've got 4 more pointing back at you.

There are very few things that get my back up but as a man of science one of them is going on the net a seeing
posts and sites from people who've reinvented "Tesla's Earthquake Machine", they just don't want to use it
because it will, you know, cause an earthquake. Or the guys who are on the verge of perfecting the dielectric
that will allow them to use a machine that will draw "Free Energy that Exist in the Universe all Around Us".
They all make a lot of noise, back it up with a lot of pseudo-science, but when asked for proof it's always
the same. "Oh, we can't do the proof yet but give us your money and come back in a few months" (years,
decades, never).

Am I attacking you personaly? No. Am I holding you accountable for statements said. You bet! Am I attacking

said statements. Sure am. Have I insulted you? Do you find my tone insulting? Perhaps it's because I'm tired
of signing on the net and finding Shaman selling snake oil. This is a free internet and I will fight to keep
it so. Anyone can say what they wish and if I disagree with thier statements I will not stop them. But I will
refute thier statements with my own. My right.

> You want it, earn it.

No Hans, I have earned it. With years of study and dedication. I know science is not precise. As a physicist I
understand this, as an engineer I live with it. But I stand with my proofs and I refute your statement. If you
want to prove me wrong Hans then do so. You say you can build things and you've acomplished so much. Why don't
you build a test bed with a fast transister and a fast tube, feed them a clock and throw the signals on a
scope and see which one is the fastest. Send me your results and the test bed. If your right, I'll put them on
the net myself and publicly apologize for attacking your statements.

You earn it Hans, until then I refuse to fall inline with the religion of Hans.

Oh, that thing about the spelling. I've got 3 forms of dyslexia, even the simplest word can be misspelled and
I wouldn't know it. I don't have a spell check on my editor and if I checked every word in a dictionary I'd
never get anything done. Nice grasp though, "a drowning man will grab even the tip of a sword" as they say.

{more crap snipped}

Rick

2488. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: ".H .H" <koenen1@telusplanet.net>
Message-ID: <37D030B4.6E40D9FE@telusplanet.net>
Source record: 67251
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Sorry about your dyslexia, Rick.
Really.
It was dirty of me to point at it.
But I had to find something.
I don't sell anything, I don't need money.
Best to you.
Hans

Rick Haub wrote:

> Sorry guys I didn't get my filter in place in time and, of course, I took the bate (shame on me).
>
> .H .H wrote:
>
> {bunch of amatuer psycho crap snipped}
>
> > So back to square one.
> > Vacuum tubes transfer faster than solid state by a factor of up to eighty.
> > It is so.
>
> You know Hans, I really thought for a second there that you were actually going to get back on topic. I
> thought you might even have a proof of your own.
>
> I'm caught within the stricture of a pathetic scientific religion? What about you Hans? Read your own
> statement,
>
> "Vacuum tubes transfer faster than solid state by a factor of up to eighty."
> "It is so."
>
> Your proof is "It is so."? Is this *your* religion Hans?
>
> "Vacuum tubes transfer faster than solid state by a factor of up to eighty. I am Hans and as I speak it, it is
> so."
>
> Remember the teachings of Mark Knoffler Hans, When you point a finger you've got 4 more pointing back at you.
>
> There are very few things that get my back up but as a man of science one of them is going on the net a seeing
> posts and sites from people who've reinvented "Tesla's Earthquake Machine", they just

don't want to use it
> because it will, you know, cause an earthquake. Or the guys who are on the verge of perfecting the dielectric
> that will allow them to use a machine that will draw "Free Energy that Exist in the Universe all Around Us".
> They all make a lot of noise, back it up with a lot of pseudo-science, but when asked for proof it's always
> the same. "Oh, we can't do the proof yet but give us your money and come back in a few months" (years,
> decades, never).
>
> Am I attacking you personaly? No. Am I holding you accountable for statements said. You bet! Am I attacking
> said statements. Sure am. Have I insulted you? Do you find my tone insulting? Perhaps it's because I'm tired
> of signing on the net and finding Shaman selling snake oil. This is a free internet and I will fight to keep
> it so. Anyone can say what they wish and if I disagree with thier statements I will not stop them. But I will
> refute thier statements with my own. My right.
>
> > You want it, earn it.
>
> No Hans, I have earned it. With years of study and dedication. I know science is not precise. As a physicist I
> understand this, as an engineer I live with it. But I stand with my proofs and I refute your statement. If you
> want to prove me wrong Hans then do so. You say you can build things and you've acomplished so much. Why don't
> you build a test bed with a fast transister and a fast tube, feed them a clock and throw the signals on a
> scope and see which one is the fastest. Send me your results and the test bed. If your right, I'll put them on
> the net myself and publicly apologize for attacking your statements.
>
> You earn it Hans, until then I refuse to fall inline with the religion of Hans.
>
> Oh, that thing about the spelling. I've got 3 forms of dyslexia, even the simplest word can be misspelled and
> I wouldn't know it. I don't have a spell check on my editor and if I checked every word in a dictionary I'd
> never get anything done. Nice grasp though, "a drowning man will grab even the tip of a sword" as they say.
>
> {more crap snipped}
>
> Rick

2489. Re: HELP! Tube Guru's Advice Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <37D02949.613AC54F@midwestmicro-tek.com>
Source record: 67252

Hi Michael,

Michael Black wrote:

>

They must have been added later. Oh well I fixed that problem. A couple of the guys pointed out that wire wireing might be faulty, they were right. The OD3's ground wire was not connected. I fixed it and now I'm getting the proper voltages.

I replaced the .01 cap between the plate of the 1625 and the tuning cap as suggested and fired the rig back up. I tuned it then I switched to OP and keyed the rig. I got about a watt or two out of it when hooked to the 50 ohm dummy load. I hooked my scope up to the output of the plate and I saw 150 volts of DC on it. When I keyed the rig I could see a very small 3.5MHz rider (@3.5, I didn't measure it but I'm sure it was close to the crystal frequency). It this right? Or is the tube blown. I have two tubes but I was switching them in and out the night the rig went down. I might have blown them both.

This weekend I'm going to try to wrap another tuning coil and see If I can get it back up.

Thanks for the help!

Rick

> Where did the voltage regulators come from?
>
> I don't have the exact diagram you are using. The 1961 edition has
> something similar, though I'm beginning to think that the function
> switches aren't quite the same, and it has no VR tubes.
>
> What voltage do you measure out across the filter capacitor in the power
> supply? Be careful! What does the schematic show the voltage being at
> that point? It's bound to be somewhat different, but if there's a big
> variation...
>
> If the schematic is like all the variations I have around here, there
> should be a variable resistor of some sort between the high voltage line
> in the power supply and the voltage regulator tubes. If that isn't
> adjusted right, the regulators aren't going to work properly. There
> should be something in the text about adjusting this for proper operation.
>
> Don't adjust the resistor with the power on. And short the filter
> capacitor before making any adjustments.
>

> If by chance it's a fixed resistor there, it may need changing if the
> power supply output differs from what's shown in the schematic.
>
> If you look at the back of the Handbook, there is data for common
> tubes. Mine shows the plate voltage for the 12BY7 as 250volts, and the
> screen as 150volts. Something has to be wrong, either in your meter, or
> the power supply and voltage regulator section.
>
> The tables show the 0D3 to be a 150volt regulator, and the 0C3 to be a
> 105volt regulator. So the voltage across the 0D3 should be 150volts.
>
> The table shows the 1625 maximum plate voltage to be 750 volts, and it's
> maximum screen voltage to be 300volts. I'm assuming the plate of the 1625
> gets fed directly from the output of the rectifiers in the power supply,
> and it's the regulated 255volts from the anode of the 0C3 that feeds the
> screen grid. Again, the voltages you show are too high.
>
> The voltage across the filter capacitor in the power supply probably will
> vary some between key up and key down. And between the tune and
> operate position, since in the tune position the 1625 gets no screen
> voltage (unless that's different from the transmitters I'm looking at).
> But the VR tube voltages should stay constant no matter what else, which
> is the point of the regulators.
>
> We can work on the rest once the power supply is putting out the correct
> voltages.
>
> Michael VE2BVW

2490. Heath manuals and Heath Warrior filter cap FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: Ken Simpson <W8EK@fdt.net>
Message-ID: <hvWz3.3205$Dj2.200306@monger.newsread.com>
Source record: 67253

I found what I am sure is the original filter cap from a Heath Warrior amplifier.

It is 8 uf at 3000 V, oil filled, and has Heath part number 47472 on it. Mounting brackets are included.

Any one need it? $ 40

I also have the following Heath manuals available. All are originals, and are in good condition.

IO-103 Five inch scope $ 12

GR-2000 TV Set $ 12
GR-2050 TV Set - Five book set $ 18
GRA-2000-1 TV Clock $ 3
GRA-601 TV Clock $ 6

Prices do not include shipping from Florida.

E-mail to W8EK@fdt.net

Thanks.

73,

Ken, W8EK

Ken Simpson
E-Mail to W8EK@fdt.net
Voice Phone (352) 732-8400

2491. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <37D032E3.DE9A1995@midwestmicro-tek.com>
Source record: 67254
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

.H .H wrote:

{drivel snipped}

> Hans

After snipping the drivel I find nothing to respond to. You either will not or can not back up your statement.
Therefore there is no point. Fair the well Hans, Fair thee well.

Rick

2492. Re: HELP! Tube Guru's Advice Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <37D02F0C.6B7626D2@midwestmicro-tek.com>
Source record: 67255

Hi Jim,

N2EY wrote:

> In article <37CD5DA9.2DACACCC@midwestmicro-tek.com>, Rick Haub
> <rhaub@midwestmicro-tek.com> writes:
>
> >Okay, it's been a while since I posted any results but I've been busy. Also
> >after spending an hour here and a couple of hour there on the transmitter I
> >had thought that I was on my way to figuring it all out. I was at the point
> >were, after trimming the tuning coil and working out the kinks with the
> >loading and tuning caps that I was able to get about 25-30 watts (@20 watts
> >on 40 meters) out to my dummy load. Then one night just for the heck of it
> >decided to get the best responce dialed in using the dummy and then switch
> >back to the light bulb and see what happend. The results were quite
> >spectacular, The light burned as bright as any 100 watt light and the meter
> >was pegged (100 watt pyrimid meter). Well needless to say this got me
> >thinking about what one of the posters (I think it was Jim) who said
> >something about overdriving the input of the 1625. When trying to get the
> >most output to the dummy load I had routinely been turning the drive
> >capaciter up to get those 25 watts.
>
> Uh-oh.
>
> > So I looked at the output of the driver
> >on the built in meter and saw that I was driving about 8 mA out to the
> >1625. Just on a wild guess I'd say that that was too much.
>
> That's way too much. 3.5 to 4 mA is about the max, and 2.5 to 3 will do the job
> OK with most tubes.
>
> Overdriving can causes all kinds of troubles, including destruction of the
> final tube.
>

I know, I know, tune to the dip of the plate and not the output watt meter. I've
learned my lesson.

> >So I left the
> >light bulb plugged in and retuned by the instructions with the bulb instead
> >of the dummy. Using 3 mA drive and tuning for best dip I was getting about
> >80 watts on my meter and measuring the voltage at the antenna I was seeing
> >about 850v pp. Another guess but I'd say this was too high for a rig rated
> >at 75watts input. After thinking about it I came up with the idea that even
> >though the light bulb was inaccurate in its loading effects, the dummy

> >and/or my watt meter where also likly flawed. I was showing way too much
> >with the bulb but way to little with the dummy. So I decided to build a new
> >dummy based on a different design and use a watt meter barrowed from the
> >local University.
>
> I think one problem here is that you are making things way too complicated.
>
> There is no need for a fancy wattmeter or dummy load with this kind of rig. A
> light bulb dummyload is all you need. A 60 watter has an impedance of something
> like 240 ohms at full brilliance, and the pinet in this rig will match that
> with no sweat. Of course the settings of the plate and loading caps will be
> different when lighting a lamp than when feeding a 50 ohm antenna, but that is
> of no consequence.
>
> Power output is easily judged by lamp brilliance. No need for wattmeters and
> such. Get a package of two 60 watt bulbs and another of two 40 watters. Put one
> of the 40 watters in a lamp near the rig and plug it into the 110. Use the
> other 40 watter for a dummy load. Comparing brightness will tell you the
> approximate power output. If the 40s burn too bright, use the 60s.
>
> In addition, be very skeptical of the readings of electronic meters like DMMs
> when used around transmitters. Particularly hollow state rigs. There is RF all
> over the place, and it doesn't take much stray RF to give all sorts of goofy
> readings on electronic meters.
>
> In this type of rig, you DO NOT just tune everything for maximum output. The
> output indicator is NOT the main thing to watch. Proper grid and plate
> currents, setting for the dip, and knowing that you are tuned to the right
> harmonic are the important things.
>
> If you set the grid current to 3 mA and dip and load the plate current to the
> recommended 110 mA cathode current, a good 1625 with 700 volts on the plate
> will give you more than 40 watts of clean output in a rig of this type. That's
> pretty good.
>

Your right about the tuneing. I should know better. Some of the other guys have
told me not to use the light bulb method because the reactance of the bulb is such
an unknow and they might be right. If I have a good known 50 ohm dummy load I
should trust it. But, I don't know any hams, I saw a transmitter once when I was 15
but I had now idea what it was all about. So when I key the rig and I see that
light bulb glow, well, it's magic. The first time I saw the bulb light up about 3
weeks ago I felt a thrill of discovery that I haven't felt in years. The rest of
the guys might be right about trusting the meter and the dummy but I like the bulb.
And as you say, on a rig like this dummy loads and meters may be a bit much.

> > Well, even the best laid plans of mice and men go astray.
> >Last night when I sat down to work out the relevant parameters as far as
> >watts at dummy and bulb vs voltage output vs driver current and such the
> >transmitter started acting strangly. Watts out started falling off and I
> >could swear I heard a metalic "BING" noise coming from somewhere.

>
> You zorched something. Sorry. Were you keying the rig for long periods of time
> while fiddling with the controls? That's really hard on components.
>

I try not to key it for too long but all the experience I have with tube rigs is
what I've gained it the last few weeks. I could have hurt some thing with out
trying.

> >Performance continued to fall off untill I got nothing at all. I tried
> >changing out the 1625 and the 12BY7 and the OC3 and OD3 VR tubes but
> >nothing help. At present this is what I'm seeing.
> >
> >1) I still get the driver current from the 12BY7 to work correctly so I
> >know I'm driving the 1625.
>
> By "driver current" I assume you mean "1625 grid current". If so, it probably
> means the oscillator section is OK.
> >
> >2) When I switch from TUNE to OP the OC3 tube stops glowing. The OD3 and
> >the OC3 are in series with each other with the OD3 being grounded.
>
> Let's back up a second and talk about the power supply and how this all works.
>
> This rig uses an "economy" power supply, consisting of a 540 VAC 120 mA power
> transformer feeding a silicon diode bridge rectifier. This supply puts out
> about 700 volts from the high tap and 350 from the low tap, simultaneously. The
> high tap is used for the 1625 plate only. The low tap is used for the 12BY7
> plate, and also run to a series string of VR tubes (0C3 and 0D3) which provide
> 255 volts and 150 volts at their taps. Dropping resistor for the VR string is a
> 5 K 10 W power resistor. The 255 volts is used for the 1625 screen, and the 150
> volts is used for the 12BY7 screen.
>
> The mode switch has 3 positions - "CAL", "TUNE", and "OP".
>
> In CAL, the 12BY7 cathode circuit is closed and the 1625 cathode and screen
> circuits are opened. This is done so you can spot the transmitter signal with
> your receiver when using crystals.
>

What should the reading on the meter be?

> In TUNE, the 12BY7 cathode circuit is closed and the 1625 cathode and screen
> circuits are grounded. This is done so you can set the driver tuning without
> applying too much power to the 1625. (With the screen grounded, the 1625 will
> draw very little plate current).
>
> In OP, the 12BY7 and 1625 cathodes circuit are connected to the key jack and
> the 1625 screen circuit is connected to the 255 volts regulated. This is done
> so you can set the 1625 plate tuning and loading, and for normal operation.
> 1625 will draw very little plate current).

>
> >When the
> >mode switch is in the TUNE position I get 270v out of the OD3, which drives
> >the 12BY7 and 375v out of the OC3 which drives the 1625. When I switch to
> >OP I get 440v out of the OD3 and 450v out of the OC3.
>
> There's something really odd going on here. First thing to do is recheck all
> the power supply wiring, the electrolyutic caps and power resistors, and the
> silicon diodes. CAUTION! HIGH VOLTAGE!! The electrolytics can hold a lethal
> charge for DAYS if there is no discharge path.
>

That's what it was, the OD3's ground wire had become unattached.

> Get in the habit of unplugging the rig from the 110 before doing anything under
> the chassis. Then use an insulated screwdriver to short out each of the
> electrolytics. Then take your testmeter (with heavily insulated test leads, set
> to read DC volts) and carefully check for zero volts on all electrolytics and
> the high voltage points. The idea is to make absolutely sure that the rig is
> totally dead before getting in there with bare fingers.
>
> Next step is to double check all of the wiring in the power supply, as well as
> the above-mentioned components. A resistor may have opened up, or a capacitor
> shorted, or a diode fried. A wire grounding the 0D3 may have opened up. Or one
> of the VRs may have turned to toast. It's also possible that the 1625 plate
> coupling capacitor (shown as .01 @ 1000 V) blew up. This cap should really be
> rated at 1.4 kV or more.
>

Replaced it with a .01 2k part.

> Next step is to remove the 1625 and 12BY7 tubes, power up, and see what the rig
> does. The VRs should never go out under any circumstances when the RF tubes are
> out of the rig. In addition, the voltages should read +255 and +150 on the two
> tubes' anodes. If not, you have power supply or wiring troubles.
> >
> >3) If I key the circuit when I have the mode switch in the OP position the
> >OC3 will start to glow again and the volages fall off to a little below the
> >TUNE posision readings.Switching to the 1625 plate reading on the internal
> >meter shows that I'm getting about 120mA from the plate but no amount of
> >fiddling with the tuning or load caps causes any effect, let alone a "dip"
> >of any kind.
>
> It sounds like something has opened up or shorted. A fried 1625 RF plate choke
> or zapped plate cap will do what you describe. Check all the bypass caps, too,
> for shorts with an ohmmeter. One of them may have shorted, too.
> >
> >Okay guys, what did I do now. I'm going to look at it all tonight, maybe
> >just a short or open line somewhere?
>
> The mode switch is another suspect.

>
> The main thing is to try to get an understanding of how this deceptively simple
> rig really works. There's a lot more going on in it than first meets the eye.
>
> 73 es GL de Jim, N2EY

Well Jim, I fixed all those things then I tuned it back up and I keyed the rig a got about a watt out of it. I checked the voltage on the plate with my scope and I saw a 150 volt DC signal. When I key the rig the voltage drops to 130v and I can just barely make out a small sine wave on the DC. I'm kind of assuming the problems with the voltages, I may have made a mistake with my tuning coil. I'm going to try and wrap a new one this weekend and see if that works. Does that plate voltage sound right to you?

Thanks for all the help, I'll let you know what happens.

Rick

2493. FS: (long) High Voltage and RF components, ferrites and lots more

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: bw201@torfree.net
Message-ID: <FHI4rM.8yL.0.queen@torfree.net>
Source record: 67256
Cross-posted to:
rec.radio.swap,rec.radio.amateur.homebrew,misc.industry.electronics.marketplace,sci.electronics.components,sci.electronics.misc

Sorry about the list being so long, but the Freenet does not provide web sites so this is the only way I have to list this all.

The following are personal items I have for sale. This is everything I have dug out of my storage boxes that I know I will never get around to using.

Minimum order $30 plus shipping costs. I will not respond to smaller orders
20% DISCOUNT ON ALL ITEMS FOR ITEMS TOTALLING $75 OR MORE (shipping extra)

Prices negotiable ONLY IF you are purchasing over $300 or if you are purchasing a large quantity of the Mica Compression Trimmer Capacitors.

E-mail your offers to bw201@torfree.net

Shipping is extra, but I can confirm shipping from Toronto, Canada and let you know the cost once I know where you are located. All orders must be prepaid but I can send you references of people I have dealt with on sci.electronics.* groups all of whom were happy with our dealings. Once an offer is accepted we will trade physical addresses and phone numbers.

I have done all of my shipping by surface or air, parcel post, insured by the post office so far with no problems.

Thanks

Qty. Item Price EACH in
All items have never been U.S. dollars
been used unless noted (ie. it says "USED") shipping extra

AND DON'T FORGET THE 20% DISCOUNT ON ORDER OVER $75

100 VG20X 20kV 15mA 250nS Rectifiers 2

100 VG5X 5kV 45mA 250nS Rectifiers 1.50

2 International Rectifier 67GC030H20LSS 3kV 4
1.25 Amp 150 Amp surge R-C compensated epoxied
blocks 2 3/8" x 1" x 1" with turret connections

2 High-voltage dividers marked "200 MEG" 6
and believed to be a total of 200 megs +/- 5%
and have a 15:85(?) tap. Looks like it contains
6 high voltage resistors, in a rubber compound
in a plastic case with three mounting holes,
4" x 2 3/4" x 1" with what looks like a 60kv lead

2 High voltage resistor 500 Meg 1% (F) in a 6
rubber compound in a white plastic box with
two mounting hole in tabs. One green wire at
one end and two red 40kV wires (internally
connected together) at the other end one with
an Anode connector like on a large colour CRT
Excluding the mounting tabs: 4" x 1" x 3/4"

2 TG-36 by Signalite ("less that 5uC of Cs137") I 6
would assume this 3" long tube with 3/8" metal
ends is a glass overvoltage/transient protector
in the kV range (3.6kV?)

1 Kilovac Stacked Ceramic High-Voltage High-Current 70
Vacuum Relay # KC-3/S10, 26.5 VDC coil, SPDT,
never used (plate contacts separated by 3/8"
thick ceramic tubes, 3/4" in diameter)
Rated at 8kVDC (or 8kV peak AC 60Hz)
25 Amps continuous current with contacts closed
0.1 Amp switching at 8kVDC (or 8kV peak AC @ 60Hz)
0.015&#65533; contact resistance. 18mS response time
All ratings are for purely resistive circuits
(actual price $56 after discount)

1 Kilovac Silicone covered Ceramic High-Voltage 40
High-Current Vacuum Relay # S709/S43, 26.5 VDC
coil, SPDT, never used, looks like HC-2 series
8kV rated (10kV test) 18 Amp continuous current
with contacts closed and 0.5 Amps switching
6mS response time

1 USED Kilovac relay, looks like a HC-1 series 15
but no part number. 3.5kV rated (5kV test)
18 Amp continuous currenct with 0.5 Amp switching
6mS response time. 115 VDC coil, SPDT

8 Steatite (Ceramic) Cone-shaped standoffs 1.50
1 1/2" high x 1" dia. at bottom with all hardware
(ie. two screws, two metal washers plus, a cork
washer for the base of the standoffs)
Very similar to H.H.Smith #9502

10 270pf 20kV X5R disc capacitors 2.50

10 250pf 20kV X5R disc capacitors 2.50

4 Used Sprague 715C-Z 1300pf 15kV capacitors with 2.50
Doorknob style with 8-32 female ends

1 Custom Capacitor .01uF 15kV reconstituted mica 12.50
2 3/4" x 1 3/4" x 5/8" with wire leads

3 TRW .0047uF 10kV film Capacitor 2 1/4" long x 2.50
7/16" dia.

48 1200pf 10kV Z5R red Disk capacitors 1.25

1 .02uf 3kv Z5U disc capacitor 1.00

1 .01uf 3kv Custom Capacitor - reconstituted mica 1.00
1 3/8" x 1 1/4" x 0.1"thick

4 Sprague .0082uf 3kV disc capacitors 0.75

13 .001uf 3kV caps 0.40

2 Custom Capacitor .25uF 2000 VDC Capacitors 6.00
turret connections and four base mounting screws

1 10uF 400volt Polypropylene Capacitor with wire 8.00
leads by Illinois Capacitor 2.25" long x 1.5" dia.
(I have marked with an alcohol based felt-pen and
NOT one using a stronger solvent that could damage
the capacitor) MPH series High-Current non-inductive,
self-healing design, 6 milliohm ESR, 0.1% DF,
15 Amp maximum ripple current from 20kHz to
100kHz @ 75°C (14.1 Amp at 85°C)

1 50 Ohm 10% Power resistor by IRC MPP series 4
NON-INDUCTIVE Could be 25 or 50 Watt
Metal ring ends (ie. not wire leads)

4 Jackson Brothers 7:1 Ball Drive, 1/4" input and 10
1/4" shaft output. These drives have an output
torque of approximately 26 OZ. These have a
2 grub screws on the output shaft for connecting
a dial plate and one U-shaped ear on the flange
for mounting. 1 7/8" total length.

500 4.7uH 10% axial inductors probably made by 0.125
Taiyo Yuden probably around 190mA max,
56MHz minimum self-resonant frequency;
about 1/4" long x 9/32" maximum diameter

1 RF power choke on 3" long ceramic form, coil 15
1.25" dia. 5 pi-wound sections. 10 Ohms,
probably in the 1.0 or 10 mH range, and
probably 500mA maximum current.

11 Ceramic variable coil forms for High Power VHF use 4.
by Cambion (Midland Ross) Part number: 530-3354-05
0.5" dia. x 0.7" winding length, 2 collars each
but with 4 terminals; Brass Perma-Torq slug for
100 MHz use and up. Slotted at both inside the
large core, and at the end of the 6-32 shaft.
Total length excluding slug shaft about 2"
For panel mounting

1 Variable capacitor #074055 with ceramic base 15.00
Panel mount with 1/4" shaft 6" long

50pf max. Should be good up to 500 volts

2 Cardwell #PL6078 ceramic based variable capacitor 15.00
Panel mount with 1/4" dia. by 1/2" long shaft
and includes a shaft locking nut to keep it
locked in place. Should also be good to 500V
Dual butterfly configuration.
25pf + 25pf max.

5 Dual VHF ceramic based variable capacitors 5.00
with phenolic mounting plate and 3 screw mounting
looks like it is about 8pf+ 8pf
Model # 80199

1 APC-100 panel mount trimmer capacitor 7.50
with ceramic base
100 pf maximum and looks like it should be
good to 350 VDC

4 Johnson Air variable capacitors Panel Mount 3.50
Model #189-563. 1.75-8.25pf minimum range
3/16" dia. x 7/32" long slotted shaft
0.45" x 0.5 x 0.5" deep body
Solid machined rotors. Lug mount

6 Johnson Air variable capacitors Panel Mount 4.50
Model #193-8. 2.4-24.3pf minimum range. 250VDC
0.5" x 0.56" x 0.65" deep body
Solid machined rotors. Lug mount

2 Johnson 160-102 variable capacitor Panel Mount 3.50
0.6-4.0pf
3/16" dia. x 1/4" long slotted shaft

6 Johnson 160-110 variable capacitor Panel Mount 4.50
2.7-19.6pf
3/16" dia. x 1/4" long slotted shaft

3 Johnson 160-205 variable capacitor Panel Mount 3.50
Dual butterfly unknown capacitance
but guessed to be up to 4pf + 4 pf

10 Johnson Air variable trimmer capacitors 2.50
1.5-5.0pf minimum range. 125VDC. PCB mount
0.35" x 0.35" x 0.35" in size
+45ppm +/- 15ppm/&#65533;C. Identified by a red "7"

1 Used 189-4 Johnson variable trimmer capacitor 2.
1.9-10.4pf guaranteed range
0.45" x 0.43" x 0.6" high. Lug connections

15 Johnson 193-29-34 variable trimmer capacitors 2.50
1.7-11.7pf guaranteed minimum range. 325VDC

0.5" x 0.56" x 0.6" high. Lug connections
+50ppm +/- 20ppm/°C

21 Tusonix Series 557 350WVdc 0.5" dia. trimmer cap 1
3-12 pf NPO

4 Tusconix Series 557 350WVdc 0.5" dia. trimmer cap 1
5-25pf "A" temperature co-efficient

4 Tusconix Series 557 350WVdc 0.5" dia. trimmer cap 1
8-50pf N750

5 Teflon high-powered UHF/microwave variable 3
capacitors all silver plated piston type.
Extremely rugged. About 1 3/8" long.
D-keyed mounting hole and connection is about
7/16" outside dia. on the threads (all
apparently silver plated). Second connection to be
made to silver plated tube about 3/8" long, and
1/4" ID. Looks like they must be good up to
3kV and capacitance guessed to be from almost
0 to 4.0pf.

1 JFD VC203 glass piston capacitor 24 turn 1.50
unknown capacitance about 1/4" dia. x 1 1/4"

1 Unmarked silver-plated glass piston capacitor 1
unknown capacitance same size as one above

11 Concentric cylinder air piston trimmer caps 1
4-30pf European style stud mount
1/2" in diameter by 1 1/4" long stud length
One connection by bottom of stud, other by lug
Hex-stud adjustment - not sealed

ALL JOHANSON TRIMMER PISTON CAPACITORS INCLUDE THEIR BRASS
SEALING CAP AND RUBBER WATERPROOF WASHER
All have mounting nuts except those with PCB mount leads.
All their models that I know of are all 0 ppm/°C and are
air dielectric and are extremely high Q (min. 5000 @ 100 MHz)

1 Johanson #2800 trimmer piston capacitor 0.32" dia. 1.50
1.0-10.0pf lug connection 12 turn

1 Johanson #2801 trimmer piston capacitor 0.32" dia. 1.50
1.0-10.0pf pcb connection 12 turn

1 Johanson #2802 trimmer piston capacitor 0.32" dia. 1.50
1.0-10.0pf turret connection 12 turn

1 Johanson #2950 trimmer piston capacitor 0.25" dia. 1.50
0.8-10.0pf lug connection 6 turn

1 Johanson #2951 trimmer piston capacitor 0.25" dia. 2.00
0.8-10.0 pcb connection 6 turn

1 Johanson #2954 trimmer piston capacitor 0.25" dia. 1.50
0.8-10.0pf turret connection 6 turn

1 Johanson #2955 trimmer piston capacitor 0.25" dia. 1.50
0.8-10.pf stud connection 6 turn

1 Johanson #4337 trimmer piston capacitor 0.25" dia. 2.00
1.0-10pf very long pcb leads 6 turn

1 Johanson #4610 trimmer piston capacitor 0.17" dia. 1.50
0.5-5.0pf turret connection 9 turn

1 Johanson #4700 trimmer piston capacitor 0.125" dia. 1.50
0.3-3.0pf turret connection 12 turn

30 Johanson #5201 trimmer piston capacitor 0.25" dia. 2.50
0.8-10pf pcb connection 6 turn
NPO +/- 50ppm/&#65533;C

1 Johanson unknown part number dual common 1.50
trimmer piston capacitor 0.25" body diameter
1.0-10pf 6 turn and 0.8-5.0pf 6 turn

1 Johanson unknown part number trimmer piston 0.32" dia. 1.50
0.6-5.0pf lug connection 12 turn, pink ceramic body

1 Johanson unknown part number trimmer piston 0.25" dia. 1.50
1.0-14.0pf lug connection 8 turn

1 Johanson unknown part number trimmer piston 0.25" dia. 2.00
1.0-14.0pf pcb connection 8 turn

1 RF Power QUAD spiral variable inductor 50
Each section estimated to be maybe 3uH max
6 turns. 2 1/2" long X shaft
Shielded box: 6" x 2" x 2"
P.R Mallory Co. #446S001

Addition to the list: Industrial limit switches

2 Micro Switch Corp. # WZE-7RQ9TN, Diecast Aluminum 6
Enclosed Switch (side-mounting) with Roller Plunger
SPST NC(monentary) 10A@125VAC, 5A@250VAC, 3A@460VAC
for CONDUIT - looks similar to the BZE6-2RQ8
Screw terminals

2 Micro Switch Corp. # WZV-7RQ9T1, Diecast Aluminum 6
Enclosed Switch (bottom-mounting) with Roller Plunger
SPST NC(mom.) 10A@125VAC, 5A@250VAC, 3A@460VAC, 2A@600AC
for CONDUIT - similar to the BZV6-2RQ80. Screw terminals

1 Micro Switch Corp. # BZV-2RQ, Diecast Aluminum 6
Enclosed Switch (bottom-mounting) with Straight Plunger

SPDT (mom.), 15A @ 125VAC/250VAC/460VAC Screw terminals
for CONDUIT - looks similar to the BZV6-2RQ

1 Micro Switch Corp. # BZE-2RN, Diecast Aluminum 6
Enclosed Switch (side-mounting) with Straight Plunger
SPDT (mom.), 15A @ 125VAC/250VAC/460VAC Screw terminals
for CONDUIT - looks similar to the BZE6-2RN
With water-proof actuator rubber seal boot

1 Micro Switch Corp. # WPE3, for CONDUIT - Army green 4
"Ordinance Part No. 7753261" Diecast Aluminum
Enclosed Switch (side-mounting) with Straight Plunger
SPST NC(mom.) No ratings stamped on the case
With water-proof actuator rubber seal boot
Screw terminals

1 Micro Switch Corp. # BZLN-RH, Diecast Aluminum 6
Enclosed Switch (side-mounting) with Straight Plunger
SPDT (mom.) 15A @ 125VAC/250VAC/460VAC for CONDUIT
wire connections

17 Micro Switch Corp. # DT-2R-A7, industrial switch 6
Long minimum mechanical life = 1 million operations!
Extremely high-reliability switches.
DPDT (mom.) 10A @ 125VAC/250VAC / 0.5A@125VDC
Pin plunger - six screw terminals. If you buy enough
to qualify for my 20% discount they cost you $4.80 each.
http://www.marshall.com has these at a $75.60 list price!

9 Micro Switch Corp. # WZ-7R
SPST NC (mom.) 10A@125VAC, 5A@250VAC, 3A@460VAC 0.75
pin plunger - solder terminals

9 Micro Switch Corp. # WZ-7RTC 0.75
SPST NC (mom.) 10A@125VAC, 5A@250VAC, 3A@460VAC
pin plunger - solder terminals

1 Micro Switch Corp. # BE-2R-A4 2
SPDT (mom.) 25A@ 125VAC/250VAC/480VAC
pin plunger - screw terminals (missing one screw)

12 Micro Switch Corp. # 1TB25-D8 0.75
DPST one NC one NO (mom.) 10A @ 125VAC/250VAC
0.25" quick connect terminals - plastic plunger

2 Micro Switch Corp. # V3L-27-D8 1
Roller lever actuator - 0.25" quick connect terminals
SPST NO (mom.) 15A @ 125VAC/250VAC

7 Micro Switch Corp. SM series subminiature 1
industrial switch with customized one screw mount
roller leaf actuator 5A@250VAC
solder turrets terminals - strong actuating force

99 USED - Micro Switch Corp. # 1SM23 subminature switch 0.25
plastic pin plunger - solder turret terminals
5A @ 125/250VAC

2 Electrical magnetic Circuit Breakers by Heinmann 4
AM1-A8W, 20 Amp, 240 VAC, 50/60 Hz, #20 time delay

14 Miscellaneous industrial, appliance and automotive
switches - FREE with the purchase of at least $75
(before discount of the above industrial switches
and circuit breakers)

74 Mica compression trimmer capacitor 35 - 250pf 1.25
2 lug connections with a separate grounded screw
adjustment grounded through a centered mounting
bracket - flat base style approx 5/16" x 13/16"
part number 310720850061
rivetted plate (ie. cannot be taken apart and modified)

53 Dual separate mica compression trimmer capacitor PCB 1.00
mount with capacitors set in ceramic block 1 1/16" x for
1 3/16"with maximum height of ceramic 7/16" high. each
Includes some silvered mica plates to limit range. dual
One capacitor is, 390 - 470pf, unit
the other capacitor is two sections in series:
first one 230 - 375pf, second 140pf fixed
Electro Motive part number 51102200
For you homebrewers, by removing the extra flat plates
(the slighty curved ones give the maximum variable range)
and just the silvered mica sections you can create various
combinations eg. 10 - 80pf with two plates one unplated mica
piece for the first section, and for the other section
20 - 120pf with three plates and two unplated mica pieces
or 10 - 75pf with just the top two plates and one mica piece.

236 Dual separate mica compression trimmer capacitor PCB 1.00
mount with capacitors set in ceramic block 1.0" x 0.7" for
x 0.25" Electro Motive part number 310720850911 each
Includes some silvered mica plates to limit range. dual
One section is variable from about 390 pf to 480 pf. unit
The other section has a fixed 150 pf (approximately) in
series with a variable capacitance of 260 pf to 340.
These can be modified similar to the 58 units above.

100 SFE10.7MA5A Murata-Erie 10.7MHz ceramic IF filter 0.25
(red dot - 10.70MHz center frequency) 3dB bandwidth
280 ±50 kHz, 20dB bandwidth of 650kHz, 6dB insertion
loss, 330 Ohm input/output impedance, the standard
for most stereo's and home receivers. Listed in the
Digikey catalog at $1.13 each and $61.50 per hundred.
If you take all 100, you can have them for $12.50.
(and with the 20% discount it would be $10 for 100)

25 KBF-455R-15A Kyocera 455kHz 6-POLE ceramic IF filter 3.00
455kHz ±1.5kHz center frequency. 6dB or all 25 for $62.50
bandwidth ±7.5kHz (ie. 15kHz), 50dB bandwidth of
±15kHz. 6dB maximum insertion loss, 1.5kOhm impedance.
These are triple units (ie. equivalent to 3 of the
standard 2-poles units like sell for $2.84 each
at www.digikey.com)

25 CFW455E Murata-Erie 455kHz 6-POLE ceramic IF filter 2.50
6dB bandwidth ±7.5kHz, 50dB bandwidth or all 25 for $50.00
±15kHz, 6dB maximum insertion loss, 1.5kOhm impedance.
(same bracketed note as with previous item)

2 SHORTED General Electric C50 110 Amp SCR's free with
Electrically they are useless, but you might minimum $75
be able to use the braid on them. They are purchase
also great to hold by the braid and then whip but you pay
a mugger over the head with! ;-) the shipping

10 Solitron Devices, SD10, Sounvister - NOISE ZENER's 2.
9V Zener diodes used as audio white noise sources in
audio equipment. Supplies with data sheet showing
individually tested noise outputs of 390 to 900
uV/20Khz @ 600 ohm, ordered by International
Rectifier (according to the data sheet) in 1975

1 Sigma Datacel # 301R2-24 optocoupler 4
with one lamp and two photoconductive cells

6 Clairex Photomod # CLM4012 optocoupler with one lamp 2
and one photoconductive cell with spec. sheets

31 DG180BP Dual SPST Very Low-Resistance (±10 ±) J-FET 6.
Low Distortion Analog Switches especially
suited to Video or Audio Switching purposes and precision
Sample and Holds, by Harris/Siliconix/Intersil list price
$20.20 U.S.! I have copies of the specs sheets for
you plus a summary of the data is at the end of this list
(FET switches unlike CMOS ones do not change resistance
with signal and so are extremely low distortion)
Or take all 31 for $110 minus 20% discount (= only $88)

50 2SC1254 Low-noise UHF-VHF NPN transistor TO-72 case 0.75
by NEC. 800 MHz minimum fT at 6mA, 50mA Ic max.
25 Vceo, 0.25 Watt

5 80180 TO-117 stud RF NPN transistor by MEC for CATV 1.25
amplfiers. 5 Watt Pd max., 250mA Ic max., 25 Vceo,
1500 MHz fT

2 Used Piezoelectric Ceramic Blocks with metalize 15.
ends. About 2" x 2" x 1 1/8". HEAVY

1 Double Disk converter/hole punch All metal construction 2.
Yes the original product in the original box for you
antique lovers! Now if you can just find 3.5" 720k disks ;-)

80 USED - Miniature lamp holders with 24/28 volt lamps 0.05
plus 16 spare bulbs

12 Appliance neon indicator lamps with internal resistor 0.40
3/8" x 1 1/4" rectangular hole

9 Appliance slide switch 3A@125VAC plus 0.50
neon indicator lamp with internal resistor
3/8" x 1 1/4" rectangular hole

200 Heat Shrink Tubing END CAPS (plastic plugged end) $6 per 100
Inside diameter before shrinking 1/8"
use to cap unused wires or insulate small splices

50 Panduit Female 1/4" disconnects crimp-connectors 0.10
(ie. solderless terminals) fully insulated
Blue for #14-#16 wire. For use on things such
as Solid State Relays that have 1/4" tabs.
Similar to ones made by Amp and by 3M.

48 Knobs for 1/8" shaft Raytheon pn TSA50-2WL-1 9/16" dia. 1.
x 7/16" high. Fluted black polycarbonate knob with
brass insert with one set screw, white line up the
side and brushed aluminum circle on top.

3 Alco black machined aluminum knob for 1/8" shaft 2.
with flat finger grip and thick aluminum skirt
numbered from 0 through 9

12 Various plastic knobs with set screws for 0.40
1/8" dia. shafts

12 Knobs for 1/4" shaft. 1 1/4" dia. x 5/8" high 1.
Fluted black ABS knob with aluminum insert with
two set screws, NO pointer, with brushed aluminum
circle on top.

3 Various machined aluminum knobs for 1/4" shaft 1.25

10 Large plastic knobs for 1/4" shaft with one set screw 0.40
Gold-coloured anodized alumimum cap, brown plastic
approx 2" in diameter and 5/8" deep

16 METAL foot switch with 2.5mm plug on 5' coaxial cord 5.00
meant for controling cassette tape recorder, but
contains SPDT 5A@250VAC micro-type momentary switch
so can be easily modified for other applications
rubber floor pad and non-slip white plastic foot grip

1 International Rectifier #J29B17 Selenium Full-Wave best offer
Bridge Rectifier. Plates 6" x 5" and 2" between the

outer-most plates. Center bolt length is 4.25" long
4 plates, 4 connections.

2 Xenon u-shaped # U-8538 flashtubes for low 5
speed (eg. photographic) use. Pt = 10 Watt.
Anode to Cathode voltage: 300 volts minimum,
400 volts nominal, 600 volts maximum. Operating
life at 10,000 flashes with a maximum energy of
100 Joules per flash at 6 flashes per minute
(eg. 1250uF capacitor charged to 400 V = 100J)
6kV (@ 0.8 mJ) trigger voltage. 45 mm high,
8mm dia. U-shaped tube.

3 Xenon small linear flashtubes designed for 2
higher speed use (data sheet uses the example
of a 30 Hz rate) Total length of about 1" long
Maximum Power input of 6 W.s., with an
operating life of 10,000,000 flashes with a
30 Hz flash rate and 0.2 Joules per flash.
Has attached trigger lead. With data sheet

10 Xenon small linear flashtubes designed for low 0.50
repeat rate (as for camera flash use)
has No attached trigger lead. About 1" long
No data sheets

1 Strobe - flashes from 1 to 6 times a second. 20
Good for use in medium sized darkened room like a
rec room. Approx. 4 x 6 x 12 cm. (This unit and
the one below are in Hammond 1591C Heavy Duty ABS
boxes with 1591AC clear lids. These boxes alone cost
over $7 US each.) Runs off of the
AC outlet and has internal fuse for protection.
Uses FILM capacitors (3.3 ΓF) for charge storage.
The first item that "blows" on strobes are the
Xenon flash tubes, the other major item is the
capacitor if cheap electrolytics are used rather than
film capacitors. Film capacitors also have much
lower ESR (effective series resistance} and so are
usually as bright as strobes using electrolytic
capacitors with 3 times the capacitance.
(2 Linear replacement Xenon tubes are available for
$1.50 each, but only with the purchase of the strobe.)

1 Strobe - flashes from 2.5 to 14 times a second. 35
Good for use in medium sized darkened room like a
rec room. Approx. 4 x 6 x 12 cm. plus the size of
the external fan that includes a finger protector.
(This unit built in a Hammond 1591 Heavy Duty ABS
box with 1591 AC clear lid.) Runs off of the AC
outlet and has internal fuse for protection.

Uses Film capacitor (3.3 µF) for charge storage.
Because it uses the same capacitance as the $20
unit, but flashes up to 2.5 times as often, it
delivers up to 2.5 times as much power to the
Flash Tube. Includes a built-in fan to increase
Xenon tube life as well as using a special tube
designed for higher speed/higher power flashing use.
(4 Linear replacement Xenon tubes with data sheet,
are available for $4 EACH, but only with the
purchase of the strobe.)
WARNING: prolonged exposure to higher flash rates
can produce nausea and even epileptic-like seizures
in some people who are NOT epileptic.

1 6 Digit mechanical counter with 6 Digit preset 4
PANEL MOUNT. With SPDT switch output - 93 Volt DC
One 93 VDC solenoid for counting and one for reset
(there is also a manual button for the reset)
could probably be powered by one of the
16VAC + 50 VAC listed below

1 ACE cylindrical key mechanical 7 pin lock 1
with 3 keys, for cabinet etc.,

16 25kΩ Linear 50mm-travel slide potentiometer 0.20
with centre detent - no 3mm mounting screws

Military Grade high-G shock resistant relays

1 USED Hi-G Inc. 26.5VDC 575Ω DPDT 2A contacts 1.50
20 x 10 x 10mm

1 Branson #AR6919 26.5VDC 390Ω 4PDT bolt-mount 2.50
20 x 23 x 10mm

1 HiG Inc. 26.5VDC 675Ω DPDT 2A contacts 2.50
20 x 23 x 10mm

1 Struthers-Dunn 26.5VDC 300Ω DPDT 5A contacts 4.
25 x 31 x 15mm

4 Deutsch Inc. microsized 25.5VDC 1.3kΩ DPDT 4.
only 10 x 15 x 5mm!

FERRITES:

1200 Ferrite beads - About 0.1" long x 0.13" O.D., 100 for $5
believed to be #43 material. 1200 for $36

200 Ferrite core, cylindrical with two holes - (How I used 0.05
them was to put in a U-shaped piece of wire and use
them as radial mount RFI suppressors chokes for DC
power supply lines. Of course you can also use them

for baluns.) 0.25" long x 0.25" diameter.

32 768T188 Ferroxcube/Philips 0.5" OD x 0.28" ID .30
x 0.19" thick Toroid 3C8 material with 3 sets of
windings (very few turns and so easily removed
to use the cores) for on-board inverters
to provide negative supply

1 Solid ferrite block 4" X 2" X 1" 4.00
Has two corners mildly chipped
Unknown ferrite material type

2 Toroids Magnetics # 6T5320-S4 4.00
2 5/8" OD, 1 3/8" ID, 5/8" thick
Supermendur, High Flux density and temperature

6 Ferrite toroids 2" OD x 1.2" ID x 0.5" thick 2.50
Light blue in colour - no identification

6 Toroids Magnetics # 6T5233-D2-A4 black 1.50
1.55" OD x 0.9" ID x 0.45" thick

7 Toroids Magnetics # E53-55252-A2 violet 1.50
1.6" OD x 0.9" ID x 0.55" thick
Square Orthonal 50% nickel-iron alloy
2 are still wound with magnet wire

8 Toroids Magnetics # M65-55930-A2 violet 1.00
1.05" OD x 0.55" ID x 0.45" thick

8 Toroids 1.3" OD x 0.75" ID x 0.43" thick 1.00
Black - no identification

4 Prewound 4229 3B7 Philips Pot cores A250 set 3.00
with two winding both about #18 AWG wire
with PCB mounting and shielding can

4 Prewound 3010 3B7 Philips Pot cores ungapped 1.25
A7580 set with three #20 AWG and one finer winding
with PCB mounting and shielding can

4 U-cores 2 5/8" wide X 1 1/16" high x 9/16" thick 0.75
(67mm X 27mm X 14mm) of course you need a pair
of them to make a set and I do not have the
bobbin core for them. There is lots of room
for a high-voltage winding if you can wind one

2 Prewound E-core transformer #TLP6759 Mitsubishi 1.00
One centre-tapped primary and one secondary
appears to be a 1:1:7 for switcher
approx. 1 5/8" x 1 1/2" x 1/2"

4 set EC series 70 Ferrite E core. Total core pair size 10.00
is about 2.75" x 2.75" x 0.65". Each set includes

a pair of cores, a bobbin, U-bolt, and a metal base
plate. Four of the core halves are ungapped and
four have 0.19" gaps. These could either be
paired to make 4 sets with 0.19" gaps (for about
A90) or to make 2 ungapped sets and 2 sets with
a 0.38" gap (for about A55). Will be of Philips
3C80, 3C81 or 3C85 materials (all very similar)
Also included are a total of 3 spare bobbins in
case you make any winding errors if you buy all sets.

4 set EC series 52 E core. Total core pair size is about 4.00
2" x 2" x 0.55". Each set includes a pair of
cores, a bobbin, U-bolt but no base plate.
2 halves with no gap, 6 halves with 0.09" gaps.
So you can make 1 ungapped set and 3 with 0.18"
gaps, or 2 sets with 0.09" gaps (A105) and 2 sets
with 0.18" gaps (A65). Will be of Philips 3C80,
3C81 or 3C85 materials (all very similar). Also
included are a total of 3 spare bobbins in case
you make any winding errors if you buy all sets.

INDUCTORS:

Bag Of 28 minature audio toroids on 5/8" x 5/8" phenolic 14.00
mounting base. Various values from 10 to 500 mH

2 Used "Collins" MP-206-28B audio toroids 600 mH 2.00
1" dia. x 1/2" thick

1 Used Torotel audio toroid 240 mH 1"dia.x1/2" thick 1.50

1 Used Torotel audio toroid 360mH with tap 1.50
1" dia. x 1/2" thick

2 Used CAC audio toroids 4 H, 5/8" dia. x 3/8" thick 2.00

1 Encapsulated toroid by Hisonic believed to be .50
132uH - 1" dia x 1/2" thick

6 Encapsulated toroids by Torotel believed to be .50
180uH - 1" dia. x 1/2" thick

(Transformers are preferably for sale in the Toronto,
Canada area for pick-up, because of the cost of shipping heavy items
such as these, but if you are willing to pay for the shipping I will
send these anywhere.)

TRANSFORMERS (all 115VAC primaries except audio transformers):

3 50 Amp to 5 Amp (50-400Hz) CURRENT Transformer 12.50
The Simplex Co., Inc. 2 3/4"x 2 3/4" x 1 3/8"

5 Microtran T1104, telephone coupling transformers 1.75
600 : 600 Ohm, 300-3500Hz ±0.5dB, 0.5% distortion max

3/4" x 7/16" x 9/32" (DigiKey list price $13.73 each)

1 Calectro D1-726 audio 3/4" x 5/16" x 5/16" 1.50
500 Ohm C.T. to 8 and 3.2 with 2" long insulated wires

3 #154A5969-1 Green audio transformer 1.
1" x 3/4" x 7/8" believed to be 700mW
250 Ohm resistance and 30 Ohm resistance, believed
to be 5k Ohms to 500 Ohm Center-tapped impedance

1 Red audio transformer 1" x 3/4" x 3/4" three windings 1
26 ohms, 26 ohms and 50 ohms resistance,
believed to be 1k, 500 and 500 ohm impedance

2 Blue audio transformrs 1" x 3/4" x 3/4" three windings 1
52 ohms, 82 ohms and 82 ohms resistance,
believed to be 1k, 2.5k and 2.5k ohms impedance

1 Yellow audio transformer 1" x 3/4" x 7/8", one winding 1
26 Ohms, the other is 82 ohms resistance with two taps,
believed to be 500 ohm to 5 kohm (w/taps) impedance

1 Hammond #167J36 36VCT @ 1A closed frame 8.
Heavy metal protective cover over windings
Great for making a ±15 volt @ 600 mA DC
professional audio power supply

2 Hammond #166G36 36VCT @ 0.5A open frame 4.
for ±15 volt @ 300 mA DC audio power supplies

2 Used 10VA 40VCT shielded 1.50

1 Used Hammond #166G20 20VCT@0.5A open frame 1.50

1 Hammond #166L5 5VAC@2A open frame 1.50

7 16VCT and 50VAC ±6VA 1.25

1 10 VAC + 10 VAC; 6 VA pcb mount transformer 1.25
ie. 20 VAC @ 0.3A or 10VAC @ 0.6A
by Signal Transformer; Split Trans # DST-40-20
can be wired for either 120 or 240 VAC input

1 8 VAC + 8 VAC; 20 VA pcb mount transformer 1.50
ie. 16 VAC @ 1.25A or 8 VAC @ 2.5A
by Signal Transformer; Split Trans # DST-6-16
can be wired for either 120 or 240 VAC input

7 11 VAC ±3VA (ie. ±250ma) 1.
separate bobbin sections for primary and seconday

1 9.5 VAC @ 200mA 1.

1 25VAC ±3VA 1.

4 12.6VAC @3VA 1.

2 30 VAC @ 50mA 0.75

1 Used 17 VAC +17VAC @ 20VA - 120/240 VAC input 1.
ie. 34 VCT @ 0.6A or 17VAC @ 1.2A

2 AC adapters 4.5VDC @ 100mA coaxial power plug 1.

1 AC adapter 9VDC @ 100mA coaxial plug 1.

MOTORS (or all 37 motors for $16 U.S.)

1 "MN-30 Micro Motor" by Tradeship (California) Inc 0.50
Open-framed 12 Volt DC 5 pole permanent magent hobby
motor at up to 18,000 r.p.m. 3/32" shaft with gear
about 2 1/4" long with mounts, 1/2" thick, 3/4" wide
graphice brushes. In original box

1 "MX-77 Micro Motor" by Tradeship (California) Inc 0.50
Open-framed 12 Volts DC 7 pole permanent magnet hobby
motor at up to 20,000 r.p.m. 3/32" shaft with gear
about 2 5/8" long with gear, 5/8" thick, 7/8" wide
graphite brushes. In orginal box

1 Sychron 20 r.p.m 24VAC 6Watt AC motor 0.50

6 3-12 VDC permanent magnet motors 0.50
body approx. 1" dia. X 1.5" long with 1/2" long
shaft. Has graphite brushes

4 108 VDC permanent magnet motors 7500 r.p.m. 0.25
full-load current of 0.08 amps. Rated for 105@C @
20 minutes. Body approx. 1" dia. X 1 3/8" long
with 3/16" long "d" shaft

3 USED pancake type 12 Volt stepper motors 0.25
removed from old floppy drives

1 USED cube style stepper motor from an old Hard Drive 0.25
body approx. 1.5" X 1.5" X 1" with gear on shaft
short 3/4" long leads

16 USED DC permanent magnet motors of various sizes 0.25
for 3 to 12 volts from tape recorders and a VCR
with pulleys on shafts

1 New stepper motor Rapid-syn model 20V-03L 6
Impedance protected. 6 leads. I can't "feel" the
step size. 2" dia. x 2 1/2" long body. Double
shafted 1/4" dia. x 1" long at both ends. Three
threaded mounting holes at one end - two at the other

1 Used stepper motor similar to above 20Volt 3
somewhat longer shafts. 6 leads with connector
Rapid-syn model 20V-01J. Looks like one end is

meant to fit into a 1.75" dia. hole, with a ridge
presumably for holding it in just above this.
"Feels" like it is 3.6° step size.

1 Stepper motor used from HD. 5 lead with connector 1
Astrosyn model # 17PS-c006-01. 1 5/8" x 1 5/8" x
1 1/4" body. 5mm dia. x 12mm long shaft.

1 Stepper motor - used. Nidec model #44F5098007 2.50
2" dia. x 7/8" deep body. With two rollers and
the matching belt to go with them.

OTHER:

2 5 pin 180° DIN male to four RCA males on 3' cord 1

1 5 pin 270° DIN male to DIN male on 7' cord 1

1 5 pin male to 5 pin male slide projector control cable 1

1 misc 3 pin heater cord with no AC plug 0.01!

1 1/4" male to 1/4" female shielded extension cable 0.75

3 1/4" male to bare shielded end cable 0.75

8 Elmwood Sensor series 2400 thermal switch 0.50
N.C. - opens at 84°F

4 6 Amp 250VAC 11' long European colour-coded electrical 2.
sets cords with no AC plug at one end, and 3 prong modular
female at other, plus the matching Switchcraft EAC-301
panel-mount male connectors

1 Used optical shaft encoder - removed 6
1/2" dia. x 3/4" long shaft. All electronics connect
to 5 pin connector Housing about 2" in dia. x 2" long

SPEAKERS: (to be sold in one inexpensive batch) the 24 for $7.50
2 5cm dia. 8° 0.3W
8 5cm dia. 8° 0.15W
4 Used 5cm dia. 8° 0.1W
1 Sharp 8cm dia. 10° 0.4W
3 Sharp 6cm dia. 10° 0.3W
2 Sharp 6.5cm dia. 25° 0.2W
2 Used 5.7cm dia. 40° 0.2W
2 5 cm dia. 100° 0.2W

4 270uF 20% 50V CSR-13 Mil-style hermetic axial 2.00
low-leakage Solid Tantulum capacitor

4 250uF 10% 10V CSR-13 Mil-style hermetic axial 1.50
low-leakage Solid Tantulum capacitor

20 220uF 10% 10V CSR-13 Mil-style hermetic axial 1.50
low-leakage Solid Tantulum capacitor

5 150uF 10% 15V CSR-13 Mil-style hermetic axial 1.25
low-leakage Solid Tantulum capacitor

1 150uF 10% 10V CSR-13 Mil-style hermetic axial 1.00
low-leakage Solid Tantulum capacitor

4 150uF 10% 6V CSR-13 Mil-style hermetic axial 1.00
low-leakage Solid Tantulum capacitor

100 33uF 10V dipped Tantalum capacitors 0.20

20 0.22uF 20% 50V Erie CK06 molded monolithic cap 0.05

30 0.18uF 20% 50V Erie CK06 molded monolithic cap 0.05

20 0.12uF 20% 50V Erie CK06 molded monolithic cap 0.05

20 0.1uF 10% 50V Erie CK05 molded monolithic cap 0.05

30 0.082uF 10% 100V CK06 molded monolithic cap 0.05

12 0.162uF 1% 63V molded polystyrene 15mm dia. X 25mm 0.10

3 0.15uF 1% 63V molded polystyrene 15mm dia. X 25mm 0.10

3 0.12uF 2% 63V molded polystyrene 15mm dia. X 25mm 0.10

3 0.075uF 2% 63V molded polystyrene 0.10

1 0.068uF 2% 63V molded polystyrene 0.10

1 1100uF 330V photoflash electrolytic 1.2" dia. X 3.2" 4.00

4 750uF 330V photoflash electrolytic 1.2" dia. X 2" 4.00

2 350uF 330V photoflash electrolytic 1" dia. X 1.8" 2.50

1 250uF 330V photoflash electrolytic 1" dia. X 1.8" 2.00

12 170uF 330V photoflash electrolytic .85" dia. X 1.2" 1.50

21 150uF 330V photoflash electrolytic .6" dia. X 1.6" 1.50

1 Mallory computer-style 140uF 450VDC electrolytic 4.00

6 130uF 200V photoflash electrolytic .6" dia. X 1.1" 1.00

6 40uF 350V axial electrolytics 1.00

6 33uF 250V axial electrolytics 0.75

22 10uF 330V axial electrolytics 0.50

23 3.3uF 450V axial electrolytics 0.50

9 2.2uF 500V axial electrolytics 0.50

1 1uF 450V radial electrolytic 0.40

Power resistor selection 35
Do you need power resistors for things like testing power
supplies or power amps? Here is selection of over 100
of them, from 0.15 ohm to 5600 ohms at up to 70 watts.
Also included are over 250 of the very hard to find tubular
power resistor mounting brackets.
(or with the 20% discount $28! plus shipping)

1 bag Over 250 power resistor mounting brackets
for 5 to 50 Watt tubular power resistors
1 0.15 Ohm 20 Watt power resistor
4 0.47 Ohm ADJUSTABLE 25 Watt power resistor
1 1 Ohm 50 Watt power resistor
1 1.2 Ohm 70 Watt power resistor
1 1.5 Ohm 35 Watt power resistor
1 1.5 Ohm 50 Watt power resistor
1 1.5 Ohm 63 Watt power resistor
8 2.0 Ohm 50 Watt power resistor
Great for audio and power supply dummy loads
1 2.0 Ohm 3% 50 Watt (metal encased)
1 2.0 Ohm 63 Watt power resistor
6 3.3 Ohm Dale RW21 series (at least 20 Watt)
(Same size as the Ohmite 4 Ohm 40 Watt resistors)
8 4 Ohm 5 Watt cement block type
2 4 Ohm 40 Watt power resistors by Ohmite
1 5.1 Ohm 5 Watt cement block type
2 6 Ohm 50 Watt power resistors
1 6 Ohm center-tapped 50 Watt power resistor
2 6.2 Ohm 5 Watt cement block type
2 7 Ohm 5 Watt cement block type
9 8 Ohm 5 Watt cement block type
8 10 Ohm 10 Watt cement block type
7 10 Ohm 20(?) Watt
2 12 Ohm 5 Watt cement block type
2 25 Ohm 3% 50 Watt metal encased
1 91 Ohm 5% 3 Watt resistor
3 240 Ohm 5% 9 Watt series CW7 Dale resistor
1 800 Ohm 5% 10 Watt Dale resistor
8 1 kOhm 2 Watt cement block type
2 1 kOhm 10 Watt cement block type
6 1.5 kOhm 5 Watt cement block type
2 3 kOhm 10 Watt tubular Dale resistor
2 3.9 kOhm 10 Watt cement block type
4 5 kOhm 10 Watt tubular type
1 5.6 kOhm 5 Watt cement block type

<End of list>
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2494. Re: HELP! Tube Guru's Advice Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: maddog@io.com
Message-ID: <37d05675.2460855@news.io.com>
Source record: 67257

On Fri, 03 Sep 1999 15:02:17 -0500, Rick Haub
<rhaub@midwestmicro-tek.com> wrote:

>[snip]. I hooked my scope up to the output of the plate and I saw 150 volts of DC
>on it. When I keyed the rig I could see a very small 3.5MHz rider (@3.5, I didn't
>measure it but I'm sure it was close to the crystal frequency). It this right?

Sounds like either the 1625 is shorted, (how much plate current?) or
the plate choke is open. Another possibility is that the rectifiers
in the plate supply are blown or their filament supply is missing
(thus no plate voltage) Either way, it probably happened as a result
of an arc inside the tube.

2495. Re: FS: (long) High Voltage and RF components, ferrites and lots more

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.990903165850.28469B-100000@oso.slonet.org>
Source record: 67258
Cross-posted to:
rec.radio.swap,rec.radio.amateur.homebrew,misc.industry.electronics.marketplace,sci.electronics.components,sci.electronics.misc

Aw come on Bob.....this is just too damn much! Do you think we are
running a surplus store here!!!!! Cliff K7RR

2496. Re: Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: Rocci <rocci@worldnet.att.net>
Message-ID: <37D06691.343C37FD@worldnet.att.net>
Source record: 67259

The 'front-end hardware for 'Weaver' is identical to the more traditional 'phasing' type of direct conversion topology. It's just a pair of balanced mixers (multipliers in function) fed with a quadrature phase LO. Only difference is that the LO in Weaver method is placed in the middle of the information band, vs at the carrier frequency for 'phasing' receivers. After that, it's just I and Q outputs that go into the DSP for processing. In the 'phasing' approach, the DSP performs a Hilbert transform (broadband 90 deg audio phase shift) on one of the inputs, puts a matching time delay on the other, and sums the two together to get cancellation of the unwanted sideband response. In the Weaver approach, the DSP performs another mathematical multiplication (mixing) process on the I and Q channels with a mathematically generated quadrature LO at the mid-channel frequency (approx 1.2 Khz for SSB). Since the DSP processing is mathematically generated, it is numerically perfect. The only source of non-mathematical variation or error is in the first set of mixers and LO phasing. This error only results is in 'aliasing' distortion inside the channel bandwidth, not degraded interference rejection from the opposite sideband as in the phasing method. Using DSP, it seems to me that the Weaver method is preferable for SSB, and maybe even CW work.

Joe
WA3CMQ

Roy Lewallen wrote:

> It's been many years since I've looked at the Weaver approach, so I'm a
> little vague about how you'd apply modern DSP techniques to it. But even
> with DSP, can you make a Weaver-method and conventional phasing receiver
> with the same hardware topology?
>
> Roy Lewallen, W7EL
>
> marsgal42@hotmail.com wrote:
> >
> > Weaver vs. Phasing isn't something I'd worry about. It's
> > in software: if you don't like it, change it.
> > --
> > Laura Halliday VA3LDH "Que les nuages soient notre pied
> > Grid: FN03gs a terre..." - Hospital/Shafte
> > Satellite: VA3SFL on UO-22, KO-25
> >
> > Sent via Deja.com http://www.deja.com/
> > Share what you know. Learn what you don't.

2497. FS GEN. RADIO ADJ. AIRLINES

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: Joe Ship <ve2js@total.net>
Message-ID: <37D06C54.6E1B@total.net>
Source record: 67260

```
--
\\W//
(@ @)
________ooO_(_)_Ooo__________
|Visit Joe Ship's home page at|
| http://www.total.net/~ve2js |
|_____________________________|
```

GENERAL RADIO 874LAL 50 OHM ADJUSTABLE AIR LINE.
Freq. range DC to 7GHz. Adjustment length 15 11/16"
collapsed to 24 1/4" extended. GR type N female
connectors at each end.

These are brand new. I have a quantity of these.
For sale @ (USD) $60. each plus $5. Air Mail to
continental U.S.A.

Joe Ship, VE2JS
ve2js@total.net

Lots more test equipment for sale. See my web page for list.

2498. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: Don Gallant <dgallant@total.net>
Message-ID: <37D079F3.5351292C@total.net>
Source record: 67261
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

> > Remember the teachings of Mark Knoffler Hans, When you point a finger > > you've got 4 more pointing back at you.

Got proof? When I try I've only got 3 pointing back.

2499. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: "Laszlo I. Morocz" <kf4pv@SPAMMENOTlmorocz.com>
Message-ID: <WG%z3.5753$Xz1.10721@jump.innerx.net>
Source record: 67262
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

You'll just have to take my word for it, it'd take me years to re-learn the math :-)

73 de KF4PV/3, Laszlo

--
To reply, remove the text SPAMMENOT from the e-mail address.
Don Gallant wrote in message <37D079F3.5351292C@total.net>...
>
>> > Remember the teachings of Mark Knoffler Hans, When you point a finger >
> you've got 4 more pointing back at you.
>
>Got proof? When I try I've only got 3 pointing back.

2500. Re: Microwave oven transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19990903104635704 32@zetnet.co.uk>
Source record: 67263

> Anybody know any links to pages describing how to use and the
> characteristics of, microwave over power transformers for
> amateur radio use.
> Neil
==========
There have been discussions on this NG on this topic before.

I tested a microwave oven transformer . Perhaps the unit is not in a A1 condition ,but after 45 minutes without any load the unit became very hot. There are also surface welds to keep laminates together .When I suggested that heat was due to eddy currents , a comment was made that welds were too superficial to be the cause of eddy currents causing this heat problem.
Some transformers are probably designed for a low duty cycle , hence perhaps not OK for Ham purposes.
Another aspect is the fact that 1 end of HV winding is bonded to the case and that make it floating might be unwise because of inadequate winding isolation.
Then it was mooted to go for 2 transformers giving 1 HV winding with centretap earth, but this gives a problem with a pulsating DC current also in the primary windings.

As far as I am concered the microwave oven transformer I have is no good for a HV power supply.

Frank GM0CSZ / KN6WH

Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland UK
e-mail : gm0csz.kn6wh@ukrs.org

2501. Re: HELP! Tube Guru's Advice Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19990902200544.11662.00000394@ngol01.aol.com>
Source record: 67322

In article <37CD5DA9.2DACACCC@midwestmicro-tek.com>, Rick Haub
<rhaub@midwestmicro-tek.com> writes:

>Okay, it's been a while since I posted any results but I've been busy. Also
>after spending an hour here and a couple of hour there on the transmitter I
>had thought that I was on my way to figuring it all out. I was at the point
>were, after trimming the tuning coil and working out the kinks with the
>loading and tuning caps that I was able to get about 25-30 watts (@20 watts
>on 40 meters) out to my dummy load. Then one night just for the heck of it
>decided to get the best responce dialed in using the dummy and then switch
>back to the light bulb and see what happend. The results were quite
>spectacular, The light burned as bright as any 100 watt light and the meter
>was pegged (100 watt pyrimid meter). Well needless to say this got me
>thinking about what one of the posters (I think it was Jim) who said
>something about overdriving the input of the 1625. When trying to get the
>most output to the dummy load I had routinely been turning the drive
>capaciter up to get those 25 watts.

Uh-oh.

> So I looked at the output of the driver
>on the built in meter and saw that I was driving about 8 mA out to the
>1625. Just on a wild guess I'd say that that was too much.

That's way too much. 3.5 to 4 mA is about the max, and 2.5 to 3 will do the job
OK with most tubes.

Overdriving can causes all kinds of troubles, including destruction of the
final tube.

>So I left the
>light bulb plugged in and retuned by the instructions with the bulb instead
>of the dummy. Using 3 mA drive and tuning for best dip I was getting about
>80 watts on my meter and measuring the voltage at the antenna I was seeing
>about 850v pp. Another guess but I'd say this was too high for a rig rated
>at 75watts input. After thinking about it I came up with the idea that even
>though the light bulb was inaccurate in its loading effects, the dummy
>and/or my watt meter where also likly flawed. I was showing way too much
>with the bulb but way to little with the dummy. So I decided to build a new
>dummy based on a different design and use a watt meter barrowed from the
>local University.

I think one problem here is that you are making things way too complicated.

There is no need for a fancy wattmeter or dummy load with this kind of rig. A
light bulb dummyload is all you need. A 60 watter has an impedance of something
like 240 ohms at full brilliance, and the pinet in this rig will match that

with no sweat. Of course the settings of the plate and loading caps will be different when lighting a lamp than when feeding a 50 ohm antenna, but that is of no consequence.

Power output is easily judged by lamp brilliance. No need for wattmeters and such. Get a package of two 60 watt bulbs and another of two 40 watters. Put one of the 40 watters in a lamp near the rig and plug it into the 110. Use the other 40 watter for a dummy load. Comparing brightness will tell you the approximate power output. If the 40s burn too bright, use the 60s.

In addition, be very skeptical of the readings of electronic meters like DMMs when used around transmitters. Particularly hollow state rigs. There is RF all over the place, and it doesn't take much stray RF to give all sorts of goofy readings on electronic meters.

In this type of rig, you DO NOT just tune everything for maximum output. The output indicator is NOT the main thing to watch. Proper grid and plate currents, setting for the dip, and knowing that you are tuned to the right harmonic are the important things.

If you set the grid current to 3 mA and dip and load the plate current to the recommended 110 mA cathode current, a good 1625 with 700 volts on the plate will give you more than 40 watts of clean output in a rig of this type. That's pretty good.

> Well, even the best laid plans of mice and men go astray.
>Last night when I sat down to work out the relevant parameters as far as
>watts at dummy and bulb vs voltage output vs driver current and such the
>transmitter started acting strangly. Watts out started falling off and I
>could swear I heard a metalic "BING" noise coming from somewhere.

You zorched something. Sorry. Were you keying the rig for long periods of time while fiddling with the controls? That's really hard on components.

>Performance continued to fall off untill I got nothing at all. I tried
>changing out the 1625 and the 12BY7 and the OC3 and OD3 VR tubes but
>nothing help. At present this is what I'm seeing.
>
>1) I still get the driver current from the 12BY7 to work correctly so I
>know I'm driving the 1625.

By "driver current" I assume you mean "1625 grid current". If so, it probably means the oscillator section is OK.
>
>2) When I switch from TUNE to OP the OC3 tube stops glowing. The OD3 and
>the OC3 are in series with each other with the OD3 being grounded.

Let's back up a second and talk about the power supply and how this all works.

This rig uses an "economy" power supply, consisting of a 540 VAC 120 mA power transformer feeding a silicon diode bridge rectifier. This supply puts out about 700 volts from the high tap and 350 from the low tap, simultaneously. The high tap is used for the 1625 plate only. The low tap is used for the 12BY7

plate, and also run to a series string of VR tubes (0C3 and 0D3) which provide 255 volts and 150 volts at their taps. Dropping resistor for the VR string is a 5 K 10 W power resistor. The 255 volts is used for the 1625 screen, and the 150 volts is used for the 12BY7 screen.

The mode switch has 3 positions - "CAL", "TUNE", and "OP".

In CAL, the 12BY7 cathode circuit is closed and the 1625 cathode and screen circuits are opened. This is done so you can spot the transmitter signal with your receiver when using crystals.

In TUNE, the 12BY7 cathode circuit is closed and the 1625 cathode and screen circuits are grounded. This is done so you can set the driver tuning without applying too much power to the 1625. (With the screen grounded, the 1625 will draw very little plate current).

In OP, the 12BY7 and 1625 cathodes circuit are connected to the key jack and the 1625 screen circuit is connected to the 255 volts regulated. This is done so you can set the 1625 plate tuning and loading, and for normal operation. 1625 will draw very little plate current).

>When the
>mode switch is in the TUNE position I get 270v out of the OD3, which drives
>the 12BY7 and 375v out of the OC3 which drives the 1625. When I switch to
>OP I get 440v out of the OD3 and 450v out of the OC3.

There's something really odd going on here. First thing to do is recheck all the power supply wiring, the electrolyutic caps and power resistors, and the silicon diodes. CAUTION! HIGH VOLTAGE!! The electrolytics can hold a lethal charge for DAYS if there is no discharge path.

Get in the habit of unplugging the rig from the 110 before doing anything under the chassis. Then use an insulated screwdriver to short out each of the electrolytics. Then take your testmeter (with heavily insulated test leads, set to read DC volts) and carefully check for zero volts on all electrolytics and the high voltage points. The idea is to make absolutely sure that the rig is totally dead before getting in there with bare fingers.

Next step is to double check all of the wiring in the power supply, as well as the above-mentioned components. A resistor may have opened up, or a capacitor shorted, or a diode fried. A wire grounding the 0D3 may have opened up. Or one of the VRs may have turned to toast. It's also possible that the 1625 plate coupling capacitor (shown as .01 @ 1000 V) blew up. This cap should really be rated at 1.4 kV or more.

Next step is to remove the 1625 and 12BY7 tubes, power up, and see what the rig does. The VRs should never go out under any circumstances when the RF tubes are out of the rig. In addition, the voltages should read +255 and +150 on the two tubes' anodes. If not, you have power supply or wiring troubles.
>
>3) If I key the circuit when I have the mode switch in the OP position the
>OC3 will start to glow again and the volages fall off to a little below the
>TUNE posision readings.Switching to the 1625 plate reading on the internal

>meter shows that I'm getting about 120mA from the plate but no amount of
>fiddling with the tuning or load caps causes any effect, let alone a "dip"
>of any kind.

It sounds like something has opened up or shorted. A fried 1625 RF plate choke
or zapped plate cap will do what you describe. Check all the bypass caps, too,
for shorts with an ohmmeter. One of them may have shorted, too.
>
>Okay guys, what did I do now. I'm going to look at it all tonight, maybe
>just a short or open line somewhere?

The mode switch is another suspect.

The main thing is to try to get an understanding of how this deceptively simple
rig really works. There's a lot more going on in it than first meets the eye.

73 es GL de Jim, N2EY

2502. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: jjesson@ais.net
Message-ID: <rtGz3.2$Vb.50@news.ais.net>
Source record: 67323
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

After running a communications shop and repairing and rebuilding National, Hallicrafters and other tube gear in the late 60's, designing and building receivers in the 70's and 80's, I feel I am certainly qualified as a builder and hardcore electronics experimenter. Software knowledge was gained over the years along with hardware knowledge through college and hands-on experimentation.

Anyway, I thought I discovered the GOLD MINE of experimenter delights when I first looked closely at NetMeeting first Version 2.11 and now 3.01... what a amazing product! Here is a list of both hardware and software projects... many of 'em current projects:

HARDWARE PROJECTS

- Design a 2.4 GHz Digital Video/Audio/Application Sharing Local NetMeeting Link (current project, 10MB)
- Build a Radio Controller Operated Remotely Through NetMeeting (many people sharing frequencies)
- Redesign Video Camera for Infrared Imaging (remove IR filter in from of CCD and add Visible light filter)
- Construct Fiber Optic Camera Lens and Adaptor
- Design and Build Performance Scope to look at Signal Eye Pattern
- Design and Build Data Constellation Scope (use fast external A/D Converter)
- Interface any Sensor for Remote Monitoring - Temp, Humidity, See Back Yard via NetMeeting CAM

SOFTWARE PROJECTS

- Write Radio Slow Scan Interface to NetMeeting API
- Write Control to allow Bandwidth Slider - Variable BW, Slow Scan to 30 Frames Per Second
- Collaborate on New Electronics Projects - Up to 8 HAMS!
- Collaborate on Circuit Simulations - Share Models in Real Time
- Create Virtual Special Interest Chat/Video Group Discussion

Just of few of my ideas for NetMeeting projects! A great communications tool... will lots of additional hardware and software components to be added... I have to get a web page up devoted to NetMeeting projects. The 2.4 GHz wireless link is built upon some Harris subsystems but you could design one from scratch. One of my favorite modern project resource is Circuit Cellar Magazine...

Thanks, Joe Jesson

2503. List of the rec.radio newsgroups

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <7qnit8dot1@news.hawaii.edu>
Source record: 67324
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

```
Archive-name: radio/personal-brief-introduction

In an effort help ensure a poster's article reaches the appropriate
audience, below is a list of the rec.radio newsgroups. In most cases,
a group's name will explain its purpose. Cross-posting should rarely
be necessary.

*rec.radio.broadcasting (devoted to the broadcast industry; moderated)*
rec.radio.cb
rec.radio.info (periodic informational bulletins; moderated)
rec.radio.scanner
rec.radio.shortwave
rec.radio.swap (for buying, selling, and trading; not a discussion group)

rec.radio.amateur.antenna
rec.radio.amateur.boatanchors (tube-type communications equipment)
rec.radio.amateur.digital.misc (packet, pactor and other digital modes)
rec.radio.amateur.dx (long-distance amateur communications)
rec.radio.amateur.equipment (questions, comments regarding commercially-
built amateur gear; not for buying/selling)
rec.radio.amateur.homebrew (devoted to home-building ham gear)
rec.radio.amateur.policy (issues include code, restructuring, local
restrictions in conflict with FCC R&R)
rec.radio.amateur.space (satellites, meteor scatter, EME)
rec.radio.amateur.misc (any topic not covered in the above groups)

(At least two other English language radio hierarchies exist, prefixed
with "uk" (United Kingdom), and "aus" (Australia), in place of "rec.")

Again, cross-posting should rarely be necessary. Many times, a long-
running thread results from a single cross-posted article, and its
content drifts further and further away from being "on-topic" in the
various NGs which receive each and every followup.

For more detailed information, see "Guide to the Rec.radio Newsgroups"
posted on the 15th of each month.

Jeffrey Herman, KH6O
(rec.radio.amateur working-group)

*It's been sadly reported that the moderator was lost to us in an
automobile accident; the future of this newsgroup is not known. 73 Bill...
```

2504. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: ".H .H" <koenen1@telusplanet.net>
Message-ID: <37CF6309.47F8C818@telusplanet.net>
Source record: 67325
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

There is a delay coil?
Hans

Rick Haub wrote:

> .H .H Russell wrote:
>
> > To wit,
> > Black and white is a whole lot faster than color.
>
> Sorry Hans, nosale. Back up your statements with numbers and science please. Just what is "a whole
> lot faster".
>
> The time issues with B&W vs. color has to do with how the human eye response to light stimulus and
> the fact that color tv's incorporate 3 electron guns instead of one and the added amount of
> information needed to be decoded by a color tv. It has nothing to due with your unfounded statement
> of "black and white is a whole lot faster than color". I am of course assuming that you are refering
> to the actuall EM propagation.

2505. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: ".H .H" <koenen1@telusplanet.net>
Message-ID: <37CF68ED.3AE6B698@telusplanet.net>
Source record: 67326
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

That's the joke I was thinking of when I made my spelling boo-boo.
Thanks.
Hans

Brad Thompson wrote:

> Dave VanHorn wrote:
> >
> > > The newbies are only here, and don't even know what a pornograph is.
> >
> > ??? I've seen a pornograph, but not in a ham store!
>
> Hello--
> ...Which made me recall a very old joke:
>
> The scene: a dock in a harbor, where a customs agent is interviewing
> sailors as they debark:
>
> "Sailor, do you have any pornographic literature in your seabag?"
> "Hell, no! I ain't even got a pornograph!"
>
> 73,
> Brad AA1IP

2506. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: ".H .H" <koenen1@telusplanet.net>
Message-ID: <37CF686F.C56F2CDE@telusplanet.net>
Source record: 67327
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Well, what can I say except the permitted nothing.
I am oppressed with restrictions and impositions.
Only your formulae and math.
Only your processes.
Naturally anyone's conclusion would be the same as yours under these conditions.
It is a wonder to me -now that I'm reduced to semantics- that any new discoveries can be made at
all, what with all the answers all known already.
So your challenge to me is to provide proof to you, using only your acceptable methods?
-Can't be done for just that reason.
And my statement requiring my proof according to you, really should be regarded as a stimulating
area of interest for you to pursue.
That is all it is for.
We are not on trial here in Kangaroo Courthouse.
Say I report having seen an UFO.
You want a print-out of mathematics to prove that I'm telling the truth, the authorities will want
third-degree cross-examinations and psychiatric evaluations, and so on.
In the meantime, some other country drops a bomb on us from a new type of aircraft which I could
not identify.
Sensible?
Re-reading my past postings will help to reduce the necessity for my repeating my arguments in the
general sense.

One plus one equals two every time?
So I know arithmetic.
Then they come and say I must learn math, then the "new" math, and algabra or algebra, calculus
dating all the way back to, did you say Archimedes?
Then Quantum mechanics, then Scalar physics.
Is that it finally?
Do we know everything there is to know?
Come on.
Your tone in this last letter is entirely posturing, as compared to your seeming interest at the
onset.
Is it peer pressure?

Not to worry.
Sometime soon, a new discovery will be announced.
Why haven't you already found it?

This is becoming tedious.
My statement stands as presented, and even if I'm corrected about eighty times when it is three, so
what.

Tell us (notice the process of bonding here) what you know about Barkhausen oscillations, and the
Caduceus (sp) coil.

Thank you for calling. *click*
Next!

Hans

Rick Haub wrote:

> .H .H Russell wrote:
>
> > I really can't do the math anymore.
>
> Really? I havn't pickup a physics text in ten years. One of the other engineers here had his
> freshman text so I just barrowed it and solved for the vacuum tube over my lunch hour. The math
> is pretty simple, algabra only and all classical. I should think that you could do simple
> algabra.
>
> > I just did. Sound and EME are not mutually exclusive.
> >
>
> I got a whole floor of physicist a mile away from me who say your wrong. I can give you names
> and addresses if you wish. I prefer the consol of real people and not "this scientist on a web
> site says".
>
> > It is definitely what I had in mind.But the math, I would have to study for a year to bring
> > it all back.
>
> Hmmmm.... took me about half an hour. Really now, is algabra that tough?
>
> > I won't use incomplete bits and pieces if do calculations, and some of these
> > calculations won't follow accepted standards.
>
> They better if you want any one to take you seriously.
>
> > So it is better left to you youngsters to find a way to make my statement true.
> >
>
> Sorry Hans, your theory, your proof. Put up or shut up as they say. BTW you cannot "make" a
> statement true. It either is or it isn't. That reminds me of the church in the dark ages.

They
> new that the earth revolved around the sun but for social/religious reasons they keeped
it away
> from the common man and went so far as to persecute Gallilao. They "made" thier untrue
> statement "the sun revolves around the earth" true. But it still didn't alter the fact
that the
> earth revolves around the sun.
>
> > By the way, there is a perspective which would be called cheating by some, but in that
> > perspective you enter three-dimensional mathematics.
>
> Hmmmm..... I studied n-dimensional math and tensor calculus, I don't recall seeing
anything in
> the nominclature about "cheating".
>
> >
> >
>
> Okay, here are the numbers for the tube
>
> I will be using F=ma given by Newton in his Pricapia (SP sorry Issic) and the following:
> E=F/qo (eq. 18.2) where E=electric field in N/C, F=force, and qo= charge of the electron
> E=V/d (eq. 19.7) where E= electric field, V=applied volage, and d= the distance between
two
> plates.
> and d=1/2at^2 (eq. 2.8) d=distance, a=acceleration, and t=time
> The last three can be found in Cutnell and Johnson's 3rd addition of *PHYSICS* published
by
> Wiley in 1995.
>
> So assume we have a triode tube where the plates are .5 cm apart and we have an applied
voltage
> of 200V. I think these are reasonable paramaters.
>
> Then by 19.7 we have
>
> E=200V/.005m=40,000 N/C
>
> sub into 18.2 gives
>
> F=Eqo = 40,000 x 1.602xE-19 = 6.408xE-15
>
> now sub F=ma and we get
>
> a=F/m = 6.408xE-15/9.109xE-31 = 7.0348xE15 m/s^2
>
> now by using d=1/2at^2 we get
>
> t=sqr(2d/a) = sqr(2x .005/7.0348xE15) = 1.19xE-9
>
> or about 1.19 nano seconds.

>
> I have of course, not taken into account the setup time of the the E field after the grid
> potential is dropped nor have I added in the slew rate of the grid drop. I merely assume
that
> the grid drop is instantanious and that when the electrons strike the other side they
will
> immediatly began "energy transfer".
>
> Now I have decided not to do the math for the semiconductor since it involves quantum
mechanics
> and if you can't do algabra I don't think you'll follow the math. You could just say that
I'm
> "cheating". For those that are interested the flow of electrons in a semi conductor is
> discussed in detail in Omar's text Elementary Solid State Physics published by Addison
Wesley.
> I used the first addition published in 1975. I will give a short discription though.
>
> In order to conduct, the electrons in the valance shells (valance band) of a semi
conductor
> must absorb enough energy to make the jump into the conductance band. The distance
between the
> the two bands is not physical but electrical in nature and is know as the Energy gap.
It's
> value is given in eV and for Silicon the value is 1.1eV. The time that it take for the
electron
> to make the energy jump can be calculated like all energy state shift. Any one interested
in
> these calculations are refered to Kenneth Krane's, Introductory Nuclear Physics,
published by
> Wiley. It is known that these jumps take place in the sub nano second range and once the
jump
> is made, I am assuming, as I did with the tube that flow begins when the electrons jump
from
> the the valance band (cathode) to the conductance band (anode) (I could be wrong about
the
> cathode/anode direction, I always get them confused).
>
> In other words the time it takes to get conduction or "energy transfer" within a semi
conductor
> is in the sub nanoseconds. Of course this works on a quantum basis and therefor it must
be
> treated statisticaly since not all electrons make the jump at the same time.
>
> At this point since I did not do the complex math you may be temped to call me a cheater.
So
> instead I will point to an imperical proof. Go to Pericoms web page and down load thier
PDF
> file ps2011b.pdf. You will find a data sheet on the 74FCT240T line driver. If you look at
the
> switching characteristics you will see that the propagation delay time from off to on for

any
> given gate is a maximum of 3.6ns.
>
> In other words, from the time that I apply a volage on the input of a gate it will take no more
> than 3.6ns for the electrons to flow.
>
> I offer this as my proof.
>
> Your original assumption was that a tube could provide transfer rates 80 times faster than
> semiconductors. I submit that the difference is actually about 3 times faster using the best
> case senario for a tube and the worst case for a semiconductor. At this point I would ask that
> any one out there who has a really fast digital storage scope could test actual conditions by
> getting a suitable high speed transister and a triod tube and actually measure the time it
> takes for current flow vs gate on for the transister and grid drop for the tube. Real world
> proof would be interesting.
>
> If you don't agree with my math or my statements then please feel free to refute them, but
> please do so with hard science and good math, not with "some scientist on a web page says".
>
> Rick

2507. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: ".H .H" <koenen1@telusplanet.net>
Message-ID: <37CF6A28.E89F619E@telusplanet.net>
Source record: 67328
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Nostalgia, yep!
I don't know the song, but it sounds good.
As for the Pleiedians, better avoid them.
Andromedans are okay, but I don't mean Richard Hoagland's type.
I say, to the newbies, "wanna play 'chicken'?" .
You fellas in your Asian coupe, and us in our American Kings of the Road.
So I know what you write of, I had a Gonset transceiver also at one time.
RF gain and AF gain shafted together, is that the one?
Great set.

Hans

Will White wrote:

> Ah, you write like Don DeLillo, Jr. . .See me, as I whiz along the empty
> Interstates in my 1965 Impala SS (with a Hurst, and sorry, no Q-Jet, got an
> AFB when the 327 got rebuilt. . .) Here is a picture of me sending QRQ CW via
> the dash mounted MAC bug, and the Gonset mobile rig. . .[jpg] Oh, wait, there
> goes my great-uncle Fil in his 1946 Hudson pick-up (Hudson green), with the CE
> 100V, crystal box on the hump, tuning the homebrew HF converter hung off the
> dash AM radio. . .ah, Y2K was wonderful, for those of us who didn't go with
> the Pleiadeans when they landed. . .Isn't that an Ethel Merman song?
>
> .H .H Russell wrote:
>
> >
> > All told, the old guys have been there, and they are here.
> > The newbies are only here, and don't even know what a pornograph is.
> > They've never seen one, so they don't believe in wax cylinders being played on a
> > wind-up machine.
> >
> > They've seen CD players. And know all about them.
> > So do the old timers.
> > There are so many ICs in there, numbers so and so.
> > Same with cell phones.
> > Just look in the book and quote numbers like mad, the way we used to do about
> > Hemis, 327s,
> > quadrajet carburators. Four on the floor! Hurst shift!
> > Wow.
> > Today? Aim the remote control at the car and it starts for you.
> > Stuck? Call the automobile assn.
> > Everything is throwaway.
>
> --

> Will White, KD7BFX
>
> to reply, please click this link mailto:wcw@uswest.net

2508. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: ".H .H" <koenen1@telusplanet.net>
Message-ID: <37CF6ACC.8123AC78@telusplanet.net>
Source record: 67329
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Sorry, it was the other fellow who mentioned taste.
Hans

.H .H Russell wrote:

> You're sucking me in, here.
> But okay.
> The taste.
> You snidely mentioned about taste as well as eyesight.
> So go read.
> Read about what is being done with food.
> Never mind the references to the weird stuff.
> The site is huge, and has nearly everything.
> I have repaired and watched an early RCA color tv, the one with a round crt
> in it.
> I don't care to banter.
> The picture, especially in motion, is superior.
> End of communication with Mr. Miles.
> Hans
>
> John Miles wrote:
>
> > .H .H Russell wrote:
> > >
> > > As a matter of fact yes. -To everybody, it did.
> > > See
> > > www.trufax.org
> > > for an elucidation on this outrageous claim.
> > > Hans
> > >
> >
> > Well, I certainly found that site enlightening on the matters of "Chakra
> > points in the human body, relation to hyperbolic channels," "Gulf War
> > Syndrome as a step in global socialism," and the "Takyon capsule of Dr.
> > K. Lambrakis," but I was unable to uncover any evidence of the
> > superiority of early NTSC color sets to modern high-resolution graphics
> > displays. Perhaps you could be a bit more specific?
> >
> > -- jm
> > http://www.qsl.net/ke5fx
> >
> > --
> > Note: My E-mail address has been altered to avoid spam
> > --

2509. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: ".H .H" <koenen1@telusplanet.net>
Message-ID: <37CF7006.54F70463@telusplanet.net>
Source record: 67330
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Just to show that I'm serious about tinkering, you can see me and a little bit
of my stuff in my dust-free laboratory at this URL:
http://www.telusplanet.net/public/koenen1/OSC.JPG

Regards,
Hans

2510. Wanted: schematics/diagram of 70cm PA amp.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: Christian Andresen <daejml@post7.tele.dk>
Message-ID: <7qo0r1$l2l$1@news.inet.tele.dk>
Source record: 67331

Are there any one who has got a schematics/diagram of a 70cm PA amp ?

regards

Christian Andresen Denmark
OZ5CHR
---
company phone: +45 87 37 65 47
---
private homepage: http://home7.inet.tele.dk/daejml
mail me at: daejml@post7.tele.dk
view us at: http://www.dae.dk leaders in slotmachines
find me at: ICQ#: 4937239

Do not ask what You can do for The Net,
ask what The Net can do for You !

2511. Re: Help Identify Old Frequency Counter IC's

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <K3bPN0N5H88LrHR1E9lS9cXSWTje@4ax.com>
Source record: 67332
Cross-posted to: sci.electronics.equipment,sci.electronics,sci.homebrew,sci.electronics.repair,sci.electronics.misc,rec.radio.amateur.homebrew,sci.electronics.components

>|Anyway the ICs have these numbers on 'em and would appreciate any ref
>|pinouts, crosses, etc...

>| SIG N8280A

The 8280 is a Signetics presettable BCD up counter, with up to 20 MHz clock frequency, consisting of a divide by 2 and divide by 5 counter.

The 8421 outputs are at pins 12, 2, 9 and 5 and the corresponding inputs at pins 11, 3, 10 and 4 respectively. Data strobe at pin 1 and reset at 13. Clock for the divide by 2 section is at pin 8 and clock for the divide by 5 at pin 5. Vcc and Gnd at the usual pins 14 and 7.

Paul OH3LWR

2512. Re: Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: Rocci <rocci@worldnet.att.net>
Message-ID: <37CF952A.C502411@worldnet.att.net>
Source record: 67333

After reviewing my own comments, as well as the other responses, I'd like to throw out the idea of using the 'Weaver' method. The Weaver method has traditionally been regarded as a mtehod for generating and recovering SSB, but it is probably usable as a generalized HF receiver demodulator.
The beauty of the Weaver method, as I see it, is that responses due to signals outside the information bandwidth ('out of band') are inherently filtered out and do not rely on complex phase and amplitude balance in order to be rejected.

Consider how the Weaver method works:
A Weaver receiver is what I would call "Dual Direct Conversion".
In a first set of I/Q mixers, the LO frequency is inserted not at the carrier frequency, but in the middle of the information channel. For SSB with a nominal 2.4 khz BW, this means the LO is injected at 1.2 KHz above (or below, depending on which sideband contains the information) the carrier frequency, and the outputs of the two mixers are each processed by steep skirted 1.2 KHz lowpass filters. Voila! Any signals outside the information channel are instantly eliminated from the equation. Only remaing problem is that we have 'scrambled' the information we wanted to recover. In the case of a 2.4 khz SSB audio bandwidth, information that was originally in the range of 0-1200 hz is now at inverted at 1200-0 hz, and original information in the range 1200-2400 hz is now frequency shifted down to 0-1200 hz. The whole audio spectrum has been folded in half on top of itself and jamed into a 1200 hz bandwidth. Now comes the second half of the 'dual direct conversion process':
In a second set of I/Q mixers, the folded and scrambled audio spectrum is processed with a 1.2 khz quadrature LO, and the mixer outputs are summed. This process restores the folded 1.2 kHz spectrum to its original 2.4 kHz shape.

No complex wideband audio phase shifters were used in the entire process. Also, any imbalances in the phase or amplitude of the I/Q processes merely result in non-infinite suppression of the in-band components that were 'folded' back into the spectrum. This is distortion, not interference, and as long as it is 30 dB or so down it should be inaudible.

So, it seems to me that the Weaver method makes the process of building a direct conversion receiver more practical. With DSP lowpass filters after the first set of I/Q mixers, and a complete DSP implementation of the second I/Q process, many of the problems associated with hardware imperfections should be alleviated. The only 'fly in the ointment' that I can see is that AC circuit coupling will produce a small 'hole' in the frequency spectrum at mid-way in the audio band. For speech and CW reception, this will probably be in-audible. The only place I can see where it might be a problem is when trying to pass data information through the de-mod.

Comments?

Rocci wrote:

> I've also been fascinated by this in recent years. There's some cool
> technology available that makes this not only feasable, but also makes
> the hardware very simple and eminently reproduceable. Any time you can
> trade in RF complexity for digital complexity, you generally get a
> cheaper and simpler product.
> Problems I've struggled with are:
> The mixers - How to build a pair of mixers whose gain (loss) and phase
> track over several octaves of RF and also give good intermod
> performance. My goal would be at least 50dB of unwanted sideband
> suppression, but this requires extraordinary amplitude and phase
> balance. I recently came across an article by Dan Tayloe on a 4-phase
> switching mixer that uses a single high speed bus multiplexer IC as a
> quadrature analog mixer. Dan posted measured intermod, blocking range,
> and noise performance that beats some of the best rigs on the market,
> yet the mixer is 'near digital' in implementation. It requires a 4x,
> 2-bit digital LO clock.
> The RF phasing for the quadrature LO's (if required) - Most analog I/Q
> mixers require an accurate 90 deg phase shift network at the LO. This is
> a major source of phase mis-tracking over the wide HF range. New DDS
> technology from Analog Devices now makes it possible to generate
> numerically accurate quadrature RF signals up to 120 MHz. Only question
> mark is spectral purity.
> The I & Q IF filters - Some filtering needs to be inserted in the I & Q
> outputs to prevent out of band signals from overloading the ADC. Since
> these filters are at audio, they need to have very good phase and
> amplitude tracking over nearly a decade of frequency.
> AGC - This one make my gray matter smoke. Signal amplitude measurement
> is most commonly done on the post-filtered audio DSP output. This DSP
> output might be delayed many milli-seconds from the RF input that caused
> it. Consequently, the ADC input might be overloaded for a significant
> time before a measurable output from the DSP indicates that it is time
> to reduce the input signal. AGC has always been a problem for DC
> receivers, but it seems that it should be possible to build DSP
> algorithm that handles it effectively and smoothly.
>
> I'd love to see a thread, or even a seperate group, for practitioners
> who'd like to work on this. The idea of a 'virtual project team' with
> contributions from a far flung group of expert hobbyists could yield a
> PC controlled "VolksRadio" that could rival anything the Japanese are
> making at a price we can all afford..
>
> I'm in.
>
> Joe
> WA3CMQ
>
> Paul Breed wrote:
>

> > Has anyone build a really high performance I+Q direct conversion
> > receiver and followed it with a high performance A/D and DSP?
> >
> > I would think that a pair of high level mixers
> > followed by a 24 bit 96Khz stereo audio A/D converter and DSP would
> > give you an unbeatable receiver for the HF bands.
> >
> > Has anyone done this?
> >
> > What are the drawbacks?
> >
> > Paul (KL7JG)

2513. Re: Microwave Oven Transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-03 00:00:00 UTC
From: Richard Soulie <soulie@zipworld.com.au>
Message-ID: <37CF9B1E.E34BBAC0@zipworld.com.au>
Source record: 67334

Yep the txformer can be used but you need two of the same type and don't forget to take out the lamination shunt between the two windings. and don unearth the bit that goes to earth that the reason for the two txformers

Regards
Richard VK2ARS

2514. FS: Vacuum and Air Variables

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-04 00:00:00 UTC
From: Bill Clarke <w2blc@bigfoot.com>
Message-ID: <7qs4k1dgs1@ash.prod.itd.earthlink.net>
Source record: 67185
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

I have two Jennings vacuum variables:

GCS-100 610-59
GCS-100 610-65

They are available for $100 each plus $10 insured shipping.

I also have a small box filled with small air variables of the type used for VHF and UHF - about 20 or 25 of them. Mostly from 5 to 100 pf. Many have never been installed in anything. $40 for the box full plus $8 insured shipping.

Bill W2BLC

2515. Re: 2 meter SSB HTs???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-04 00:00:00 UTC
From: la8ak@online.no
Message-ID: <37d19763.427776175@news.online.no>
Source record: 67186

On Sat, 31 Jul 1999 20:29:16 -0400, "KF4FDJ (Mike in Ft. Myers, FL)"
<seven77@gate.net> wrote:

>Dave,
>
>Your input was very helpful! I thank you for taking the time to proffer
>such a comprehensive answer. Now, do you have an IC 202S, or a
>Santec/Belcom LS-202? I have all sorts of cool things to trade for one
>or the other!
>

almost 20 years old IC202E/202S (and IC402) are still very popular at
VHF and microwave rallies in Europe, mainly because of low oscillator
noise, but has some distortion in TX and bad RX mixer, so it isn't as
good as it is expected to be, particularly not with a PA in urban
areas

73 jan-martin LA8AK

2516. Re: Squelch for Grundig Satellit 700

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-04 00:00:00 UTC
From: la8ak@online.no
Message-ID: <37d19857.428020356@news.online.no>
Source record: 67187

On Thu, 12 Aug 1999 21:53:48 +0200, "Horst Winheim"
<Horst.Winheim@t-online.de> wrote:

>Hi people,
>
>I am looking for a circuit-idea for an Squelch-function for enlarges my
>Grundig Satellit 700.
>A possibility were to evaluate that S-meter-signal, but I have no circuit
>diagram.
>Who has broader ideas or the circuit diagram from the receiver or can help?
>
>Thank in advance
>Horst Winheim
>
>
>
a squelch circuit is usually made as an amplifier connected close to
the FM-detector output with simple bandpassfilter or tuned circuit for
a frequency above the audio band with a detector. The detector feeds a
transistor to switch of a part of the audio stage of the receiver.
When no signal is detected the squelch will be open. Most efficient
frequency is twice (or was it half?) IF filter bandwidth

73 jan-martin LA8AK

2517. R 5 vertical

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-04 00:00:00 UTC
From: Markus Laszlo <ve7ceu@attcanada.net>
Message-ID: <WHhA3.4373$Si5.14729@tundra.ops.attcanada.net>
Source record: 67188

I have an R5 for sale, first 75 us, or 100 cdn takes it+ shipping.
Contact Les VE7CEU at ve7ceu@attcanada.net

2518. 6 Ghz Waveguide fittings

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-04 00:00:00 UTC
From: "S.W.Drinkard" <wa4phy@groupz.net>
Message-ID: <37D1D218.8B2978F6@groupz.net>
Source record: 67189

Hi all,

I've got a collection of 6 Ghz Andrew fittings, flex, and so forth
I'd like to see put to a good use. All are new, some still in bags.
The collection consists primarily of CPR and CMR and maybe a UG or two.
The flex is 18" stuff. I've posted to a couple of other sites, but
apparently there's not much interest in that kind of hardware except for
maybe selling it as scrap. I suspect I have maybe 50-60 lbs of this
stuff. If you'd be interested in acquiring it drop me a note, either to
the address shown in header or to sam@wa4phy.dyndns.org. I need the
space it occupies in my workshop!

I'd appreciate a cc: of any followups due to my limited news reading
time.

Thanks...

2519. Re: Crystal Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-04 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <7quakn$6hi@dfw-ixnews3.ix.netcom.com>
Source record: 67190

In article <19990904113349.17663.00003572@ng-fd1.aol.com>,
TOECAPP <toecapp@aol.comnospam> wrote:
>Since this is the place the Experts hang out, I have a tech question that I
>can't figure out. I have an old marine radio that's pretty sensitive. I was
>thinking of using it for a monitor, but I cant figure out the crystals. For
>example, channel 6, which is 156.3 mhz, the transmit crystal reads 15.48888
>and the receive reads 17.36666. Channel 26, which is 157.3mhz, the transmit
>crystal reads 17.47777 and the receive reads 16.1111. There doesn't seem to be
>a relationship between the two that's consistant. Are these just reference or
>stock numbers, or is there a formular to use?

Some of those channels are full duplex. Channel 6 is simplex on 156.3,
but channel 26 is 157.3 ship, 161.9 shore.

For transmit, multiply the xtal by the multiplier. (Those repeating
final digits make me think that 9 would be a good guess). That works for
156.3/9 ~= 17.3666 (I suspect you got those two crossed up) and 157.3/9 ~=
17.47777 .

For receive, you have to offset the frequency by the intermediate
frequency. And then divide by some multiple to get the crystal frequency.
Looks like a first IF of 16.9 ????? MHz and a multiplier of 9.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

2520. Help for a friend

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-04 00:00:00 UTC
From: "G.Kuhn" <gkuhn@global.co.za>
Message-ID: <7qs05rkvo1@ctb-nnrp2.saix.net>
Source record: 67191

Hello,
A fellow ham by name of Louie, ZS1HE, is in hospital, paralized from a brain tumour.
He is trying to communicate by tapping Morse code with his one hand, I need to know if there is some program I can use in conjunction with a key that I can run on a 486 laptop with a sound card that will allow him to communicate with the staff at the hospital.
Please mail me direct, gkuhn@global.co.za

Regards,
G.Kuhn ZS1NZ

2521. Re: HELP! Tube Guru's Advice Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-04 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19990903222811.00668.00000642@ngol07.aol.com>
Source record: 67264

In article <37D02F0C.6B7626D2@midwestmicro-tek.com>, Rick Haub
<rhaub@midwestmicro-tek.com> writes:

>Hi Jim,

Hello Rick,

>> > So I looked at the output of the driver
>> >on the built in meter and saw that I was driving about 8 mA out to the
>> >1625. Just on a wild guess I'd say that that was too much.
>>
>> That's way too much. 3.5 to 4 mA is about the max, and 2.5 to 3 will do the
>job
>> OK with most tubes.
>>
>> Overdriving can causes all kinds of troubles, including destruction of the
>> final tube.
>>
>
>I know, I know, tune to the dip of the plate and not the output watt meter.
>I've
>learned my lesson.

Experience varies directly with equipment ruined.

>> >So I left the
>> >light bulb plugged in and retuned by the instructions with the bulb
>instead
>> >of the dummy. Using 3 mA drive and tuning for best dip I was getting about
>> >80 watts on my meter and measuring the voltage at the antenna I was seeing
>> >about 850v pp. Another guess but I'd say this was too high for a rig rated
>> >at 75watts input. After thinking about it I came up with the idea that
>even
>> >though the light bulb was inaccurate in its loading effects, the dummy
>> >and/or my watt meter where also likly flawed. I was showing way too much
>> >with the bulb but way to little with the dummy. So I decided to build a
>new
>> >dummy based on a different design and use a watt meter barrowed from the
>> >local University.
>>
>> I think one problem here is that you are making things way too complicated.
>>
>> There is no need for a fancy wattmeter or dummy load with this kind of rig.
>A
>> light bulb dummyload is all you need. A 60 watter has an impedance of
>something

>> like 240 ohms at full brilliance, and the pinet in this rig will match that
>> with no sweat. Of course the settings of the plate and loading caps will be
>> different when lighting a lamp than when feeding a 50 ohm antenna, but that
>is
>> of no consequence.
>>
>> Power output is easily judged by lamp brilliance. No need for wattmeters
>and
>> such. Get a package of two 60 watt bulbs and another of two 40 watters. Put
>one
>> of the 40 watters in a lamp near the rig and plug it into the 110. Use the
>> other 40 watter for a dummy load. Comparing brightness will tell you the
>> approximate power output. If the 40s burn too bright, use the 60s.
>>
>> In addition, be very skeptical of the readings of electronic meters like
>DMMs
>> when used around transmitters. Particularly hollow state rigs. There is RF
>all
>> over the place, and it doesn't take much stray RF to give all sorts of
>goofy
>> readings on electronic meters.
>>
>> In this type of rig, you DO NOT just tune everything for maximum output.
>The
>> output indicator is NOT the main thing to watch. Proper grid and plate
>> currents, setting for the dip, and knowing that you are tuned to the right
>> harmonic are the important things.
>>
>> If you set the grid current to 3 mA and dip and load the plate current to
>the
>> recommended 110 mA cathode current, a good 1625 with 700 volts on the plate
>> will give you more than 40 watts of clean output in a rig of this type.
>That's
>> pretty good.
>>
>
>Your right about the tuneing. I should know better.

Now, you do. That's all that matters.

>Some of the other guys
>have
>told me not to use the light bulb method because the reactance of the bulb is
>such
>an unknow and they might be right.

No, they are wrong, when we ar talking about this type of rig. Here's why:

Most "modern" rigs are designed to feed a 50 ohm resistive load, and don't take
kindly to anything that is much different.

But it was not always so. Rigs like this one can match all sorts of loads. This rig cannot match everything, but it can feed a common household lightbulb OK. The pinet in this rig has a much wider range than those found in later designs.

The reasons for the move away from wide-range pinets are several:

1) Smaller and cheaper components can be used.
2) Less chance of mistuning
3) Most hams were using coax feed with low SWR, and wide range matching was not needed.

> If I have a good known 50 ohm dummy load I
>should trust it. But, I don't know any hams, I saw a transmitter once when I
>was 15
>but I had now idea what it was all about. So when I key the rig and I see
>that
>light bulb glow, well, it's magic. The first time I saw the bulb light up
>about 3
>weeks ago I felt a thrill of discovery that I haven't felt in years. The rest
>of
>the guys might be right about trusting the meter and the dummy but I like the
>bulb.
>And as you say, on a rig like this dummy loads and meters may be a bit much.

We all know exactly what you are saying. My first rig was a single 6V6 xtal oscillator on 80 meters. Would light a 7-1/2 watt Xmas tree bulb to almost full brilliance. Made lots of QSOs with that rig - once I learned how to use it.
>
>I try not to key it for too long but all the experience I have with tube rigs
>is
>what I've gained it the last few weeks. I could have hurt some thing with out
>trying.

20-30 seconds should be the maximum.
>

>> In CAL, the 12BY7 cathode circuit is closed and the 1625 cathode and screen
>> circuits are opened. This is done so you can spot the transmitter signal
>with
>> your receiver when using crystals.
>>
>
>What should the reading on the meter be?

In CAL, there should be no 1625 plate or grid curent, because the cathode circuit is open. The meter should read zero.
>
>> In TUNE, the 12BY7 cathode circuit is closed and the 1625 cathode and
>screen
>> circuits are grounded. This is done so you can set the driver tuning
>without
>> applying too much power to the 1625. (With the screen grounded, the 1625
>will

>> draw very little plate current).
>>
>> In OP, the 12BY7 and 1625 cathodes circuit are connected to the key jack
>and
>> the 1625 screen circuit is connected to the 255 volts regulated. This is
>done
>> so you can set the 1625 plate tuning and loading, and for normal operation.
>> 1625 will draw very little plate current).
>>
>> >When the
>> >mode switch is in the TUNE position I get 270v out of the OD3, which
>drives
>> >the 12BY7 and 375v out of the OC3 which drives the 1625. When I switch to
>> >OP I get 440v out of the OD3 and 450v out of the OC3.
>>
>> There's something really odd going on here. First thing to do is recheck
>all
>> the power supply wiring, the electrolyutic caps and power resistors, and
>the
>> silicon diodes. CAUTION! HIGH VOLTAGE!! The electrolytics can hold a lethal
>> charge for DAYS if there is no discharge path.
>>
>
>That's what it was, the OD3's ground wire had become unattached.

There ya go!.
>
>> Get in the habit of unplugging the rig from the 110 before doing anything
>under
>> the chassis. Then use an insulated screwdriver to short out each of the
>> electrolytics. Then take your testmeter (with heavily insulated test leads,
>set
>> to read DC volts) and carefully check for zero volts on all electrolytics
>and
>> the high voltage points. The idea is to make absolutely sure that the rig
>is
>> totally dead before getting in there with bare fingers.
>>
>> Next step is to double check all of the wiring in the power supply, as well
>as
>> the above-mentioned components. A resistor may have opened up, or a
>capacitor
>> shorted, or a diode fried. A wire grounding the 0D3 may have opened up. Or
>one
>> of the VRs may have turned to toast. It's also possible that the 1625 plate
>> coupling capacitor (shown as .01 @ 1000 V) blew up. This cap should really
>be
>> rated at 1.4 kV or more.
>>
>

>Replaced it with a .01 2k part.

That's a lot better.
>
>> Next step is to remove the 1625 and 12BY7 tubes, power up, and see what the
>rig
>> does. The VRs should never go out under any circumstances when the RF tubes
>are
>> out of the rig. In addition, the voltages should read +255 and +150 on the
>two
>> tubes' anodes. If not, you have power supply or wiring troubles.
>> >
>> >3) If I key the circuit when I have the mode switch in the OP position the
>> >OC3 will start to glow again and the volages fall off to a little below
>the
>> >TUNE posision readings.Switching to the 1625 plate reading on the internal
>> >meter shows that I'm getting about 120mA from the plate but no amount of
>> >fiddling with the tuning or load caps causes any effect, let alone a "dip"
>> >of any kind.
>>
>> It sounds like something has opened up or shorted. A fried 1625 RF plate
>choke
>> or zapped plate cap will do what you describe. Check all the bypass caps,
>too,
>> for shorts with an ohmmeter. One of them may have shorted, too.
>> >
>> >Okay guys, what did I do now. I'm going to look at it all tonight, maybe
>> >just a short or open line somewhere?
>>
>> The mode switch is another suspect.
>>
>> The main thing is to try to get an understanding of how this deceptively
>simple
>> rig really works. There's a lot more going on in it than first meets the
>eye.
>>
>> 73 es GL de Jim, N2EY
>
> Well Jim, I fixed all those things then I tuned it back up and I keyed the
>rig a
>got about a watt out of it. I checked the voltage on the plate with my scope
>and I
>saw a 150 volt DC signal.

Whoa, hold it right there.

Which plate has 150 VDC on it?

Go back and remover the 1625 and 12BY7 tubes and measure the DC voltages in the plate circuits as described. The 1625 plate cap should have 700 or so volts DC on it, key up or down.

>When I key the rig the voltage drops to 130v and I
>can
>just barely make out a small sine wave on the DC. I'm kind of assuming the
>problems
>with the voltages, I may have made a mistake with my tuning coil.

No, that's not right. The coil is probably pretty close to OK, but something else is wrong.

> I'm going
>to try
>and wrap a new one this weekend and see if that works. Does that plate
>voltage
>sound right to you?

Nope. Sounds like a bad plate RFC or a bad rectifier diode or both. Or a shorted cap in the plate circuit. Don't connect the scope directly to the tube plates - the voltages under normal operation are way too high.

Measure the DC plate volts with a DC meter and let us know what you find. 130 VDC on the 1625 plate is way too low.

73 de Jim, N2EY

2522. I need help learning radio elec's.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-04 00:00:00 UTC
From: "G.W. Field" <angelgrove@nf.sympatico.ca>
Message-ID: <37D08B12.6FE51A6@nf.sympatico.ca>
Source record: 67265

I am trying to learn radio electronics and would like to buy some used
but good condition videos which teach radio electronics. If you can help
please let me know. tx gary

2523. FA:Power transformer 100A 12/24/36/48V

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-04 00:00:00 UTC
From: technofreak@wa.freei.net
Message-ID: <37d0a138.253933321@news1.usenetserver.com>
Source record: 67266

Check out...
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=156234823

2524. FA:800W RF TERMINATIONS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-04 00:00:00 UTC
From: technofreak@wa.freei.net
Message-ID: <37d0a180.254005327@news1.usenetserver.com>
Source record: 67267

Check out....
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=155686530

2525. Transverter for 220

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-04 00:00:00 UTC
From: rod <rodwall@prodigy.net>
Message-ID: <37D0A80F.1E99@prodigy.net>
Source record: 67268

Hello,

Does anyone have any ideas to build a transverter for the 220 MHz
band? I would like to use my HR2510 as the exciter for use as all mode.

Thanks in advance.... 73 Rod KB8DNS

2526. Re: Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-04 00:00:00 UTC
From: vincent@barbie.student.utwente.nl
Message-ID: <7qqoncsjq1@dinkel.civ.utwente.nl>
Source record: 67269

In article <7qovdc$mn4$1@nnrp1.deja.com>,
marsgal42@hotmail.com writes:
> Weaver vs. Phasing isn't something I'd worry about. It's
> in software: if you don't like it, change it.

When using the Weaver-method, you could (and should) halve the
bandwidth of the analogue filters. And since designing a good
post-mixer filter for a DC RX is non-trivial, I would suggest
deciding on Weaver vs. phasing before building everything.

Vincent.

2527. Q: Cooling fan for 4CX400 tube in HF PA.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-04 00:00:00 UTC
From: Vladimir Nikitin <Vladimir.Nikitin@mea.junk-block.spb.ru>
Message-ID: <7qrbfn$12d4$1@news.leivo.ru>
Source record: 67270

Hi, builders.

Can anyone advise if PC minitower case PS (say 200W) fan is good for blowing
onto 4CX400A?
Should I shield it to prevent from being damaged by RF? Thanks.
--
Vladimir, RA1AVA.
/don't forget to remove anti-spam string from my e-mail address to contact
me/

2528. Re: Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-04 00:00:00 UTC
From: Rocci <rocci@worldnet.att.net>
Message-ID: <37D0FDB5.7D03749E@worldnet.att.net>
Source record: 67271

You have to design a good filter in either case, so it doesn't affect the decision whether to use Weaver or DC. In both cases, the important consideration about the post-mixer filter is to provide a broadband termination to the mixer. This is the purpose of a good post-mixer diplexer.
If DSP is used to process the I & Q channels, then the analog lowpass filters only have to be good enough to prevent overload of the DSP from signals outside of the information bandwidth. As you pointed out, Weaver does have the advantage that the information bandwdth is 'folded in half', so the Weaver DSP only has to deal with half the input bandwidth compared to conventional phasing systems.

Joe
WA3CMQ

Vincent Arkesteijn wrote:

> In article <7qovdc$mn4$1@nnrp1.deja.com>,
> marsgal42@hotmail.com writes:
> > Weaver vs. Phasing isn't something I'd worry about. It's
> > in software: if you don't like it, change it.
>
> When using the Weaver-method, you could (and should) halve the
> bandwidth of the analogue filters. And since designing a good
> post-mixer filter for a DC RX is non-trivial, I would suggest
> deciding on Weaver vs. phasing before building everything.
>
> Vincent.

2529. Re: HELP! Tube Guru's Advice Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-04 00:00:00 UTC
From: paul <apollo_six@btinternet.com>
Message-ID: <Mtmj$GAKrN03Ew2J@btinternet.com>
Source record: 67272

In article <37D02949.613AC54F@midwestmicro-tek.com>, Rick Haub
<rhaub@midwestmicro-tek.com> writes
>Hi Michael,
>
.....................................CUT.........................
>I replaced the .01 cap between the plate of the 1625 and the tuning cap as
>suggested and fired the rig back up. I tuned it then I switched to OP and keyed
>the rig. I got about a watt or two out of it when hooked to the 50 ohm dummy
>load. I hooked my scope up to the output of the plate and I saw 150 volts of DC
>on it. When I keyed the rig I could see a very small 3.5MHz rider (@3.5, I
I learnt the hard way that VERY AMAZINGLY! Scope probes are generally
not intended for high RF voltages. They have to be generally derated
with increasing frequency :((Better to use a diode probe and multimeter
or Valve Volt meter (VVM).

Hope this is another useful tip

Paul

--

2530. FS: Sola CVT

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-04 00:00:00 UTC
From: Richard Matthews <richard@leedselect.com>
Message-ID: <7qqvk2buh1@bgtnsc03.worldnet.att.net>
Source record: 67273

Sola 21-1396 CVT Normal harmonic type, Constant Voltage Transformer 60 VA (new original box) - $45.00

Richard
Leeds Electronics
http://www.leedselect.com

2531. Re: Good resources for learning electronics?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-04 00:00:00 UTC
From: emr01@ms19.hinet.net
Message-ID: <37d12865.22392804@news.hinet.net>
Source record: 67274

On Wed, 01 Sep 1999 23:43:45 -0400, Luke Seubert <lseubert@radix.net>
wrote:

>Good day.
>
>What are some good resources for learning electronics? I recently set
>up a new shortwave listening rig, and would like to build some of the
>simple circuits for little projects here and there - you know - those
>great little Arnie Coro projects.
>
Try "The Art Of Electronics" by Horowitz & Hill,
it contains pretty much design insights. Also check out
EDN website at www.ednmag.com, lots of interesting articles.

Oliver

2532. Crystal Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-04 00:00:00 UTC
From: toecapp@aol.comnospam
Message-ID: <19990904113349.17663.00003572@ng-fd1.aol.com>
Source record: 67275

Since this is the place the Experts hang out, I have a tech question that I can't figure out. I have an old marine radio that's pretty sensitive. I was thinking of using it for a monitor, but I cant figure out the crystals. For example, channel 6, which is 156.3 mhz, the transmit crystal reads 15.48888 and the receive reads 17.36666. Channel 26, which is 157.3mhz, the transmit crystal reads 17.47777 and the receive reads 16.1111. There doesn't seem to be a relationship between the two that's consistant. Are these just reference or stock numbers, or is there a formular to use? Thanks in advance..........Craig..........Toecapp@AOL.COM

2533. Re: Gummel-Poon Transistor Model ? Can ARD use it?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-04 00:00:00 UTC
From: emr01@ms19.hinet.net
Message-ID: <37d12cdf.23539083@news.hinet.net>
Source record: 67276

>SPICE programs use Gummel-Poon parameters to establish an operating point
>for a BJT, and from there a small-signal equivalent circuit. In SPICE the
>two-port S-parameters for the transistor can be found by simulating a
>two-port test circuit (50 ohm gen, 50 ohm load) that is based on these G-P
>parameters.
>
>When these S-parameters are found at a set of frequencies they can be used
>by ARD, employing the Circles Utility for amplifier and matching network
>design, which "low-end" SPICE programs do not have.
>

Thank you for the information. I did successfully extract the
S-parameters using a S-parameter two-port model from the book
"A Guide to Circuit Simulation & Analysis Using PSpice".

Can I also generate the noise figure parameters (Fmin,Gopt,Rn)
from Spice? The noise analysis of Spice covered in books doesn't seem
to shed light on how it can be done. Would you know where I may find
information on how these noise figure parameters are generated from
the Gummel-Poon model?

Oliver

2534. (long) High Voltage and RF components, ferrites and lots more

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-04 00:00:00 UTC
From: Anonymous <nobody@replay.com>
Message-ID: <199909041603.SAA29611@mail.replay.com>
Source record: 67277

Bob Levitt (bw201@torfree.net) wrote:
: Sorry about the list being so long, but the Freenet does not provide
: web sites so this is the only way I have to list this all.
: The following are personal items I have for sale.
and lots more bull lies

Cut the garbage. It is clear you are a dealer trying to rip us off
Go to e-bay idiot. You'll be lucky to get $200 there for everything!

2535. WTB: Modulation transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-04 00:00:00 UTC
From: lou martin <lmartin@clsp.uswest.net>
Message-ID: <37D14F62.F62361C1@clsp.uswest.net>
Source record: 67278
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Stancor A3893 or Triad M-15.

LOU
KC0BBE
Monument, CO 80132

2536. Re: Good resources for learning electronics?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-04 00:00:00 UTC
From: "Mr. Muckle" <jdwalton@home.com>
Message-ID: <37D196BA.55830C9C@home.com>
Source record: 67279

There is also a study guide for "The Art of Electronics". The book is
available at Borders.

Oliver Huang wrote:

> On Wed, 01 Sep 1999 23:43:45 -0400, Luke Seubert <lseubert@radix.net>
> wrote:
>
> >Good day.
> >
> >What are some good resources for learning electronics? I recently set
> >up a new shortwave listening rig, and would like to build some of the
> >simple circuits for little projects here and there - you know - those
> >great little Arnie Coro projects.
> >
> Try "The Art Of Electronics" by Horowitz & Hill,
> it contains pretty much design insights. Also check out
> EDN website at www.ednmag.com, lots of interesting articles.
>
> Oliver

2537. Re: Crystal Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-04 00:00:00 UTC
From: spyder <spyder@flash.net>
Message-ID: <37D10CBD.DA56FE46@flash.net>
Source record: 67280

Craig,
As to the crystals - Transmit
17.366666 X 9 =156.3
17.477777 X 9= 157.3

As to the receive I don't know. The receive might be on different frequencies
that the transmit. It would help if you knew the IF frequency.

Hope this helps.

Michael

TOECAPP wrote:

> Since this is the place the Experts hang out, I have a tech question that I
> can't figure out. I have an old marine radio that's pretty sensitive. I was
> thinking of using it for a monitor, but I cant figure out the crystals. For
> example, channel 6, which is 156.3 mhz, the transmit crystal reads 15.48888
> and the receive reads 17.36666. Channel 26, which is 157.3mhz, the

> transmit
> crystal reads 17.47777 and the receive reads 16.1111. There doesn't seem to be
> a relationship between the two that's consistant. Are these just reference or
> stock numbers, or is there a formular to use? Thanks in
> advance...........Craig...........Toecapp@AOL.COM

2538. Re: Crystal Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-04 00:00:00 UTC
From: Joe Leikhim <jleikhim@nettally.com>
Message-ID: <37D16720.9C46C129@nettally.com>
Source record: 67281

First, I think you have your TX and RX crystals mixed up. Second channel 6 and 26 are different in that 6 is simplex and 26 is duplex.

For receiving:
156.3 minus 16.9000 (IF) =139.400 (injection) / 9=15.48888.

For transmitting:
156.3 / 9=17.36666.

I am assuming you likely have a 16.9 MHz IF based on the crystals you mention.

Also channel 6 is simplex, while 26 is duplex (ship and shore different freqs) The ship is transmitting on 157.3 while the shore is 161.900 (your radios channel 26 receive) I did the math for those and got same results. That is why you did not see a relationship between the two channels.

TOECAPP wrote:

> Since this is the place the Experts hang out, I have a tech question that I
> can't figure out. I have an old marine radio that's pretty sensitive. I was
> thinking of using it for a monitor, but I cant figure out the crystals. For
> example, channel 6, which is 156.3 mhz, the transmit crystal reads 15.48888
> and the receive reads 17.36666. Channel 26, which is 157.3mhz, the transmit
> crystal reads 17.47777 and the receive reads 16.1111. There doesn't seem to be
> a relationship between the two that's consistant. Are these just reference or
> stock numbers, or is there a formular to use? Thanks in
> advance...........Craig...........Toecapp@AOL.COM

--
Joe Leikhim K4SAT (EX KE4TZH)
Jleikhim@nettally.com

"tv dinner by the pool,
i'm so glad i finished school" -F.Zappa 1967

"The Revolution will NOT be televised" -Gil Scott Heron

2539. FS: Pr of 803 tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-04 00:00:00 UTC
From: Ross Lipman <rl1856@ix.netcom.com>
Message-ID: <37D1897F.5C7E@ix.netcom.com>
Source record: 67282

9/4

Hello,

I have a pair of 803 tubes I want to get rid of.

Huge tubes with 5pin base and plate cap.

$25.00 + shipping for the pair.

Please reply to: rl1856@ix.netcom.com

Thank you,

Ross Lipman

2540. FS: QST Issues 1992 to Current $1.00ea

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-04 00:00:00 UTC
From: Andrew <xandrew@tropicom.net>
Message-ID: <37D17EB5.3C088BA8@tropicom.net>
Source record: 67283
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.space

I am clearing out the ham shack of all my QST magazines once again. If anyone is interested, I am selling
1992-1998 at $1.00 ea. (you pay shipping costs however you want them shipped) for 1 to 10 issues. If you
are interested in over 10 issues or the entire collection, make me an offer. I am willing to ship anywhere on
this planet so long as you are willing to pay the actual shipping costs.

Here are the issues that I have:

QST

1992 Jan - April $1.00 ea.
1993 Jan - Feb & April - Dec $1.00 ea.
1994 Jan - Oct & Dec $1.00 ea.
1995 Jan - Dec $1.00 ea.
1996 Jan - Dec $1.00 ea.
1997 Jan - Dec $1.00 ea.
1998 Jan - Dec $1.00 ea.
1999 Jan - Current $2.50 ea.

All the issues are in perfect condition with no ripped pages or covers. Sorry I don't have anymore, but the last
time I did this in 1993, I sold all my 1989 through my 1992 issues less a few months still available.
If you would like to check my references, please feel free to do so. I am on Ebay and my user ID is: Andrew45
http://cgi2.ebay.com/aw-cgi/eBayISAPI.dll?ViewFeedback&userid=andrew45
--
********** DO NOT AUTOREPLY **********

TO REPLY REMOVE THE TWO 'X' FROM MY EMAIL
ADDRESS. ANTI SPAM MEASURES IN EFFECT

XANDREW@XTROPICOM.NET

****

2541. New Amateur Website

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-04 00:00:00 UTC
From: compcnsult@aol.com
Message-ID: <19990904163148.23267.00001285@ng-fb1.aol.com>
Source record: 67284

Visit the new online Hamfest:

http://www.ehamfest.com

All ads placed free!

See the FAQ page for details!

2542. Spread spectrum digitized voice in the 960MHz (around there) band

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-05 00:00:00 UTC
From: wa2ise@netcom.com
Message-ID: <7qt3lh$4ji@dfw-ixnews5.ix.netcom.com>
Source record: 67192

Have heard that some cordless phones in the 900MHz area are using digitized voice over spread spectrum, 1MHz wide spread. My company (which shall remain nameless) is making ICs that are transcievers on a chip, but only at the milliwatt level. Seems that we as hams could develop a new mode with these chips, and appications could also be packet as well as digitized voice. We'll need preamps and "linears" for these chips though.

Is spread specturm of 1MHz wide legal up in around 960MHz (forgive my forget-fullness on where the ham band exacly is, I'd look it up before operating though)?

2543. Transverter to FT-747GX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-05 00:00:00 UTC
From: Pekka Juvonen <pekka.juvonen@nokia.com>
Message-ID: <7qstbo$b2j$2@netnews2.ntc.nokia.com>
Source record: 67193

Hi,

any good ideas/links how to connect a transverter to Yaesu FT-747GX, which doesn't have any low power RF output nor separate RF input. Transverter is an old Microwave Modules' 144/28.

73 de Pekka OH2BSC

2544. Re: FS: (long) High Voltage and RF components, ferrites and lots more

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-05 00:00:00 UTC
From: Rich Grise <rich@entheosengineering.com>
Message-ID: <37D23C88.5956@entheosengineering.com>
Source record: 67194
Cross-posted to:
rec.radio.swap,rec.radio.amateur.homebrew,misc.industry.electronics.marketplace,sci.electronics.components,sci.electronics.misc

Clifford Buttschardt wrote:
>
> Aw come on Bob.....this is just too damn much! Do you think we are
> running a surplus store here!!!!! Cliff K7RR

Maybe I should lease him some webspace. I could also put up an
order form, for a small, but nominal fee.

Cheers!
Rich

2545. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-05 00:00:00 UTC
From: rey@cstone.net
Message-ID: <37d266a9.798893287@news.cstone.net>
Source record: 67195
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Any builder want to help an offspring get into the hobby? I have a
Radio Shack elecrtonic experimenter's kit on eBay @ $5.00.

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=157841333

_____
5 million people have visited Rey's Freeware Hall of Fame (no ads)
http://www.freewarehof.org for the Web's best Freeware site
http://www.freewarehof.org/stock.html for the latest eBay news

2546. Re: Q: Cooling fan for 4CX400 tube in HF PA.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-05 00:00:00 UTC
From: "Robert M. Ganter" <hb9dnn@gmx.net>
Message-ID: <+GbSN9C4ObO060K54a6TbH33UpeB@4ax.com>
Source record: 67196

On Sat, 4 Sep 1999 14:37:42 +0400, "Vladimir Nikitin"
<Vladimir.Nikitin@mea.junk-block.spb.ru> wrote:

> Hi, builders.
>
> Can anyone advise if PC minitower case PS (say 200W) fan is good for blowing
> onto 4CX400A?

No. The problem is back pressure. These kind of blowers are designed
to deliver a high volume of air with very low back pressure. Although
the 4CX400A only produces a relatively low back pressure, You will
need a blower deigned to deliver a relatively low volume with enough
back pressure for the tubes. Have a look at e.g. www.papst.de for
different kind of blowers usable for tube cooling.

> Should I shield it to prevent from being damaged by RF? Thanks.

I don't think this will be necessary. One solution might be to mount
the blower outside the RF compartment with a screen in between. You
will need an even stronger blower then, however (additional back
pressure due to the screen).

Hope this helps

73

Robert
--

Robert M. Ganter HB9DNN

2547. SALE VACUUM TUBES

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-05 00:00:00 UTC
From: xray <xray@sprintmail.com>
Message-ID: <7qtvjm$818$1@oak.prod.itd.earthlink.net>
Source record: 67197

A large quantity of vacuum tubes and test equipment for sale. Reply to this post in order to recieve the list.
xray@sprintmail

2548. FA: Jennings Vacuum Variable

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-05 00:00:00 UTC
From: Bill Clarke <w2blc@bigfoot.com>
Message-ID: <7quaf3$8e9$1@holly.prod.itd.earthlink.net>
Source record: 67198
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

Can be seen at:
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=158364586

2549. FA: Air Variables

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-05 00:00:00 UTC
From: Bill Clarke <w2blc@bigfoot.com>
Message-ID: <7quada$8bh$1@holly.prod.itd.earthlink.net>
Source record: 67199
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

Can be seen at:
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=158366982

2550. FA: Johnson roller Inductor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-05 00:00:00 UTC
From: Bill Clarke <w2blc@bigfoot.com>
Message-ID: <7quaaq$87k$1@holly.prod.itd.earthlink.net>
Source record: 67200
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

Can be seen at:
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=158369353

2551. Tayloe Mixer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-05 00:00:00 UTC
From: Rocci <rocci@worldnet.att.net>
Message-ID: <37D2BD1F.A7942BE9@worldnet.att.net>
Source record: 67201

Has anyone done any work with the mixer circuit described in this link?:

http://www.extremezone.com/~ki7mn/tayloe.htm

It seems to me that this circuit, combined with some low noise op-amps, would provide a very high performance I/Q front-end for a phasing or Weaver type of receiver. Add a 4x local oscillator generated from a high frequency DDS, and a DSP 'backend', and it seems that one could build an almost 'all digital', all band receiver with an unlimited software-controlled feature set, on a post card size format.

Is anyone out there doing anything like this?

Joe
WA3CMQ

2552. Re: PCB design software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-05 00:00:00 UTC
From: jim@rst-engr.com
Message-ID: <37d2c3ef.5841383@news.gv.net>
Source record: 67202

"WB" <willyacht@yahoo.com>
shared these priceless pearls of wisdom:

->I am looking to purchase some PCB design software, one thats easy to use,
->has a autorouter and has a good set of manuals for beginners.

I went through this iteration myself about a year ago, and after trying ALL of them, I finally decided on CircuitMaker and Traxmaker from Microcode. It isn't foolproof, but better than anything else I tried, and I tried about 20 of them.

Don't bother with the "Pro" version, it is just more money for very little additional performance.

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

2553. Transmitter xtal

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-05 00:00:00 UTC
From: Justin Fielding <justinfielding@hotmail.com>
Message-ID: <7qum8akta1@uranium.btinternet.com>
Source record: 67203

I have a simple fm TX (a small singlestage bug) and want to know how to make it xtal controlled as it is extremely sensitive to temp/proximity of the body. If it is difficult to convert it does anyone have a plan for a simple xtal controlled bug with about 1000m range on 3v?

2554. IMD improvements for 4CX250

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-05 00:00:00 UTC
From: larryc@northwest.com
Message-ID: <37D2993A.6CC8@northwest.com>
Source record: 67204

A couple years ago, I came across a website in either the UK or Europe which detailed many ways to improve IMD performance for the 4CX250. Can anyone help point me back in that direction?

2555. Re: Tayloe Mixer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-05 00:00:00 UTC
From: rick@area.com
Message-ID: <7qv700$a0e$1@vax.area.com>
Source record: 67205

In article <rice-ya02408000R0609991003170001@news.latrobe.edu.au>,
Phil Rice <rec.radio.amateur.homebrew> wrote:
>
>Rocci <rocci@worldnet.att.net> wrote:
>
>> Has anyone done any work with the mixer circuit described in this link?
>> http://www.extremezone.com/~ki7mn/tayloe.htm
>
>Variations on this mixer have been around for years. I first heard of it as
>a "switched capacitor filter" in 1980. Another variation was (maybe still

Further refinements have been made in this general area by Tom Hornak
of Hewlett Packard Laboratories (now Agilent Technologies). If you
are interested, look at his recent patents. He has an additional patent
on a mixer in this class that is still pending. He has taken up this
basic concept, identified the major error sources, and figured out how
to virtually eliminate them.

Rick Karlquist N6RK
rick@area.com

2556. 900 mhz amp from ericsen cell amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-05 00:00:00 UTC
From: kable guy minn <n0mnb@minn.net>
Message-ID: <7qva9i$2ba$1@news.minn.net>
Source record: 67206
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

hello
looking for any help on amp from a ericsen cell phone site .. 2mw in 60
watts out.looking tobuy
thanks
n0mnb@minn.net

2557. Re: Good resources for learning electronics?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-05 00:00:00 UTC
From: Will White <wcw@uswest.net>
Message-ID: <37D34C47.1E1CD1E7@uswest.net>
Source record: 67207

Luke et al.--

As for books, any ARRL Handbook is a great resource. The more years, the better. The Handbooks will take you from basic DC and AC principles (resistance, power, capacitance, inductance, impedence, resonance, etc.) on all the way up through some very sophisticated concepts: digital modulation schemes, DSP, etc. ARRL and CQ magazine each publish lots of books. Have a look in the back of any recent issue.

Old QST issues, or the CD-ROM archives are great. Old CQ and 73 magazine issues also. Bill Orr's Radio Communications Handbook (I think that is the correct title, but not sure) is a good one, and there is a new edition recently out.

The web is a good resource, especially for projects, or for detailed info on a particular topic. Try these URLs:

http://www.mnsinc.com/bry/hamfiles.htm
http://www.ac6v.com
http://jehosophat.com/
http://hem2.passagen.se/sm0vpo/
http://uhavax.hartford.edu/disk$userdata/faculty/newsvhf/www/ham-www.html

All sorts of info there, and lots of links. Yep, Arnie Coro comes up with some cool projects, even cooler because they are simple and cheap, and yet they work!

Go to hamfests and look under the tables for old books and magazines. You might even join a local ham club, especially after you learn a little, having a real live person to explain things really helps. Best of luck to you!

Luke Seubert wrote:
>
> Good day.
>
> What are some good resources for learning electronics? I recently set
> up a new shortwave listening rig, and would like to build some of the
> simple circuits for little projects here and there - you know - those
> great little Arnie Coro projects.
>
> As a youngster, I built a few Heathkits, and took the Heathkit DC
> electronics course, but have forgotten much of that.
>
> Would folks on this group recommend going back to those Heathkit courses
> as a good means of learning electronics and pursuing the hobby once
> more? Any other good books or self-study courses out there?

>
> Many thanks,
> Luke Seubert
>
> < Insert Pithy Quote Here >

--
Will White, KD7BFX

to reply, please click this link mailto:wcw@uswest.net

2558. Re: Grid Driven 4-1000 amp schematics anyone???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-06 00:00:00 UTC
From: dharlan <dharlan@ameritech.net>
Message-ID: <37D46672.35B1F4B4@ameritech.net>
Source record: 67135
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hey Tim,

You may want to take a look at the "K2RIW" type of VHF/UHF
amps, they used 4X150's on 2m and 432. Really slick screen protection
And control circuits. Just adjust the voltages to fit your "jug"..
I applied the above concepts to a 4-400 that I used for rtty and SSB
on 80-10m. I could run my SB-104A at 5 w, out on rtty and got about
300 watts outta the 4-400. Worked alot of europe and Africa with my
model 22 tty. (Then the kids were born... oh well)

GL de

/Dan N8ETQ Cleveland,Oh.

"Gary C. Rogers" wrote:
>
> Tim, I remember seeing a full blown schematic of a 4-1000, 80-10 meters amp in
> one of the ARRL Handbooks. It was a complete build it yourself project. I
> have not been able to locate the exact year, but I'm sure if you call or write
> to the ARRL they would be able to lead you in the right direction. Just a
> thought. Good Luck with your project.....Gary
> Tim wrote:
>
> > Hi.... I am in the process of putting together a bunch of stuff that I've
> > had kicking around here together to make a 4-1000 amp... I have at least a
> > dozen schematics for GG amps but almost nothing for Cathode grid driven amps
> > using the 4-1000. The only real drawback that I've seen so far is that it
> > requires a slightly more complicateed power supply (screen voltage and the
> > like) but I already have the stuff to incorporate that into it. The main
> > advantage that I can see for this amp is that it takes very little drive to
> > send a 2500 watt bird slug into oblivion (or at least to cause the needle
> > in the meter housing this slug to gently tap the right hand stop pin). I can
> > imagine, though maybe not rightly, that this amp may be a little more
> > difficult to tame, parasitically speaking, but then I plan to swamp the heck
> > out of the input grid circuit to knock down the input drive to a level that
> > won't cause the tube to exceed the plate dissipation rating....in my way of
> > thinking this would seem to knock down a "possible parasitic" enough to
> > where it would never get started... where is Rich Measures when you need
> > him...anyway, any info would be helpful I'm looking to start this project in
> > the next 1-2 months....
> > &#
> > Tim
> > tvendt@kear.tds.net

2559. 24GHZ Microwwave antenna, feed assembly w/mount

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-06 00:00:00 UTC
From: Norman Gillaspie <norman@pcseng.com>
Message-ID: <CM0B3.60$2k.9952@newsin1.ispchannel.com>
Source record: 67136

I have placed a 24Ghz microwave antenna and
feed assembly with mount on ebay.

It can be viewed at the following URL

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=156719130

Norman

norman@pcseng.com

2560. Re: Extending backup battery life?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-06 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <JTnRpbCYTD13EwdE@jmwa.demon.co.uk>
Source record: 67137
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

<37D429FB.1153196B@here.here>, Neil <simple.ton@here.here> inimitably
wrote:
>But how long will NiCads last ? Probably only a couple of years max.

No, I've just thrown out a NiCd PP3 which I bought in 1990. But it has
been well cared for, and has not needed re-charging very often.
--
Regards, John Woodgate, OOO - Own Opinions Only.
Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
http://www/jmwa.demon.co.uk Did you hear about
the hungry genetic engineer who made a pig of himself?
PLEASE DO ****NOT**** MAIL COPIES OF NEWSGROUP POSTS TO ME!!!!

2561. WTB; FC-30 B&W Filament Choke

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-06 00:00:00 UTC
From: CMC25 <c415a@mashell.com>
Message-ID: <37D4A50A.7BED0D84@mashell.com>
Source record: 67138

Looking for FC-30 filament choke by B&W. Please contact directly by eMail. <c415a@mashell.com>

2562. Re: Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-06 00:00:00 UTC
From: Gerhard Hoffmann <ghf@berlin.snafu.de>
Message-ID: <37D2F676.9B944B1@berlin.snafu.de>
Source record: 67208

Rocci wrote:

> So, it seems to me that the Weaver method makes the process of building a
> direct conversion receiver more practical. With DSP lowpass filters after
> the first set of I/Q mixers, and a complete DSP implementation of the second
> I/Q process, many of the problems associated with hardware imperfections
> should be alleviated.

Some completely digital Weaver receivers:

(Intersil used to be Harris Semi.)
http://www.intersil.com/families/dsp.asp#Down Conversion and
Demodulation
http://www.intersil.com/data/fn/fn3/fn3288/index.asp

http://www.graychip.com/

http://www.national.com/pf/CL/CLC5902.html

73,
Gerhard DK4XP

2563. Re: Tayloe Mixer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-06 00:00:00 UTC
From: rice@ironbark.bendigo.latrobe.edu.au
Message-ID: <rice-ya02408000R0609991003170001@news.latrobe.edu.au>
Source record: 67209

Rocci <rocci@worldnet.att.net> wrote:

> Has anyone done any work with the mixer circuit described in this link?
> http://www.extremezone.com/~ki7mn/tayloe.htm

Variations on this mixer have been around for years. I first heard of it as a "switched capacitor filter" in 1980. Another variation was (maybe still is) used in a commercial HF transceiver made in South Africa. See : J. D. K. West - COMSIG 1991 Proceedings. South African Symposium on Communications and
Signal Processing Published by IEEE, New York USA

More recently (February 1998), I had an article on "using a 4 phase switch as a direct SSB modulator" published in "Amateur Radio", (the magazine of the Wireless Institute of Australia). The article was been on the web for a while (without the AR editors permission - maybe I should get it someday ;-)

Anyway, have a look at http://ironbark.bendigo.latrobe.edu.au/~rice/ssb/ssb.html

Regards, Phil Rice
Radio: VK3BHR, 3CCC

and in my spare time...
Lecturer in Information Technology
Bendigo Campus, La Trobe University.
Phone 03 5444 7342
Fax 03 5444 7998
http://www.bendigo.latrobe.edu.au/mte/staff/rice.htm
http://ironbark.bendigo.latrobe.edu.au/staff/rice/rice.home.html
email rice@ironbark.bendigo.latrobe.edu.au
or p.rice@bendigo.latrobe.edu.au
or p.rice@latrobe.edu.au
or any one of a thousand other aliases

2564. Advise sought on Tubes - Please

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-06 00:00:00 UTC
From: kb1dwn@qsl.net
Message-ID: <UQDA3.45$9v5.1228@news.rdc1.ct.home.com>
Source record: 67210

Hello all,

Anyone know where I can get 4 6lQ6 (sweep tubes ?) please advise.

TNX & 73's de KB1DWN (Also VU2ATO)

2565. Improve Signal??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-06 00:00:00 UTC
From: "Scott P." <spellerine@ns.sympatico.ca>
Message-ID: <37D2D0C9.179@ns.sympatico.ca>
Source record: 67211

Hi,

I managed to make a normal everyday radio able to transmit audio signals over FM by attaching two wires to the inside of it and hooking them up to my stereo. Anyway, I was wondering if there was any way I could improve the distance that the signal travels...right now it barely makes it to the end of the street. Thanks for your help!

Scott.

2566. Re: Advise sought on Tubes - Please

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-06 00:00:00 UTC
From: wa2ise@netcom.com
Message-ID: <7qv94p$2ul@dfw-ixnews7.ix.netcom.com>
Source record: 67212

In article <UQDA3.45$9v5.1228@news.rdc1.ct.home.com>,
KB1DWN <kb1dwn@qsl.net> wrote:
>Hello all,
>
>Anyone know where I can get 4 6lQ6 (sweep tubes ?) please advise.
>
>TNX & 73's de KB1DWN (Also VU2ATO)
>

There's Antique Electronic Supply, they may be a bit pricey though.
www.tubesandmore.com

2567. Output of filter design software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-06 00:00:00 UTC
From: Peter Bolch <nc-bolchpe@netcologne.de>
Message-ID: <7qvh8s$3e4$1@news.netcologne.de>
Source record: 67213

Hi,

could someone please translate the following output of a filter design program into a real circuit? The filter is a parallel coupled bandpass filter, the output format is Touchstone. I suppose the CLIN ..... statements define coupled lines, the meaning of ZE, ZO, E and F is clear. How are the three coupled lines connected? Is the output of the first line (node 4) input of the second line? Have the lines to be connected directly i.e. not via 50 Ohm lines?

```
CKT
CLIN 1 2 4 3 ZE=64,347533 ZO=41,070616 E=90 F=1,024695
CLIN 4 5 7 6 ZE=52,855852 ZO=47,43771 E=90 F=1,024695
CLIN 7 8 10 9 ZE=64,347511 ZO=41,070624 E=90 F=1,024695
DEF2P 1 10 FILTER
```

Peter

2568. Re: Microwave oven transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-06 00:00:00 UTC
From: Koehl House <lkoehl@ce.mediaone.net>
Message-ID: <9cKA3.12390$Nj1.82612537@ronws01.ce.mediaone.net>
Source record: 67214

These transformers have a "shunt" in the core that makes them saturate easy.
Remove this shunt (it's usually just wedged tightly) and core losses should
drop and cool thing off.
Many folks have used these (i have not personally). QEX had an article a
couple years ago. I could look it up if interested.
Yes, the grounded end of the winding usually has little insulation so
operating it off ground takes some careful measurements and testing.

73, Dick K9FFK
Frank Dinger wrote in message <19990903104635704 32@zetnet.co.uk>...
>> Anybody know any links to pages describing how to use and the
>> characteristics of, microwave over power transformers for
>> amateur radio use.

2569. Re: IMD improvements for 4CX250

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-06 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <skUoiEA$0103EwTt@ifwtech.demon.co.uk>
Source record: 67215

wrote:
>A couple years ago, I came across a website in either the UK or Europe
>which detailed many ways to improve IMD performance for the 4CX250. Can
>anyone help point me back in that direction?

See below!

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

2570. Re: Tayloe Mixer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-06 00:00:00 UTC
From: "Robert M. Ganter" <hb9dnn@gmx.net>
Message-ID: <1nzTN287jsbFefFqbUNZVcvO4SNW@4ax.com>
Source record: 67216

On 5 Sep 1999 18:56:16 -0700, rick@area.com (Richard Karlquist) wrote:

> Further refinements have been made in this general area by Tom Hornak
> of Hewlett Packard Laboratories (now Agilent Technologies). If you
> are interested, look at his recent patents. He has an additional patent
> on a mixer in this class that is still pending. He has taken up this
> basic concept, identified the major error sources, and figured out how
> to virtually eliminate them.
>

Do You have links to these patents? I could not find anything on the
net under "Hornak" and "mixer".

73

Robert
--

Robert M. Ganter HB9DNN

2571. WTB "Broken" HF console amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-06 00:00:00 UTC
From: Matt Erickson <kk5dr@hotmail.com>
Message-ID: <37D3C3C4.A8AD2388@hotmail.com>
Source record: 67217

I'm looking for a winter project. I want a broken, burnt-out, zapped,
nasty looking , etc. HF console amp(ie.Henry, BTI, etc.)
I'll pay a little over scrap price+ shipping.
73 de Matt
KK5DR

2572. HAM LICENSE PLATE IMAGES SOUGHT

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-06 00:00:00 UTC
From: K2BJ <webmaster@k2bj.com>
Message-ID: <7r0k89$ihb@dfw-ixnews15.ix.netcom.com>
Source record: 67218

Looking for images of ham plates, all states, any age, country. To help fill out section of my web site devoted to ham license plates. Visit:

http://www.k2bj.com/Plates.htm

'73!
K2BJ

-
==========
Visit http://www.k2bj.com

2573. Extending backup battery life?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-06 00:00:00 UTC
From: voicebox@dnai_dnai.com
Message-ID: <voicebox-0609990821110001@192.168.1.2>
Source record: 67219
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

I have several devices around the house (plug-in clock; answering maching; etc.) that use a back-up battery (variously a 9v, 2 AA's, and 4 AA's) to keep the time and other parameters during a power-outage. The infurating thing is that thes batteries wear out regularly even when power is supplied (the device is plugged in); no charge circuit is provided to keep these batteries from running down.

Can I use a NiCd battery in these devices and keep it charged by connecting it to the internal power source via a resistor and, possibly, a blocking diode?

What parameters (i.e., mA charge rate) should I use when choosing the resistor and diode?

Thanks,
Dave

--
Dave Carpenter
Sound Logic

Note: "From" address is invalid.
To reply, delete duplicate portion from the address:
< voicebox@dnai_dnai.com >

2574. FS New (vintage) IF Transformers.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-06 00:00:00 UTC
From: Larry Asp <larry.asp@sympatico.ca>
Message-ID: <37D3DFA7.7EC8@sympatico.ca>
Source record: 67220
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.equipment

I have the following IF transformers for sale - please take them all as a lot - $15.00 plus postage - -

2 New in the box 85kc IF transformers - replacements for the BC453 Q5er.

4 new IF cans - only have a part number for them as marked on the top - G115A/G116A - slug adjusments top and bottom.

3 new IF cans - 1 - #22195, 2 -#22196 marked on top of cans. Cans dated 1944 and 1945.

Thats all I know about the cans. Most likely from military equipment replacement kits, Im sure someone will recognize and want them.

2575. Re: Extending backup battery life?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-06 00:00:00 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <37D3AEEE.1AAD@rica.net>
Source record: 67221
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

DaveC wrote:
>
> I have several devices around the house (plug-in clock; answering maching;
> etc.) that use a back-up battery (variously a 9v, 2 AA's, and 4 AA's) to
> keep the time and other parameters during a power-outage. The infurating
> thing is that thes batteries wear out regularly even when power is
> supplied (the device is plugged in); no charge circuit is provided to keep
> these batteries from running down.
>
> Can I use a NiCd battery in these devices and keep it charged by
> connecting it to the internal power source via a resistor and, possibly, a
> blocking diode?
>
> What parameters (i.e., mA charge rate) should I use when choosing the
> resistor and diode?
>
> Thanks,
> Dave
>
> --
> Dave Carpenter
> Sound Logic
>
> Note: "From" address is invalid.
> To reply, delete duplicate portion from the address:
> < voicebox@dnai_dnai.com >

I had an alarm clock that ate 9 volt batteries aevery month or so, just to power the sensing circuit that lit an LED whenever the battery went dead. I reverse engineered the schematic enough to find a way to add a charging resistor from the rectified, but unfiltered part of the power supply (half wave), so that the net current through the battery was just very slightly charging rather than discharging, but since this current came in pulses, the battery low monitor still worked between pulses and lights (more dimly) if the battery voltage is low (or the battery is disconnected). I now change the battery every couple years on general principles but the low indicator has never come on. No rechargable battery necessary because the battery never discharges significantly. Unfortunately, I can not give you a general design that will accomplish this in any appliance. But in principle it is probably doable, and disappointing that the manufacturers have not already done it.

John Popelish

2576. Re: WTB "Broken" HF console amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-06 00:00:00 UTC
From: Mike Lucas W5CHR <lucascom@email.msn.com>
Message-ID: <OUEbLPI##GA.327@cpmsnbbsa02>
Source record: 67222

Matt Erickson wrote
>I'm looking for a winter project. I want a broken, burnt-out, zapped,
>nasty looking , etc. HF console amp(ie.Henry, BTI, etc.)
>I'll pay a little over scrap price+ shipping.

Matt: You are describing almost all of the radio stuff that I own!!! Sorry, but until the Readers' Digest check arrives, I'll hang on to it. Sure hope you find your project at a good price.

Mike Lucas W5CHR
Memphis, Tenn.

2577. Re: Tayloe Mixer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-06 00:00:00 UTC
From: rick@area.com
Message-ID: <7r0r5s$kf4$1@vax.area.com>
Source record: 67223

In article <1nzTN287jsbFefFqbUNZVcvO4SNW@4ax.com>,
Robert M. Ganter <hb9dnn@gmx.net> wrote:
>
>Do You have links to these patents? I could not find anything on the
>net under "Hornak" and "mixer".

Try using IBM's patent server: <<http://www.patents.ibm.com>>

Rick N6RK

2578. Re: Extending backup battery life?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-06 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <7r10jpfgi1@autumn.news.rcn.net>
Source record: 67224
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

Depends on what you mean by "regularly". If properly designed, these devices should draw very little from the battery while AC power is applied. I typically change mine once a year. Now if you get lots of power outages then the batteries get used more.

DaveC <voicebox@dnai_dnai.com> wrote in message news:voicebox-0609990821110001@192.168.1.2...
> I have several devices around the house (plug-in clock; answering maching;
> etc.) that use a back-up battery (variously a 9v, 2 AA's, and 4 AA's) to
> keep the time and other parameters during a power-outage. The infurating
> thing is that thes batteries wear out regularly even when power is
> supplied (the device is plugged in); no charge circuit is provided to keep
> these batteries from running down.
>
> Can I use a NiCd battery in these devices and keep it charged by
> connecting it to the internal power source via a resistor and, possibly, a
> blocking diode?
>
> What parameters (i.e., mA charge rate) should I use when choosing the
> resistor and diode?
>
> Thanks,
> Dave
>
> --
> Dave Carpenter
> Sound Logic
>
> Note: "From" address is invalid.
> To reply, delete duplicate portion from the address:
> < voicebox@dnai_dnai.com >

2579. Detroit area swap and shop

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-06 00:00:00 UTC
From: k8bvj@webtv.net
Message-ID: <9837-37D408C9-57@newsd-232.iap.bryant.webtv.net>
Source record: 67225

Anyone know when the next one is??????
Thanks---Jack K8BVJ

web site: http://community-1.webtv.net/k8bvj/AMATEURRADIO/

2580. Universal Noise Filter/Compressor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-06 00:00:00 UTC
From: David Snyder Hale <david@isi9.mtwilson.edu>
Message-ID: <7r14rkrlt1@agate-ether.berkeley.edu>
Source record: 67226

The newest issue of _Electronics Now_ magazine (Oct99) describes a noise filter and compressor, based around Analog Devices SSM2000 noise attenuator IC.

I'm wondering if this would be useful for sideband work. Any thoughts on this? Besides maybe being used for cutting off the white noise while no one is on and I'm just listening, perhaps it could also be useful for weak signals?

73,
--
Dave * N3WTK (DM04xf) * http://isi9.mtwilson.edu * n3wtk@arrl.net

2581. Re: Extending backup battery life?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-06 00:00:00 UTC
From: Neil <simple.ton@here.here>
Message-ID: <37D429FB.1153196B@here.here>
Source record: 67227
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

DaveC wrote:
>
> I have several devices around the house (plug-in clock; answering maching;
> etc.) that use a back-up battery (variously a 9v, 2 AA's, and 4 AA's) to
> keep the time and other parameters during a power-outage. The infurating
> thing is that thes batteries wear out regularly even when power is
> supplied (the device is plugged in); no charge circuit is provided to keep
> these batteries from running down.
>
> Can I use a NiCd battery in these devices and keep it charged by
> connecting it to the internal power source via a resistor and, possibly, a
> blocking diode?
>
> What parameters (i.e., mA charge rate) should I use when choosing the
> resistor and diode?
>
> Thanks,
> Dave
Should be pretty straightforward, limit the charge current to a milliamp
or two - then the battery will not be overcharged or stressed (presume
power outs are infrequent enough to allow slow trickle charge when power
OK?).
The diode should only need to be an 1N4148 or similar, resistor power
should be small if charge current low.
But how long will NiCads last ? Probably only a couple of years max.
It's like the ones in phones I guess.
hope this helps
Neil

2582. MC3356 S-meter detector

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-06 00:00:00 UTC
From: la8ak@online.no
Message-ID: <37d2be5f.503303534@news.online.no>
Source record: 67228

somebody requested info/circuit, but I've lost the mail, pse repeat
your request

2583. Source for Precision SMD Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-06 00:00:00 UTC
From: clifford kelley <cwkelley@inreach.com>
Message-ID: <01bef8b5$aa1192c0$6f43d1d1@bigbear>
Source record: 67229
Cross-posted to:
rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design,sci.electronics.misc,sci.electronics.repair

Hi,

I am looking for precision (1% to 2%) SMD capacitors in the range of 1.5 pf
to 20 pf in small quantities for an L band RF project.

Any sugestions are most welcome.

Cliff

2584. Re: Source for Precision SMD Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-06 00:00:00 UTC
From: "www.repaircamcorder.com" <bopeep@shreve.net>
Message-ID: <37d4433e@news.shreve.net>
Source record: 67230
Cross-posted to:
rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design,sci.electronics.misc,sci.electronics.repair

Digi-Key Electronics

--
A suggestion from Video Services
www.repaircamcorder.com

clifford kelley wrote in message <01bef8b5$aa1192c0$6f43d1d1@bigbear>...
>Hi,
>
>I am looking for precision (1% to 2%) SMD capacitors in the range of 1.5 pf
>to 20 pf in small quantities for an L band RF project.
>
>Any sugestions are most welcome.
>
>Cliff

2585. Re: Extending backup battery life?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-06 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37D44505.173E8C43@teleport.com>
Source record: 67231
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

Do the devices draw current from the battery when the mains power is up?
If not, alkaline batteries should last at least five years, or even ten
if the ambient temperature doesn't get too high.

I've just seen a 1.5 volt lithium AA cell on the market. If it has the
long-life properties of the standard 3 volt chemistries, it should last
10 or more years. Or you could use a 3 volt lithium AA and dummy short
in place of a pair of AAs. Kodak used to make a 9v lithium, but quit
making it. I believe I've seen them again recently, though.

If the units are drawing current while operating, lithiums will give
longer service, but the rechargeable option might be better. However,
you'll have to choose the charge current very carefully. Unless the
charge current is very low (I believe about C/20 to C/50 is recommended
for this), a NiCd battery is likely to not last as long as an alkaline.
And at this charge rate, the battery will take a very long time to
recharge, if it ever does, after it's called upon to do its backup job.

Roy Lewallen, W7EL

DaveC wrote:
>
> I have several devices around the house (plug-in clock; answering maching;
> etc.) that use a back-up battery (variously a 9v, 2 AA's, and 4 AA's) to
> keep the time and other parameters during a power-outage. The infurating
> thing is that thes batteries wear out regularly even when power is
> supplied (the device is plugged in); no charge circuit is provided to keep
> these batteries from running down.
>
> Can I use a NiCd battery in these devices and keep it charged by
> connecting it to the internal power source via a resistor and, possibly, a
> blocking diode?
>
> What parameters (i.e., mA charge rate) should I use when choosing the
> resistor and diode?
>
> Thanks,
> Dave
>
> --
> Dave Carpenter
> Sound Logic
>
> Note: "From" address is invalid.

> To reply, delete duplicate portion from the address:
> < voicebox@dnai_dnai.com >

2586. Re: Grid Driven 4-1000 amp schematics anyone???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-06 00:00:00 UTC
From: "Gary C. Rogers" <garebear@bellsouth.net>
Message-ID: <37D44F99.C168BD5C@bellsouth.net>
Source record: 67232
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Tim, I remember seeing a full blown schematic of a 4-1000, 80-10 meters amp in one of the ARRL Handbooks. It was a complete build it yourself project. I have not been able to locate the exact year, but I'm sure if you call or write to the ARRL they would be able to lead you in the right direction. Just a thought. Good Luck with your project.....Gary
Tim wrote:

> Hi.... I am in the process of putting together a bunch of stuff that I've
> had kicking around here together to make a 4-1000 amp... I have at least a
> dozen schematics for GG amps but almost nothing for Cathode grid driven amps
> using the 4-1000. The only real drawback that I've seen so far is that it
> requires a slightly more complicateed power supply (screen voltage and the
> like) but I already have the stuff to incorporate that into it. The main
> advantage that I can see for this amp is that it takes very little drive to
> send a 2500 watt bird slug into oblivion (or at least to cause the needle
> in the meter housing this slug to gently tap the right hand stop pin). I can
> imagine, though maybe not rightly, that this amp may be a little more
> difficult to tame, parasitically speaking, but then I plan to swamp the heck
> out of the input grid circuit to knock down the input drive to a level that
> won't cause the tube to exceed the plate dissipation rating....in my way of
> thinking this would seem to knock down a "possible parasitic" enough to
> where it would never get started... where is Rich Measures when you need
> him...anyway, any info would be helpful I'm looking to start this project in
> the next 1-2 months....
> &#
> Tim
> tvendt@kear.tds.net

2587. Re: Source for Precision SMD Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-06 00:00:00 UTC
From: clifford kelley <cwkelley@inreach.com>
Message-ID: <01bef8c0$ad2efe60$2a43d1d1@bigbear>
Source record: 67233
Cross-posted to:
rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design,sci.electronics.misc,sci.electronics.repair

Thanks,

I have tried Digi-Key but the tightest tolerance in that range I could find
is 5%.

Cliff

www.repaircamcorder.com <bopeep@shreve.net> wrote in article
<37d4433e@news.shreve.net>...
> Digi-Key Electronics
>
> --
> A suggestion from Video Services
> www.repaircamcorder.com
>
>
>
>
> clifford kelley wrote in message <01bef8b5$aa1192c0$6f43d1d1@bigbear>...
> >Hi,
> >
> >I am looking for precision (1% to 2%) SMD capacitors in the range of 1.5
pf
> >to 20 pf in small quantities for an L band RF project.
> >
> >Any sugestions are most welcome.
> >
> >Cliff
>
>
>

2588. Re: Extending backup battery life?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-06 00:00:00 UTC
From: sawfilter@hotmail.com
Message-ID: <37d44181.91072079@news-server>
Source record: 67234
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

I installed 108 ohms, an 8.2v zener, and a 9v NiCd in my GERRY baby
monitor so that it had a portable life of about 3 hours. Just right so
that our battery consunption went from one per week to none. This also
allowed me to use a regular battery if required (as long as the AC
adapter was not plugger in)
I liked the earlier post about the 4148 diode and keeping the current
below 1mA.. You will never get the spec AmpHour out of these schems
(because you are only charging ~65% of total). But battery elimenating
battery replacement is possible
On Mon, 06 Sep 1999 21:54:19 +0100, Neil <simple.ton@here.here> wrote:

>DaveC wrote:
>>
>> I have several devices around the house (plug-in clock; answering maching;
>> etc.) that use a back-up battery (variously a 9v, 2 AA's, and 4 AA's) to
>> keep the time and other parameters during a power-outage. The infurating
>> thing is that thes batteries wear out regularly even when power is
>> supplied (the device is plugged in); no charge circuit is provided to keep
>> these batteries from running down.
>>
>> Can I use a NiCd battery in these devices and keep it charged by
>> connecting it to the internal power source via a resistor and, possibly, a
>> blocking diode?
>>
>> What parameters (i.e., mA charge rate) should I use when choosing the
>> resistor and diode?
>>
>> Thanks,
>> Dave
>Should be pretty straightforward, limit the charge current to a milliamp
>or two - then the battery will not be overcharged or stressed (presume
>power outs are infrequent enough to allow slow trickle charge when power
>OK?).
>The diode should only need to be an 1N4148 or similar, resistor power
>should be small if charge current low.
>But how long will NiCads last ? Probably only a couple of years max.
>It's like the ones in phones I guess.
>hope this helps
>Neil

2589. Re: Extending backup battery life?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: jim_cronin@juno.com
Message-ID: <37d4618c.7460083@news.localnet.com>
Source record: 67139
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

On Mon, 06 Sep 1999 08:21:07 -0800, voicebox@dnai_dnai.com (DaveC)
wrote:

>I have several devices around the house (plug-in clock; answering maching;
>etc.) that use a back-up battery (variously a 9v, 2 AA's, and 4 AA's) to
>keep the time and other parameters during a power-outage. The infurating
>thing is that thes batteries wear out regularly even when power is
>supplied (the device is plugged in); no charge circuit is provided to keep
>these batteries from running down.
>
>Can I use a NiCd battery in these devices and keep it charged by
>connecting it to the internal power source via a resistor and, possibly, a
>blocking diode?

Yes, it works just fine.

>What parameters (i.e., mA charge rate) should I use when choosing the
>resistor and diode?

Pick a resistor that gives a charge current of 20 mills or so.

73..Jim N2VNO

>
>Thanks,
>Dave
>
>--
>Dave Carpenter
>Sound Logic
>
>Note: "From" address is invalid.
>To reply, delete duplicate portion from the address:
> < voicebox@dnai_dnai.com >

2590. Re: Source for Precision SMD Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: n7ws@arrl.net
Message-ID: <37d46995.693924830@news.azstarnet.com>
Source record: 67140
Cross-posted to:
rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design,sci.electronics.misc,sci.electronics.repair

On Mon, 06 Sep 1999 22:10:12 GMT, "clifford kelley" <cwkelley@inreach.com>
wrote:

>Hi,
>
>I am looking for precision (1% to 2%) SMD capacitors in the range of 1.5 pf
>to 20 pf in small quantities for an L band RF project.
>
>Any sugestions are most welcome.
>
>Cliff

Cliff,

American Technical Ceramics (http://www.atceramics.com)

AVX (http://www.avxcorp.com)

Johanson (http://www.johanson-caps.com/)

and Dielectric Laboratories (http://www.dilabs.com/) all make the parts you
probably need.

As to sources for small quantities, that may be a problem AVX and Johanson are
sold by AVNET (http://www.avnet.com). They might sell to you in small quantites
with a minimum order (probably $50).

Wes -- N7WS

2591. Kenwood 140s Squelch

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: n4zss@rfci.net
Message-ID: <37d47543.7335028@news.rfci.net>
Source record: 67141

I have a few ideas for installing a squelch in my Kenwood
TS140s. If anyone has any mods of there own or any
ideas I would like to hear them.... Thanks Mike

2592. MC3362 info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: Mark Pullen <mpullen@melbpc.org.au>
Message-ID: <37D48687.8E81CE4A@melbpc.org.au>
Source record: 67142

Hi
Can anyone help with info on incorparating the motorola MC3362 IC into
a transceiver ,any schematics etc,or PCB detail would be appreciated
The IC itself is a low power FM receiver.
regards Mark

2593. Re: Extending backup battery life?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: George Silver <glsilver@digital.net>
Message-ID: <rt96drs98os84@corp.supernews.com>
Source record: 67143
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

A reasonable approach from the cost and longevity viewpoint might be to use
a charge controller for The battery in Ur application. MAXIM IC's of
Sunnyvale, Calif makes several with differing control approaches.
the MAX712 which stops the charge when the bat voltage is level during an
sample period, or by total time or temperature absolute and is sold for
about $3.09 or near that. it requires 3 low wattage resistors, and 3
capacitors of less than 35 v rating, a switch transistor(1 amp capability
or so), and a diode. It stops a rapid charge, then goes to trickle for a
settable time and then turns off completely until the voltage drops below a
settable point. At which time it repeats the cycle..

I put this into the wireless headphones I was using due to the high cost of
replacement 3 cell Ni-Cd s (flat cells). AS used in some cordless
telephones.

I was forgetting to remove the headphones from charge, and the Ni-Cd were
topping out on me..
Cost to convert both units was about $10. (less than the cost of 2
batteries) But then I had most of the the small parts in junk box or bins.
Used "dead bug" type layout and wiring.

Cant buy the Ni-Cds like that easily now due to the disposal problem. They
try to sell U NI-MH instead, well this MAX 712 doesn't care, will charge
them too, just as well..

--
George (Tinkr) Silver
Retired, too many hobbies..

2594. Re: Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: blackm00@cam.org
Message-ID: <blackm00-0709990148040001@dialup-512.hip.cam.org>
Source record: 67144

In article <7qop51$qq9$1@vax.area.com>, rick@area.com (Richard Karlquist) wrote:

>[stuff deleted]
>
> Another isse, is: what are you going to do on xmit? If you use the
> Weaver system there, you have the whistle problem. This is even
> worse than the carrier suppression problem in phasing type SSB, which
> is what effectively killed it for all non-ham radio uses where there
> is an FCC spec on carrier suppression. You see, in those services,
> they rely on the SSB filter to also help suppress the carrier. In
> ham use, they just put a pot on the front panel to null the carrier
> and/or drove the modulator higher (to make the carrier look smaller)
> and let the intermods fall where they may.
>
> Rick Karlquist N6RK
> rick@area.com

There was a commercial phasing transmitter for the amateur market, Gonset comes to mind but it might have come from some other company, that did address this issue.

The carrier oscillator was at 9MHz, and they put a 9MHz crystal across the output of the balanced modulators, to improve carrier suppression. The circuit was shown in the QST review (early sixties) of the transmitter. I can't remember whether the rig used tubes or diodes in the balanced modulator, but the point of the simple suck-out crystal was to make carrier suppression less critical.

Of course, if you're talking about using the filter to suppress the carrier, there was an article in Ham Radio in 1974 or 75 for a simple IF chain of an SSB transceiver using TTL, linearized of course. It had no balanced moudlator, but relied on the home made crystal filter to remove the carrier. The whole thing seemed more like a novelty, that it could be done with TTL, but I could never tell whether the author was serious about no balanced modulator or simply glossed over it for the sake of the novelty of TTL. Actually, I was never certain how much beyond the thinking stage the article had gone.

Michael VE2BVW

2595. Cheap repeater controller needed...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: Brian <brian_messman@yahoo.com>
Message-ID: <Dz2B3.1076$PV2.50356@typhoon01.swbell.net>
Source record: 67145

Building on a budget, need a small, inexpensive repeater controller to tie my mobiles together for some cheap repeater action...something under $100.00. Please post to email...thanx.

2596. Re: Source for Precision SMD Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: G <g.s@gcm.com>
Message-ID: <37D4C2C7.8CF370D0@gecm.com>
Source record: 67146
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design,sci.electronics.design

ROHM make the capacitors you are looking for.

www.rohm.com

Flint SMD distribute for them and deal in small quantities.

www.flint.co.uk

G.

2597. Re: Extending backup battery life?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: JohnS <Elektrode@remove.clara.net>
Message-ID: <iQ5B3.11134$fl2.283268@nnrp4.clara.net>
Source record: 67147
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

Neil <simple.ton@here.here> wrote in message
news:37D429FB.1153196B@here.here...
> DaveC wrote:
> >
> > I have several devices around the house (plug-in clock; answering
maching;
> > etc.) that use a back-up battery (variously a 9v, 2 AA's, and 4 AA's) to
> > keep the time and other parameters during a power-outage. The infurating
> > thing is that thes batteries wear out regularly even when power is
> > supplied (the device is plugged in); no charge circuit is provided to
keep
> > these batteries from running down.
> >
> > Can I use a NiCd battery in these devices and keep it charged by
> > connecting it to the internal power source via a resistor and, possibly,
a
> > blocking diode?
> >
> > What parameters (i.e., mA charge rate) should I use when choosing the
> > resistor and diode?
> >
> > Thanks,
> > Dave
> Should be pretty straightforward, limit the charge current to a milliamp
> or two - then the battery will not be overcharged or stressed (presume
> power outs are infrequent enough to allow slow trickle charge when power
> OK?).
> The diode should only need to be an 1N4148 or similar, resistor power
> should be small if charge current low.
> But how long will NiCads last ? Probably only a couple of years max.
> It's like the ones in phones I guess.
> hope this helps
> Neil

Unfortunately constant trickle charging of small NiCads, even at maybe 1 or
2 mA, will actually effect their life. I have used them in domestic heating
controllers, and found that the effective capacity drops with time due to
the constant overcharge, and also some cells eventually fail due to
dendritic growth. The cell ends up shorting itself out. We used many tens of
thousands of small button cells (100mAhr) and found that some cells would
fail after maybe two years, even though the manufacturer would claim five
years. We then changed to alkalines which with proper circuit design, i.e.
no drain unless the mains failed, looked to be heading for five years of use

before changing.
So my advice would be to try and keep your NiCad charging current as low as possible.
--
JohnS

2598. Stuck in time warp.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: BOB DUCKWORTH <bob@atl.org>
Message-ID: <37D4B68A.CB3@atl.org>
Source record: 67148

I am looking for a couple of transmitting triodes from
late 20's or early 30's. something like 10's or 25T's or ?????
I could use 45 or 245 but the audio crowd has driven the $ of these
beyond practicality for HB TX use. Fortunately most of the audio
guys shun TX tubes. So, if anyone out there has some early TX triodes
that are not too dear, please write. Could also use a pair of
816.

-bob

2599. Re: Transverter for 220

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: dpotter@bbn.com
Message-ID: <37d4fda1.3506200@news>
Source record: 67149

On Sat, 04 Sep 1999 01:03:11 -0400, rod <rodwall@prodigy.net> wrote:

>Hello,
>
> Does anyone have any ideas to build a transverter for the 220 MHz
>band? I would like to use my HR2510 as the exciter for use as all mode.
>
> Thanks in advance.... 73 Rod KB8DNS

check out the kits from Hamtronics. http://www.hamtronics.com

There are also no-tune designs you can find with a web search.

73

Dave
K1MBO

2600. Re: Advise sought on Tubes - Please

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <7r32dcean1@nnrp1.deja.com>
Source record: 67150

In article <UQDA3.45$9v5.1228@news.rdc1.ct.home.com>,
kb1dwn@qsl.net (KB1DWN) wrote:
> Hello all,
>
> Anyone know where I can get 4 6lQ6 (sweep tubes ?) please advise.
>
> TNX & 73's de KB1DWN (Also VU2ATO)
>
>

Dear friend, 73's.

You find them in http://www.tubeworld.com/tubes.html (new or used).

Good luck,

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2601. FA: vacuum caps, air caps, and roller inductor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: Bill Clarke <w2blc@bigfoot.com>
Message-ID: <7r30cm$5de$1@holly.prod.itd.earthlink.net>
Source record: 67151
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

All items with pictures so you can see what you are getting.

Jennings vacuum caps at
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=158364586

air variable caps at
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=158366982

Johnson roller inductor at
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=158369353

Bill W2BLC

2602. Re: Extending backup battery life?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <37D4D572.7740@rica.net>
Source record: 67152
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

JohnS wrote:

> Unfortunately constant trickle charging of small NiCads, even at maybe 1 or
> 2 mA, will actually effect their life. I have used them in domestic heating
> controllers, and found that the effective capacity drops with time due to
> the constant overcharge, and also some cells eventually fail due to
> dendritic growth. The cell ends up shorting itself out. We used many tens of
> thousands of small button cells (100mAhr) and found that some cells would
> fail after maybe two years, even though the manufacturer would claim five
> years. We then changed to alkalines which with proper circuit design, i.e.
> no drain unless the mains failed, looked to be heading for five years of use
> before changing.
> So my advice would be to try and keep your NiCad charging current as low as
> possible.
> --
> JohnS

Have you ever looked into how well alkalines last with a very tiny (say
.01 to .1 ma) continuous charge? Is there sometning about the
construction of alkalines that makes this a bad idea, like no vent and
possibility of rupture? What I am after i a charge current that just
barely exceeds the internal self discharge rate.

John Popelish

2603. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: "Edward J. Engelken" <ed_engelken@my-deja.com>
Message-ID: <7r37jtihp1@nnrp1.deja.com>
Source record: 67153
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

>
> I am wondering if anyone under the age of 50 is building radios
anymore, or
> is the "magic" of building a one-tube regenerative receiver using a 30
or
> '99
> tube reserved just for those of us with AARP membership.

Pete:

After 10 days and over 200 posts to this thread it has become obvious
where all the builders are. They are spending all their time on the
Internet!

Best Regards,

Ed

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2604. Re: Extending backup battery life?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <37D513F4.29EC8164@erols.com>
Source record: 67154
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

> What I am after i a charge current that just
> barely exceeds the internal self discharge rate.
>
> John Popelish

John, what kind of life are you wanting to get out of these batteries?
The self discharge rate on Alkalines is such that you should get one or
more years of service if there is no current being drawn. Lithium should
get you 10 years.

2605. Re: Spread spectrum digitized voice in the 960MHz (around there) band

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <37D515C2.41C6@eece.maine.edu>
Source record: 67155

Robert Casey wrote:
>
> Have heard that some cordless phones in the 900MHz area are using digitized
> voice over spread spectrum, 1MHz wide spread. My company (which shall
> remain nameless) is making ICs that are transcievers on a chip, but
> only at the milliwatt level. Seems that we as hams could develop a new
> mode with these chips, and appications could also be packet as well as
> digitized voice. We'll need preamps and "linears" for these chips though.
>
> Is spread specturm of 1MHz wide legal up in around 960MHz (forgive my forget-
> fullness on where the ham band exacly is, I'd look it up before operating
> though)?

Just how does spread spectrum work? I keep hearing about it, but I am
in the dark about it's encoding/decoding.
--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

2606. Re: Extending backup battery life?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: voicebox@dnai_dnai.com
Message-ID: <voicebox-0709990658430001@192.168.1.2>
Source record: 67156
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

In article <7r10jpfgi1@autumn.news.rcn.net>, "Bob Lewis"
<aa4pb@erols.com> wrote:

> Depends on what you mean by "regularly". If properly designed, these
> devices should draw very little from the battery while AC power is
> applied. I typically change mine once a year. Now if you get lots of
> power outages then the batteries get used more.

=====

That's just the problem! The devices AREN'T designed "properly". The
batteries run down several times a year because the power supply doesn't
trickle charge the batteries; it doesn't even supply power to the memory
device. The battery is the sole backup power for the memory device (in an
alarm clock and an answering machine, to give two examples) and uses up
several batteries (2-3) a year.

Dave

--
Dave Carpenter
Sound Logic

Note: "From" address is invalid.
To reply, delete duplicate portion from the address:
< voicebox@dnai_dnai.com >

2607. TenTec Transverter 2to 6 meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: chrism1111@aol.comspamless
Message-ID: <19990907100849.17665.00004418@ng-fd1.aol.com>
Source record: 67157

Hi all

I know it is not a homebrew, but I believe some people here may have put a few together. ZOOOOOee..

how good are they? good clean sound/signal on transmit. How good is receive. (clarity, noise). I a will be buying their new 2/6 all mode when they ship it (maybe), but I would like a kit to build and 6 meters would be very nice to have. When the wife gets her ticket we could use it betwixt work and home and around town. With a plethora of RS 202 units collecting static charges it could be interesting.
For free plans and info on solar oven's water and purifiers, that actually work, see<http://www.accessone.com/~sbcn/index.htm>
==========
Sufficiently advance technology is indistinguishable from magic..

2608. Re: Crystal Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: rick@area.com
Message-ID: <7r39u3sub1@vax.area.com>
Source record: 67158

Marine radios generally use a 16.9 MHz IF for simplex and a 21.4 MHz IF for duplex (shore stations owned by the phone company). Some radios use these IF's for transmit as well because then you only need one crystal for each channel instead of separate transmit and receive crystals. Motorola uses 16.8 MHz for the IF.

You might be wondering why the IF is 16.9 MHz not 10.7 MHz. The original marine VHF radios 30 years ago used 10.7 MHz. However, there were some combinations of simplex and duplex channels which had a spacing of 5.35 MHz, or half the 10.7 MHz IF. Strong shore stations caused bad intermods in these situations. This was first discovered by Al Bennett (N6BFZ) of Konel. He asked about pricing of crystal filters for frequencies other than 10.7 and was told they were the same up to 17 MHz at which point they cost more. So he chose 16.9 MHz and eventually everyone else copied him (except Motorola who almost copied him). And now you know the rest of the story...

Rick Karlquist N6RK
rick@area.com

[In a previous life I worked for Konel]

2609. Re: HELP! Tube Guru's Advice Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <37D52BF4.78513032@midwestmicro-tek.com>
Source record: 67159

To all you guys who've been helping me with this thanks a lot and here is the weekend update.

I spent all day saturday working with the rig and after exausting all other possibilities I've come to the conclusion that I managed to fry both of the 1625 finals that I had. I ordered two more this morning and I should get them by early next week If anyone is still interested in my TX by then I'll post a new update. Thanks for your time and advice!

Rick

2610. List Of Stamp Applications [990907]

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: cjX@hth.com
Message-ID: <37d52c38.50925184@news.sverige.net>
Source record: 67160
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

Hi,

Below is the latest index of L.O.S.A and you can download the
complete L.O.S.A from the following places...

WWW:

http://www.hth.com/losa.htm

FTP:

ftp://ftp.parallaxinc.com/pub/text/losa.txt

1.0 What is L.O.S.A all about?

This list was started back in -95 when I heard about (more or less)
uniqe problems that was solved by using a BASIC Stamp. Especially Guy
Gustavson's story (see #001) about how he saved his beloved cat Kesha
gave me the inspiration to start writing L.O.S.A. I hope Kesha still
is alive and having a great life. Now 4 years later there are 150+
applications described and I hope you will enjoy reading all (or
parts) of them.

The main purpose of this list is to get an idea of what other people
are using their BASIC Stamps for and maybe get some inspiration or
hints for your own projects. Some of the projects described in the
list also have links to source code and schematics for download.

1.1 How can I contribute to this list ?

If you have done something (big or small) with the BASIC Stamp that
you are willing to tell others please use the form given below and
write a short description, nothing fancy is needed just a simple
explanation. If you have source code to share that's even better but
it's not necessary.

Visit the following Web site and fill in the contribution form...

http://www.hth.com/losa.htm

1.2 Why are some links dud's ?

Since people changes their e-mail and web addresses some links may be
dud's. If you previously contributed with one (or more) of the
applications please take a quick look and check your e-mail address

and/or web-links. I'm only able to keep the list updated if I'm
informed about changes, thanks in advance.

1.3 List of contributions

> = Indicates a new or updated application since last time.

001 Robo-Cat
002 Logic Rudder
003 Interfacing MAX186 8 channel 12bit A/D
004 Scrolling LED Sign
005 Tone Decoder
006 Pager
007 HexWalker Mobile Robot
008 Robo Bug
009 EXPBOT Robot controlled by Stamp
010 Andrews Ever Evolving Lego Robot
011 Factory Monitoring System
012 Wave to the Cats/Desk Temperature
013 Gamer's Die Roller
014 Stamp II Serial I/O
015 Voice and CW Fox Hunt Transmitter IDer
016 Lift (elevator) Controller
017 Paging with the Stamp
018 Switching Sytem
019 Door Entry Card Reader
020 Telephone Card Reader
021 DTMF Decoder
022 Ion chamber radiation monitor
023 Barn Monitor
024 Dallas one-wire interface
025 Sculpture control
026 Commercial clothes dryer controler
027 Morse Code Keyer
028 Traffic Light Controller
029 Automotive Lamp Control
030 Single Switch Scanning Device for Disabled
031 Bell timer for school bell control
032 RIMS controller for beer making
033 Stamp 1 and ISD 25XX Sound Chip Application
034 Camera Wireless Controller
035 Simple Battery Check using the BS2-IC
036 Photocell MIDI Controller
037 DCF-Clock
038 Radio-controlled Digital Clock
039 Weather Station I
040 Private Aid To Navigation
041 Stamp II in Space
042 MAT32 long integer math routines
043 Distinctive Ring Detector

044 Extended Stamp Memory
045 Debate Stoplite
046 Digital nametag
047 ST506 Disk Seeking Demo Controller
048 Robot: Multi-Stamps Communicate via Shared Memory
049 NiMH Battery Charger/Conditioner
050 555 Timer as A/D Converter
051 Bits of Light
052 Process Control
053 Near Space Capsule
054 PIC Debugger
055 DS1820 Temp Sensor
056 Air muscle hexapod robot
057 Lights
058 Caller-ID Interface
>
059 Wind speed and wind direction measurement device
060 Calibrated Dust Feeder for Air Cleaner Tests
061 Use of a Serial EEPROM as a Lookup Table
062 Displaying Quantities on a 200 mV Panel Meter
063 Programmable Proportional Air Valve
064 Basic Stamp machine control application
065 Compass Interface for Navigation
066 Truck + ? identification
067 Meteoreological Station
068 Stamp Controls Electronic Tester for flex circuits
069 Game Timer
070 Photoghrapic light meter
071 Data System Remote Control on unmanned aircraft
072 Speaking Instructor
073 Small Mobile Robot
074 R/C helicopter altitude control unit
075 Automobile Rally Odometer Interface to Laptop
076 LCD drivers
077 Stamp I / PC Interface Demo
078 Stamp Photo Meter
079 Stiquito(TM) 97 HexaPod Robot
080 XRaCS DTMF Radio X10 Control with Voice Response
081 Interfacing the Basic Stamp 2 with I2C Devices
082 The WeatherStamp Meteorological Station
083 Maxxum 7000 Remote Release Widget
084 Xs And Os games for college project
085 Stamp II Mouse Emulator (Version 6)
086 Basic Alarm System
087 Interfacing with a Printer
088 Dinosaur Quiz Game
089 Chemical Injection System
090 RS-232 connections between Stamp and host
091 Video Character Overlay Generator Controller
092 Suction tube depth measurement display
093 Electronic Compass with Basic Stamp 2

094 Event Logger with 8K 24C65 I2C memory
095 Fixing the depth of a suction-pipe with the BS 2
096 Superchaser
097 Corky'z Robotz
098 Cloudrider: analog network with BS2 and BS1's
099 Yet Another Real Time Clock, Dallas DS1287
100 Amateur RadioSatellite Tracking (Az/El) Controller
101 DTMF Decoder
102 PC to STAMP via RS232 routines
103 PC Frequency Counter
104 Sub-Millisecond Reaction Timer
105 Computerized Dynamics Cart
106 Ham Radio Interface Using the Basic Stamp 2
107 Remote tempsensors communicates over the power lines
108 Interfacing a BASIC Stamp to SRAM
109 Stepper controller pulse generator
110 Automatic rang caller
111 Automatic emergency broadcast system
112 BASIC Stamp I as an welding machine
113 PLM-24 to X-10 Gateway
114 Semi-Automated Combusitible Gas Indicator Tester
115 Counter-rotating Servos
116 Joystick Controlled Robotic Arm
117 Anti Traction Control Device
118 Cat Chasing Lego Robot and Other Circuits
119 Camlift
120 Control 15 Servos in Parallel
121 8 Digit "Smart" Alphanumeric Display
122 Cycle Testing AC Motor Controller
123 Controlling an LCD by BS2 via I2C Bus
124 The Newcastle Robotic Bilby Project
125 The EM1 (Electric mule)
126 Distance Measurement with GP2D02 SHARP Sensor
127 TI82 Interface
128 Operator Interface for Multiple Stamps
129 Infrared Glucose (Blood Sugar) Monitor
130 Fox For ham radio or Automated Propogation Beacon
131 GPS Data Overlay on Video
132 10Base-T Cable Tester
133 Kodak DC40/50/120 camera control
134 Implement S.N.A.P network protocol in a BASIC Stamp
135 Stamp/PC RS-485 Network
136 Easy-to-build BS keyboard/display w/ 10 keys/LEDs
137 Joystick control: BS2, 2 motors & 2 HBridges
138 Basic Stamp 2 Mobile Robot
139 Home Automation and Security System
140 UM3750 Read Code
141 Magnetic Stripe Reader
142 Telephone Remote Control and Remote Alarm
143 Tube preamplifier control section

144 Interrupt for PBASIC
145 dLOG
146 Compass
147 BS-2 serial VISCA interface
148 Servo tester
149 Small-bot
150 Repeater Controller
151 ESD Tester for Foot and Wrist Straps
152 Beneficial Insect Dispenser
153 Bugsey
154 Vector2X Compass Module with the new BS2SX Stamp
155 Serial Mouse to BS2 Interface
156 Radio Repeater Controller
157 Keypad reader
158 Automatic Vehicle Location / Mobile Asset Tracking
159 Interfacing a 4X4 keypad to the stamp II
160 Interfacing a Max186 8 Channel ADC to a stamp II
161 Realistic Manual Shifter for PC Driving Games
162 Contact ID handshake board
163 Basic Stamp II I2C protocol for several ICs
>\# 164 Home Controller
>\# 165 Coinmachine
>\# 166 Navigation system for the blind
>\# 167 Robot Fighters
>\# 168 Octobot
>\# 169 SPI interface chip

Regards,

/Christer

[NOTE: Clear the "X" from my e-mail address if you want to e-mail me]

-=-
* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
-=-
Send and receive serial data over the power lines... For more info
about the PLM-24 Power Line Modem go to http://www.hth.com/plm-24/
-=-

2611. Re: Extending backup battery life?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: voicebox@dnai_dnai.com
Message-ID: <voicebox-0709990904470001@192.168.1.2>
Source record: 67161
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

In article <7r10jpfgi1@autumn.news.rcn.net>, "Bob Lewis"
<aa4pb@erols.com> wrote:

> Depends on what you mean by "regularly". If properly designed, these
> devices should draw very little from the battery while AC power is
> applied. I typically change mine once a year. Now if you get lots of
> power outages then the batteries get used more.

=====

That's just the problem! The devices AREN'T designed "properly". The
batteries run down several times a year because the power supply doesn't
trickle charge the batteries. The battery is the sole backup power for the
memory device (in an alarm clock and an answering machine, to give two
examples) and uses up several batteries (2-3) a year, even though the a/c
power never fails.

Dave

--
Dave Carpenter
Sound Logic

Note: "From" address is invalid.
To reply, delete duplicate portion from the address:
< voicebox@dnai_dnai.com >

2612. Blown VX-1R

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: Robert Lyons <boblyons@umich.edu>
Message-ID: <37D54234.5BD43C33@umich.edu>
Source record: 67162
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I've often seen postings suggesting that SMA circuits are easier to work on than ordinary thru-the-board circuits. I'm about to find out, I guess.

I've got a Yaesu VX-1R that's showing serious deafness on the 2M band. It went out sailing with my daughter, and went into the drink when she dumped the boat. The plastic bag it was in leaked, and she transmitted on it before realizing it was wet. I dried it out and it seems to transmit OK on 2M and 440, and receives on 440, but it's now deaf as a post on 2M. Receives a 5W signal only if within 5 feet.

Yaesu "kindly" offered to repair it for $225. Note that new radios cost only $200 or so now, so I declined, and bought a new one instead. I just can't throw out anything electronic, however. I'm sure you all know the feeling. :) So I'm going to try to fix it. My best guess is that an RF-amp in the 2M front-end is blown. Hopefully nothing else.

Two questions, therefore:

- where do I get a heat gun appropriate for SMT work? I seem to recall Gary Coffman recomended a specific unit before. Other tools I might need or want?

- Will I be able to find replacement parts? I'm only familiar with standard components with leads as long as toothpicks. Does Yaesu sell replacement components? someone else?

Thanks for any advice.

Bob, KI8AB

2613. Re: Blown VX-1R

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: Nick Caruso <nick.caruso@software.com>
Message-ID: <37D54E8A.94089784@software.com>
Source record: 67163

Robert Lyons wrote:
>
>
> Two questions, therefore:
>
> - where do I get a heat gun appropriate for SMT work? I seem to
> recall Gary Coffman recomended a specific unit before. Other
> tools I might need or want?
>
> - Will I be able to find replacement parts? I'm only familiar with
> standard components with leads as long as toothpicks. Does Yaesu
> sell replacement components? someone else?
>

I believe people have recommended the Weller portasol and similar butane-powered soldering irons which have hot-air blower attachments. These hot air blowers are advertised for shrinking heat-shrink tubing and not for soldering, as far as I can tell.

I have one of these (a PSI-100) and have some questions about SMD soldering also.

I have tried desoldering some parts from defunct pieces of consumer electronics, to get a feel for how much heat was required to melt the solder, etc. In at least one case, I noticed after removing a few chip parts that the circuit board itself had warped. !!!

And some items, like large-value SMD caps (yellow plastic), charred a bit before they would detach from the circuit board.

Before I launch into a large SMD project, I'd like to know a bit more about how to use the hot air source properly:

Do I need to measure the temperature at the exhaust? How critical is it?
Are some types of SMT devices not suitable for hot-air soldering? etc.

QST has run a series of "don't be afraid of SMD" articles with an associated small project. I'll definitely be
going back and re-reading those before I try anything more ambitious.

Thanks and 73

nick caruso
kb1dej

2614. Re: Crystal Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: toecapp@aol.comnospam
Message-ID: <19990907135909.01622.00003374@ng-fs1.aol.com>
Source record: 67164

Thanks for the info........Craig

2615. Re: Blown VX-1R

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: Robert Lyons <boblyons@umich.edu>
Message-ID: <37D55C0B.6735E07A@umich.edu>
Source record: 67165

Nick Caruso wrote:
>
> QST has run a series of "don't be afraid of SMD" articles with an associated
> small project. I'll definitely be
> going back and re-reading those before I try anything more ambitious.

Nick, do you recall roughly when those articles were published?
Thanks.

- Bob, KI8AB

2616. Re: Extending backup battery life?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: davem@groucho.cs.ubc.ca
Message-ID: <7r3n2d$odm@groucho.cs.ubc.ca>
Source record: 67166
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

John Popelish <jpopelish@rica.net> writes:

>Have you ever looked into how well alkalines last with a very tiny (say
>.01 to .1 ma) continuous charge? Is there sometning about the
>construction of alkalines that makes this a bad idea, like no vent and
>possibility of rupture? What I am after i a charge current that just
>barely exceeds the internal self discharge rate.

Apparently if the terminal voltage of an alkaline goes above about 1.65 V,
you get electrolysis happening, which produces gas. With no vent,
the cell may burst, or it may decide to slowly leak its strongly alkaline
electrolyte. Or it may just vent the gas, which is hydrogen, and
ultimately provide fuel for an explosion. Or the gas may dissipate,
but you're still drying out the cell by electrolyzing away its water,
so the cell will eventually fail.

So, if you really want to "trickle charge" an alkaline, you should use
a regulated voltage, and equalizing resistors to keep the voltage
evenly spread across the cells if they're in a series string. With
a 9 V battery, you can't do that, since the inter-cell connections
are internal.

But why try to trickle charge anyway? Alkalines still have most of
their capacity available after 5 years on the shelf, as long as no
current is drawn from them. I have several devices with 9V backup
batteries, and they virtually *never* need changing unless the AC power
has been off for many hours - and then only the clocks, which run an
oscillator from battery power.

It sounds like what you really need is to just prevent current from
being drawn from the backup battery while the AC supply is live.
In many cases, you should be able to do this with two diodes and
a resistor. One diode goes in series with one battery lead, and
allows discharge but not charge. The other diode is used to feed
power from the power supply to the point that the battery used to
provide power to, with a resistor to drop the voltage if necessary.
So now that point in the circuit can be supplied with power from
either the main power supply or the battery, whichever has the higher
voltage, without current feeding from one source to the other.

No drain from the battery in normal operation, but no worries about
charging the battery either. This is how these circuits should be
designed in the first place.

Dave

2617. Re: Extending backup battery life?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: szekeres+@pitt.edu
Message-ID: <7r3o0s$73m$1@usenet01.srv.cis.pitt.edu>
Source record: 67167
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

In article <37D513F4.29EC8164@erols.com>, Bob Lewis <aa4pb@erols.com> wrote:
>> What I am after i a charge current that just
>> barely exceeds the internal self discharge rate.
>>
>> John Popelish
>
>John, what kind of life are you wanting to get out of these batteries?
>The self discharge rate on Alkalines is such that you should get one or
>more years of service if there is no current being drawn. Lithium should
>get you 10 years.

Now wasn't that drastically increased several years ago, to something
like 6 or 7 years for alkalines?

I think it was on another group where an interesting URL was pointed out,
not seemingly related to this thread, but interesting.

http://www.enteract.com/~marnow/uk/NASA_Vargo_Start.html

I also found what seemed to be the most recent Ni-Cd FAQ.

http://www.wppltd.demon.co.uk/html/batteries.html

2618. Re: Extending backup battery life?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: szekeres+@pitt.edu
Message-ID: <7r3oal$73m$2@usenet01.srv.cis.pitt.edu>
Source record: 67168
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

In article <7r3n2d$odm@groucho.cs.ubc.ca>, davem@groucho.cs.ubc.ca (Dave Martindale)
wrote:
>John Popelish <jpopelish@rica.net> writes:
>
>>Have you ever looked into how well alkalines last with a very tiny (say
>>.01 to .1 ma) continuous charge? Is there sometning about the
>>construction of alkalines that makes this a bad idea, like no vent and
>>possibility of rupture? What I am after i a charge current that just
>>barely exceeds the internal self discharge rate.
>
>Apparently if the terminal voltage of an alkaline goes above about 1.65 V,
>you get electrolysis happening, which produces gas. With no vent,
>the cell may burst, or it may decide to slowly leak its strongly alkaline
>electrolyte. Or it may just vent the gas, which is hydrogen, and
>ultimately provide fuel for an explosion. Or the gas may dissipate,
>but you're still drying out the cell by electrolyzing away its water,
>so the cell will eventually fail.
>
>So, if you really want to "trickle charge" an alkaline, you should use
>a regulated voltage, and equalizing resistors to keep the voltage
>evenly spread across the cells if they're in a series string. With
>a 9 V battery, you can't do that, since the inter-cell connections
>are internal.

I never tried it, but with .1 ma. trickle, I doubt if
it would ever reach that 1.65v. I guess it would
depend on the size of the battery.
greg

2619. SMT soldering w/hot air sources

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: Nick Caruso <nick.caruso@software.com>
Message-ID: <37D57C96.D483D744@software.com>
Source record: 67169

REposting under new subject: since posting this I've been told (in email) that it's a bad idea to even try using a hot air source like a weller portasol to do SMT work. Anyone else want to comment on this?

Robert Lyons wrote:
>
>
> Two questions, therefore:
>
> - where do I get a heat gun appropriate for SMT work? I seem to
> recall Gary Coffman recomended a specific unit before. Other
> tools I might need or want?
>
> - Will I be able to find replacement parts? I'm only familiar with
> standard components with leads as long as toothpicks. Does Yaesu
> sell replacement components? someone else?
>

I believe people have recommended the Weller portasol and similar butane-powered soldering irons which have hot-air blower attachments. These hot air blowers are advertised for shrinking heat-shrink tubing and not for soldering, as far as I can tell.

I have one of these (a PSI-100) and have some questions about SMD soldering also.

I have tried desoldering some parts from defunct pieces of consumer electronics, to get a feel for how much heat was required to melt the solder, etc. In at least one case, I noticed after removing a few chip parts that the circuit board itself had warped. !!!

And some items, like large-value SMD caps (yellow plastic), charred a bit before they would detach from the circuit board.

Before I launch into a large SMD project, I'd like to know a bit more about how to use the hot air source properly:

Do I need to measure the temperature at the exhaust? How critical is it?
Are some types of SMT devices not suitable for hot-air soldering? etc.

QST has run a series of "don't be afraid of SMD" articles with an associated small project. I'll definitely be
going back and re-reading those before I try anything more ambitious.

Thanks and 73

nick caruso
kb1dej

2620. Re: Extending backup battery life?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: JohnS <Elektrode@remove.clara.net>
Message-ID: <xTeB3.13131$Ze2.392609@nnrp3.clara.net>
Source record: 67170
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

John Popelish <jpopelish@rica.net> wrote in message
news:37D4D572.7740@rica.net...
> JohnS wrote:
snip
> Have you ever looked into how well alkalines last with a very tiny (say
> .01 to .1 ma) continuous charge? Is there sometning about the
> construction of alkalines that makes this a bad idea, like no vent and
> possibility of rupture? What I am after i a charge current that just
> barely exceeds the internal self discharge rate.
>
How would you know what the internal self discharge rate is? The best
answer really is to alter the circuit if you can to prevent current drain
whilst the mains is on. You can expect the batteries to last at least five
years as long as you don't keep having power failures, in fact you are more
likely to have problems from the battery contacts than the batteries, but
thats another story.
--
JohnS

2621. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: King Pineapple <craigseuf@hotmail.com>
Message-ID: <7r3vpe$k6q$1@news.monad.net>
Source record: 67171
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Edward J. Engelken wrote in message <7r37jtihp1@nnrp1.deja.com>...

|After 10 days and over 200 posts to this thread it has become obvious
|where all the builders are. They are spending all their time on the
|Internet!

I didn't read any of the thread. Did anyone wheel out that honored old
phrase "If you build it they will come"?

2622. Re: Source for Precision SMD Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: Tom Bruhns <tomb@lsid.hp.com>
Message-ID: <37D592B2.85D0DFA8@lsid.hp.com>
Source record: 67172
Cross-posted to:
rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design,sci.electronics.misc,sci.electronics.repair

Peter wrote:
>
> How can one get 1% at 1.5pF, with a real cap soldered to a real PCB,
> with some real tracks leading up to it?

Very carefully? What sort of capacitance variation does one get with a couple thousandths of an inch tolerance on the pad spacing and width? How closely is the substrate dielectric constant maintained? I imagine the solder fillets don't matter a whole lot in this case, being behind the capacitor end metalization, but even things like the humidity and pressure of the surrounding air make some difference <not normally 1% but measurable>.

Cheers,
Tom

2623. Re: Extending backup battery life?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <37D5586F.4BEA@rica.net>
Source record: 67173
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

Bob Lewis wrote:
>
> > What I am after i a charge current that just
> > barely exceeds the internal self discharge rate.
> >
> > John Popelish
>
> John, what kind of life are you wanting to get out of these batteries?
> The self discharge rate on Alkalines is such that you should get one or
> more years of service if there is no current being drawn. Lithium should
> get you 10 years.

I have no perticular requirement, but was just wonderiing if anyone has
experience with how much the normal shelf life of alkaline cells might
be extended by trickle charging. If it could, say, double their
expected shelf life, they could very easily compete with lithiums where
a trickle is avaliable most of the time and long life is a requirement.

John Popelish

2624. Re: Extending backup battery life?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <37D5589E.629F@rica.net>
Source record: 67174
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

greg szekeres wrote:

> Now wasn't that drastically increased several years ago, to something
> like 6 or 7 years for alkalines?
>
> I think it was on another group where an interesting URL was pointed out,
> not seemingly related to this thread, but interesting.
>
> http://www.enteract.com/~marnow/uk/NASA_Vargo_Start.html
>
> I also found what seemed to be the most recent Ni-Cd FAQ.
>
> http://www.wppltd.demon.co.uk/html/batteries.html

Thanks for the URLs. Very interesting stuff.

John Popelish`

2625. Re: Extending backup battery life?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <37D56194.28B3@rica.net>
Source record: 67175
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

greg szekeres wrote:
>
> In article <7r3n2d$odm@groucho.cs.ubc.ca>, davem@groucho.cs.ubc.ca (Dave Martindale)
wrote:
> >John Popelish <jpopelish@rica.net> writes:
> >
> >>Have you ever looked into how well alkalines last with a very tiny (say
> >>.01 to .1 ma) continuous charge? Is there sometning about the
> >>construction of alkalines that makes this a bad idea, like no vent and
> >>possibility of rupture? What I am after i a charge current that just
> >>barely exceeds the internal self discharge rate.
> >
> >Apparently if the terminal voltage of an alkaline goes above about 1.65 V,
> >you get electrolysis happening, which produces gas. With no vent,
> >the cell may burst, or it may decide to slowly leak its strongly alkaline
> >electrolyte. Or it may just vent the gas, which is hydrogen, and
> >ultimately provide fuel for an explosion. Or the gas may dissipate,
> >but you're still drying out the cell by electrolyzing away its water,
> >so the cell will eventually fail.
> >
> >So, if you really want to "trickle charge" an alkaline, you should use
> >a regulated voltage, and equalizing resistors to keep the voltage
> >evenly spread across the cells if they're in a series string. With
> >a 9 V battery, you can't do that, since the inter-cell connections
> >are internal.
>
> I never tried it, but with .1 ma. trickle, I doubt if
> it would ever reach that 1.65v. I guess it would
> depend on the size of the battery.
> greg

In the alarm clock I altered to trickle charge a 9V battery at about 3
microamp, the voltage equilibrates at bouut 9.56 volt (just checked to
make sure). But it is in a circuit that draws a continuous current and
my charger pulses in just a bit more on average than the drain, so it is
not strictly just charging, but cycling very shallowly. I have changed
this battery every few years, though it has never gone bad in service.

John Popelish

2626. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: Tim <ka8ddz@worldnet.att.net>
Message-ID: <37D59F3C.4573FE66@worldnet.att.net>
Source record: 67176
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

"Carl R. Stevenson" wrote:

My wife is from Mexico ... she claims that people from Spain

> (and other places ... Argentina in particular) "speak Spanish
> with funny accents." :-)

So is mine :)

Now with respect to the thread, Carl I agree with your comments regarding technology, keeping up, etc. I have built a couple one tubers for fun since I missed the days of tube rigs and wanted to get a taste of what it was. The biggest hurdle I see is that there was a time when you could build from scratch a rig that was commercial grade or close to it, if we look at the level of technology today it is near impossible for someone to just 'pick up' and start building using the current state of the art.

What I mean by this is, looking inside my radio today I see microprocessors, dsp's etc. and that's great but if I *really* want to build using state of the art chips I need to learn the current assembler or have a C compiler for the latest chip, I need a prom and or micro controller burner and the appropriate software much of which is specific to the controller or chip. I need to have boards etched to accommodate SMT parts because etching them and drilling them myself is beyond the capability of most homebrew PC board techniques, and even if I spend the money to invest in all this technology so I can further the state of my amateur homebrewing the chipsets I have purchased equipment for will be obsolete in a few years and I once again need to spend money to keep up. There was a time when one could have built from scratch a radio to match the quality of a Collins or other commercial grade radio, all you needed was the parts and a schematic. So in that time your building could have been state of the Art 'Collins' :)

Additionally, starting in this hobby as a Novice I've learned a whole lot over the years and just started hombrewing in the last 7 or 8 years I haven't the knowledge to build FT-1000 so I rely on existing schematics and available components none of which really use state of the art components so what else can I do?. I've built a few superhets using 602's but those of course are obsolete for all practical purposes. I'm just getting an understanding of mixing, LO's, VFO's so for now DSP's are a bit out of my league right now, but I'm trying.. While I'd love to understand the operation of all the chips in my Alinco DX-70 unless I'm somehow in the business the return on my invested time is very low. I think were

asking to much for radio amateurs to keep up with a technology that was once moving along with us but is now screaming ahead at light speed.

Your thoughts?

Tim ka8ddz

2627. Re: Blown VX-1R

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: Tim <ka8ddz@worldnet.att.net>
Message-ID: <37D5AA39.EA6A4DA3@worldnet.att.net>
Source record: 67177
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Robert Lyons wrote:

> I've often seen postings suggesting that SMA circuits are easier to work
> on than ordinary thru-the-board circuits. I'm about to find out, I guess.
>
> I've got a Yaesu VX-1R that's showing serious deafness on the 2M band.
> It went out sailing with my daughter, and went into the drink when she
> dumped the boat. The plastic bag it was in leaked, and she transmitted
> on it before realizing it was wet. I dried it out and it seems to
> transmit OK on 2M and 440, and receives on 440, but it's now deaf as a
> post on 2M. Receives a 5W signal only if within 5 feet.
>
> Yaesu "kindly" offered to repair it for $225. Note that new radios cost
> only $200 or so now, so I declined, and bought a new one instead. I just
> can't throw out anything electronic, however. I'm sure you all know the
> feeling. :) So I'm going to try to fix it. My best guess is that an RF-
> amp in the 2M front-end is blown. Hopefully nothing else.
>
> Two questions, therefore:
>
> ?? - where do I get a heat gun appropriate for SMT work?? I seem to
> ????? recall Gary Coffman recomended a specific unit before. Other
> ????? tools I might need or want?
>
> ?? - Will I be able to find replacement parts? I'm only familiar with
> ????? standard components with leads as long as toothpicks. Does Yaesu
> ????? sell replacement components? someone else?
>
> Thanks for any advice.
>
> Bob, KI8AB

2628. Re: Blown VX-1R

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: Tim <ka8ddz@worldnet.att.net>
Message-ID: <37D5AB11.6A697AD5@worldnet.att.net>
Source record: 67178
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Sorry hit the send key by mistake. I don't have a lot of experience with this but I did have a similar situation where I did not have a chance to rinse the rig in fresh water before it dried, feeling gutsy I turned it on and found the radio acting really goofy after I gave it a good cleaning in fresh water and dried it it worked fine.

Tim

Tim wrote:

> ?
>
> Robert Lyons wrote:
>
> > I've often seen postings suggesting that SMA circuits are easier to work
> > on than ordinary thru-the-board circuits. I'm about to find out, I guess.
> >
> > I've got a Yaesu VX-1R that's showing serious deafness on the 2M band.
> > It went out sailing with my daughter, and went into the drink when she
> > dumped the boat. The plastic bag it was in leaked, and she transmitted
> > on it before realizing it was wet. I dried it out and it seems to
> > transmit OK on 2M and 440, and receives on 440, but it's now deaf as a
> > post on 2M. Receives a 5W signal only if within 5 feet.
> >
> > Yaesu "kindly" offered to repair it for $225. Note that new radios cost
> > only $200 or so now, so I declined, and bought a new one instead. I just
> > can't throw out anything electronic, however. I'm sure you all know the
> > feeling. :) So I'm going to try to fix it. My best guess is that an RF-
> > amp in the 2M front-end is blown. Hopefully nothing else.
> >
> > Two questions, therefore:
> >
> >??? - where do I get a heat gun appropriate for SMT work?? I seem to
> >?????? recall Gary Coffman recomended a specific unit before. Other
> >?????? tools I might need or want?
> >
> >??? - Will I be able to find replacement parts? I'm only familiar with
> >?????? standard components with leads as long as toothpicks. Does Yaesu
> >?????? sell replacement components? someone else?
> >
> > Thanks for any advice.
> >
> > Bob, KI8AB

2629. Re: Source for Precision SMD Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37D5B1A6.366D24DB@teleport.com>
Source record: 67179
Cross-posted to:
rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design,sci.electronics.misc,sci.electronics.repair

Whenever I find I have an unrealistic requirement like this, I consider it a sign that my design needs to be revised. Especially at the low end of this range, you won't find capacitors with anywhere near this tolerance. For one thing, it's extremely difficult to measure capacitors on the order of 1 pF with any accuracy due to fringing of the test probes of the test fixture (although I've done what I think was a reasonably good job of measuring down to a few tens of fF using microprobes and a very expensive self-zeroing HP impedance meter). Another problem is that traces to the capacitor and the body of the capacitor itself will typically have much more capacitance than a couple of percent of 1.5 pF. And these are likely to be not terribly stable, depending on the substrate material.

If I were you I'd take a careful look at my design to see what I've done to make this kind of tolerance necessary. If you're convinced you really need it, I think the only solution is variable capacitors, and keep the tweaking tool handy. Johanson makes some very nice small ones (9400 series). The smaller values are self-resonant at several GHz.

Roy Lewallen, W7EL

clifford kelley wrote:
>
> Hi,
>
> I am looking for precision (1% to 2%) SMD capacitors in the range of 1.5 pf
> to 20 pf in small quantities for an L band RF project.
>
> Any sugestions are most welcome.
>
> Cliff

2630. Re: SMT soldering w/hot air sources

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-07 00:00:00 UTC
From: N6BIU <spam@nospam.com>
Message-ID: <7r4fet$saq@dfw-ixnews14.ix.netcom.com>
Source record: 67180

I have done quite a lot of rework / repair on surface mount boards and I do not recommend using hot air. It is far to easy to heat up too much and cause many other components to unsolder and move around on the board.

The next main concern is heating up to the point of DAMAGING the board itself.

For most rework, I use two soldering irons. They serve well enough in unsoldering most small components.

As for the multi-pin integrated circuits, it depends on how many pins. One can generally assume that unsoldering a surface mount IC will destroy the IC.

Given that assumption, I often go in with a fine tip wire cutter and cut the pins on the IC. This has to be done carefully for fear of placing too much mechanical stress and ripping the pin/pad right off of the board.

With all that having been said..... Yes, I do sometimes use hot air.

I use regular tin foil to cover all the components except the precise part I want to remove. Usually, I use two layers of tin foil to improve the thermal shielding over the parts.

With the tin foil in place, I use a hair dryer. First, I take a pair of tweezers with fine tips and a curve towards the end.

By sneaking the very tip of the tweezers under a lead or two of the part I want to remove, I "catch" the tweezers so that they rest on the curved part and cause a SLIGHT upward push on the part.

Then, I blow the hot air on the part, making sure to keep the tin foil down over all the other parts. Eventually, the solder melts, and the tweezers fall down, popping the part up off of the board.

Keep in mind, the part, tweezers, AND tin foil are hot enough to burn your hands.

I grab the outside tips of the tin foil and quickly move it off to another part of my test bench which is covered in metal and will not suffer from the hot metal resting on it.

Something to watch for is when the part pops off, and then the leads fall back and attach into the solder. I usually keep another pair of tweezers at hand, so I can reach into the hot air and GENTLY lift the part out.

Watch out, it is likely that some other parts have soft and/or melted solder and it is very easy to nudge them and they will shift off of their pad to create shorts and stuff.

As I said, hot air is a risky method.... I much prefer the two soldering irons in general.

Jim
N6BIU

jpennell

at ix dot netcom dot com

Yeah, my EMAIL is scrambled to keep those SPAMBOTS from finding it.....

2631. M54826P Chip needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-08 00:00:00 UTC
From: robertc908@aol.com
Message-ID: <19990907224449.12557.00003536@ng-fp1.aol.com>
Source record: 67085

I need a M54826P frequency counter chip for a DX-302. If you have one please advise cost or swap?

73's
Bob, W4RLC (formerly WA7OGU)

2632. Re: Blown VX-1R

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-08 00:00:00 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <O6nB3.20756$ok3.6055@news.rdc1.il.home.com>
Source record: 67086
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

The number one rule for wet electronics is GET THE BATTERY OUT IMMEDIATELY.

Corrosion is drastically slowed, and you have a chance to save it. If it was dunked in salt water, then rinse it in fresh, distilled if possible.

Then dry it out, use heat if available, but no more than say 110F or you risk warping the plastic.

Most electronics made is washed in water at the end of the assembly. It's de-ionized water, but it's still water.

2633. SPREAD SPECTRUM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-08 00:00:00 UTC
From: frederic.merle@wanadoo.fr
Message-ID: <37d60361.57958388@news.wanadoo.fr>
Source record: 67087

Hi,!!

Please confirm if there is a newsgroup for Spread spectrum.?
Many thanks for your help.

Bst Rgds.

2634. Re: SMT soldering w/hot air sources

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-08 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <37D60BCE.2D7525F7@corecomm.net>
Source record: 67088

N6BIU wrote:
> As for the multi-pin integrated circuits, it depends on how many pins.
> One can generally assume that unsoldering a surface mount IC will destroy
> the IC.

One of the few tricks I know for SMT stuff is threading a thin wire behind
a row of pins, holding both ends of the wire, then pulling the loop of
wire through while the pins and solder are hot. Probably easier with hot
air but doable with an iron. It bends the pins a bit but the chips are
usually salvageable.

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

2635. Heathkit RG1

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-08 00:00:00 UTC
From: Harry Lythall <harryvpo@hotmail.com>
Message-ID: <7r5fe1$b7h@newstoo.ericsson.se>
Source record: 67089

Has anybody ever built one?
Do you still have the assembly manual & circuit diagram?
How much would you want for a copy of it?

Regards Harry

2636. Re: Blown VX-1R

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-08 00:00:00 UTC
From: Robert Lyons <boblyons@umich.edu>
Message-ID: <37D654AD.9924EF06@umich.edu>
Source record: 67090
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Tim wrote:
>
> Sorry hit the send key by mistake. I don't have a lot of experience with this
> but I did have a similar situation where I did not have a chance to rinse the
> rig in fresh water before it dried, feeling gutsy I turned it on and found the
> radio acting really goofy after I gave it a good cleaning in fresh water and
> dried it it worked fine.

A number of people have suggested this. The radio was dunked in fresh water, which reduces the likelihood of salt bridges, but does not eliminate them completely. I'll go ahead with a dw rinse. Thanks. The gentleman who mentioned that the battery should be removed - yes, I did remove the battery ASAP.

73 all

Bob, KI8AB

2637. Re: HELP! Tube Guru's Advice Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-08 00:00:00 UTC
From: troglodite@aol.com
Message-ID: <19990908084501.12504.00003055@ng-cg1.aol.com>
Source record: 67091

> Yeah, I did some damage learning
>how to build rigs. We all did.
>

Some of us couldn't afford plate current meters, so we tuned for "minimum glow." My 807 transmitter kept going for a year with a hole burned in it's plate. Rugged tube.

Doug Moore

2638. Re: Kenwood 140s Squelch

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-08 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <7r5u53icq1@nnrp1.deja.com>
Source record: 67092

In article <37d47543.7335028@news.rfci.net>,
n4zss@rfci.net wrote:
> I have a few ideas for installing a squelch in my Kenwood
> TS140s. If anyone has any mods of there own or any
> ideas I would like to hear them.... Thanks Mike
>

Dear Mike, 73's.

This rig has already a squelch circuit. Don't you like it?
Please, tell me one thing: which is the transmitting range of your
TS140-S? For example, on 40 m band, which is the minimum transmitting
frequency?
The band limiting of my rig seems not to be OK...And, despite the fact I
have followed the manual instructions, the minimum TX frequency is much
less than 7 Mhz (precisely 6.5 MHz, where filter stops operating).

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2639. 250 or 500Hz CW filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-08 00:00:00 UTC
From: Ray Dahlby <rdahlby@istar.ca>
Message-ID: <d5wB3.2152$eG5.193757@cac1.rdr.news.psi.ca>
Source record: 67093

Hi,

I am "restoring" a Yaesu FT901DM and want to install a CW IF filter. Yaesu no longer has any 500Hz units but they do have a 250Hz model ($47+shipping). I would appreciate any advice as to whether I should spring for the narrow unit or wait and try to locate a 500Hz filter. I have no experience with either of these filters.

Ray, VE7ITG

2640. Re: SPREAD SPECTRUM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-08 00:00:00 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <vhwB3.20872$ok3.6096@news.rdc1.il.home.com>
Source record: 67094

<frederic.merle@wanadoo.fr> wrote in message
news:37d60361.57958388@news.wanadoo.fr...
> Hi,!!
>
> Please confirm if there is a newsgroup for Spread spectrum.?
> Many thanks for your help.

Yes, but you have to re-assemble it with a special reader.
They put single bytes in every other newsgroup. :)

2641. College Electronic Textbooks FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-08 00:00:00 UTC
From: Ken Simpson <W8EK@fdt.net>
Message-ID: <IXwB3.5844$Dj2.336178@monger.newsread.com>
Source record: 67095

I have some modern Electronics Fundamental Text books
available. All are currently in use at various colleges.
They are all Associate Degree (Technician) level.

Electronic Principles by Malvino - 6th edition - 1999 - $ 30

Electric Circuit Fundamentals and Electronics Fundamentals
3rd edition by Floyd - 1995 - $ 30

Electronic Devices and Circuits by Hassul and Zimmerman -
Conventional Flow version - includes student workbook
I think this is a 1998 copyright, but it is still in shrink-wrap,
and I do not want to unwrap it to find out for sure. $ 30

Understanding Data Communications by Friend
The title says it all! $ 15

Understanding Communications Systems by Cannon
This one covers all sorts of communication systems -- not
just the data communications like the one above. $ 15

Modern Electronic Communications by Miller
Communications techniques, modulation, TV, antennas,
wave propagation, waveguides, fiber optics, noise,
2nd edition - 1983 - $ 15
3rd edition - 1988 - $ 18
4th edition - 1993 - $25

Intro to Digital Data Communications by Stein
Data formats, UARTs, RS-232, codes, telephone
systems, DTE/DCE interfaces, error detection, protocols,
multiplexing, packet switching, LANs $ 22

Digital Electronics by Uffenbeck
Covers from number systems to shift registers to Programmable
devices to interfacing $ 28

Electricity - Principles and Applications by Fowler
Part of McGraw Hill's "Basic Skills in Electricity and Electronics"
group of texts. Mainly theory, in easy to understand
explanations. $ 20

Prices do not include shipping from Florida. All books are
new. By the way, most of these are large, heavy books,
weighing about 6 pounds each, but can be shipped "Book
Rate" fairly inexpensively.

E-mail to W8EK@fdt.net

Thanks.

73,

Ken, W8EK

Ken Simpson
E-Mail to W8EK@fdt.net
Voice Phone (352) 732-8400

2642. Re: HELP! Tube Guru's Advice Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-08 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <37D69190.B043D2FC@midwestmicro-tek.com>
Source record: 67096

Thanks Jim!

Got 2 more tubes on the way. I have a tester too. I forgot all about it but I picked it up from my folks place this last weekend. It's a NRI profesional Model 70. Under settings for the 1625 they have "for 1600 series see suppliment". I never did get the suppliment (inherited the tester from a friends dead great uncle) got any idea where I might pick it up?

Thanks.

Rick

N2EY wrote:

> In article <37D52BF4.78513032@midwestmicro-tek.com>, Rick Haub
> <rhaub@midwestmicro-tek.com> writes:
>
> >I spent all day saturday working with the rig and after exausting all other
> >possibilities I've come to the conclusion that I managed to fry both of the
> >1625 finals that I had. I ordered two more this morning and I should get
> >them by early next week If anyone is still interested in my TX by then I'll
> >post a new update. Thanks for your time and advice!
>
> Rick,
>
> I've got some 1625s if you need more. I can test them on an I-177 tester, too.
>
> Main rig here runs a pair of 807s in the final, driven by a 12BY7. Puts out a
> little over a hundred watts on 80, 40, and 20. Yeah, I did some damage learning
> how to build rigs. We all did.
>
> 73 and keep us posted. Good luck!
>
> Jim, N2EY

2643. Help with VX10(4x)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-08 00:00:00 UTC
From: Bill McGill <g0dxb@bartg.demon.co.uk>
Message-ID: <936816221.13695.0.nnrp-03.c2de78a6@news.demon.co.uk>
Source record: 67097

Hello and thankyou for reading this message. I have been given a VX-10(4x) with a broken display. I have managed to fix the display and tested the transmitter, showing 462.416 on the frequency counter. Having looked at some literature on the net I was wondering if this rig would come down on to the amateur bands, or would I be wasting my time.
Any help and info would be greatly appreciated. Either to the newsgroup or direct to Bill g0dxb@bartg.demon.co.uk

2644. Re: Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-08 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7r6luh$61p$1@news1.fast.net>
Source record: 67098

```
-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

Rocci <rocci@worldnet.att.net> wrote in message
news:37CF952A.C502411@worldnet.att.net...
> After reviewing my own comments, as well as the other responses, I'd
like to
> throw out the idea of using the 'Weaver' method. The Weaver method
has
> traditionally been regarded as a mtehod for generating and
recovering SSB,
> but it is probably usable as a generalized HF receiver demodulator.
> The beauty of the Weaver method, as I see it, is that responses due
to
> signals outside the information bandwidth ('out of band') are
inherently
> filtered out and do not rely on complex phase and amplitude balance
in order
> to be rejected.
>
> Consider how the Weaver method works:
> A Weaver receiver is what I would call "Dual Direct Conversion".
> In a first set of I/Q mixers, the LO frequency is inserted not at
the
> carrier frequency, but in the middle of the information channel. For
SSB
> with a nominal 2.4 khz BW, this means the LO is injected at 1.2 KHz
above
> (or below, depending on which sideband contains the information) the
carrier
> frequency, and the outputs of the two mixers are each processed by
steep
> skirted 1.2 KHz lowpass filters. Voila! Any signals outside the
information
> channel are instantly eliminated from the equation. Only remaing
problem is
> that we have 'scrambled' the information we wanted to recover. In
the case
> of a 2.4 khz SSB audio bandwidth, information that was originally in
the
> range of 0-1200 hz is now at inverted at 1200-0 hz, and original
information
> in the range 1200-2400 hz is now frequency shifted down to 0-1200
hz. The
```

> whole audio spectrum has been folded in half on top of itself and
jamed into
> a 1200 hz bandwidth. Now comes the second half of the 'dual direct
> conversion process':
> In a second set of I/Q mixers, the folded and scrambled audio
spectrum is
> processed with a 1.2 khz quadrature LO, and the mixer outputs are
summed.
> This process restores the folded 1.2 kHz spectrum to its original
2.4 kHz
> shape.
>
> No complex wideband audio phase shifters were used in the entire
process.
> Also, any imbalances in the phase or amplitude of the I/Q processes
merely
> result in non-infinite suppression of the in-band components that
were
> 'folded' back into the spectrum. This is distortion, not
interference, and
> as long as it is 30 dB or so down it should be inaudible.
>
> So, it seems to me that the Weaver method makes the process of
building a
> direct conversion receiver more practical. With DSP lowpass filters
after
> the first set of I/Q mixers, and a complete DSP implementation of
the second
> I/Q process, many of the problems associated with hardware
imperfections
> should be alleviated. The only 'fly in the ointment' that I can see
is that
> AC circuit coupling will produce a small 'hole' in the frequency
spectrum at
> mid-way in the audio band. For speech and CW reception, this will
probably
> be in-audible. The only place I can see where it might be a problem
is when
> trying to pass data information through the de-mod.
>
> Comments?

Yes, if data is coded to produce a null in its spectrum at that point,
or at DC if the first mix (baseband folding) which you refer to is
replaced by I/Q data, then the problem goes away.

The Weaver architecture also lends itself well to the insertion
of a mid-band pilot (the carrier, reinserted at a controlled level)
which can be used in the receiver (with proper additional signal
processing to eliminate the effects of the mobile multipath channel
at VHF/UHF, eliminating the "picket fencing" effect. This same

technique can be applied to data, with the result that denser signalling constellations (m-QAM) can be employed, even in the multipath environment, since the "unfading" (feedforward signal regeneraton) permits "breaking through" the "irreducible error rate" shelving effect that the mobile multipath channel would otherwise introduce. Additionally, the same hardware cane easily be adapted under software control (in a DSP preferably) to transmit and receive FM.

See US Patent 4,726,069 which I hold. It effectively describes the most flexible, powerful architecture for a multi-mode radio with advanced capabilities as well as the ability to do "traditional" modes.

73,

- --
Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI
Fellow, Radio Club of America
Senior Member, IEEE
Member, ARRL
Join NCI - Hams for the 21st Century!
Help modernize ham radio and assure its future survival!
http://www.nocode.org

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=caDA
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2645. Re: Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-08 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7r6mi9aut1@news1.fast.net>
Source record: 67099

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-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

Richard Karlquist <rick@area.com> wrote in message
news:7qop51$qq9$1@vax.area.com...
>
> The Weaver system has its pluses for ham radio where you can stand
> some distortion of the recovered audio, which at least in analog
modes
> is the case. Nowadays, you can even build a DSP notch filter to
remove
> the midband whistle.
>
> However, the Weaver system is still direct conversion, with all the
> same problems any DC receiver potentially has: microphonics, ground

> loops, 1/f noise, the requirement for a DC coupled IF (probably
ruling
> out the use of triple balanced mixers), and conversion of AM noise
on
> the LO to bandband.

I respectfully disagree that the factors you mention above are
anything close to "show-stoppers."

> And you do have to worry about amplitude balance between the two
> paths to minimize audio aliasing.

One approach is to sample the IF, then use a Hilbert transform to
create the qquadrature channel. Thus, you have only one "LO"
and one "mixer" ...

> You also have to consider that if you are building a simple
receiver,
> you can probably use a CB radio IF filter to do the SSB so why
> bother with Weaver. If you are building a high performance radio,
> the low pass audio filtering is going to get complex so again you
> might be better off building a homebrew crystal filter from
microprocessor
> xtals.

Let me see you build a linear phase filter with a cutoff of 1800
dB/octave
using microprocessor crystals ... in DSP it takes some care in dealing
with quantization effects, roundoff, etc. but it's doable ... in the
analog
```

domain, forget it.

> Another isse, is: what are you going to do on xmit? If you use the
> Weaver system there, you have the whistle problem.

The "whistle problem" can be esily turned into an advantage,
using the carrier, inserted at a controlled level as a pilot tone
for feedforward signal regeneration ... providing AFC, doppler
tracking, and removing the effects of the "fast fading" caused
by the mobile multipath channel at VHF/UHF ... see
US Patent 4,726,069 as referenced in a previous post.

Your reference to the carrier supression problems which "killed
the phasing method" are real WRT completely analog implementations.
However, in the digital domain, such things don't present nearly the
difficulty they do in the analog domain.

73,

- --
Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI
Fellow, Radio Club of America
Senior Member, IEEE
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=FOId
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2646. Re: Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-08 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7r6moq$b17$1@news1.fast.net>
Source record: 67100

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-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

Vincent Arkesteijn <vincent@barbie.student.utwente.nl> wrote in
message news:7qqonc$sjq$1@dinkel.civ.utwente.nl...
> In article <7qovdc$mn4$1@nnrp1.deja.com>,
> marsgal42@hotmail.com writes:
> > Weaver vs. Phasing isn't something I'd worry about. It's
> > in software: if you don't like it, change it.
>
> When using the Weaver-method, you could (and should) halve the
> bandwidth of the analogue filters. And since designing a good
> post-mixer filter for a DC RX is non-trivial, I would suggest
> deciding on Weaver vs. phasing before building everything.
>
> Vincent.

The point is to digitize, THEN filter ... in DSP ... as long as the
sample rate is adequate, you can change bandwiths at will.

73,
- --
Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI
Fellow, Radio Club of America
Senior Member, IEEE
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BcTHADLXD2I9dqtuXthQahrQ
=Ji7s
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2647. Re: Tayloe Mixer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-08 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <37D6E731.116B3BB5@corecomm.net>
Source record: 67101

Richard Karlquist wrote:
> Further refinements have been made in this general area by Tom Hornak
> of Hewlett Packard Laboratories (now Agilent Technologies). If you
> are interested, look at his recent patents. He has an additional patent
> on a mixer in this class that is still pending. He has taken up this
> basic concept, identified the major error sources, and figured out how
> to virtually eliminate them.

Need more clues. I found 21 patents by Thomas Hornak; the most recent seem
to deal with photoelectronic stuff. Maybe I'm just not used to reading
patent text, but I couldn't identify anything similar in concept to the
description I read of the Tayloe mixer.

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+

2648. Re: Microwave Oven Transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-08 00:00:00 UTC
From: William Ricker <wdr@world.std.com>
Message-ID: <FHrKG4.9z6@world.std.com>
Source record: 67102

Richard wrote:
> Yep the txformer can be used but you need two of the same type and don't
> forget to take out the lamination shunt between the two windings. and
> don unearth the bit that goes to earth that the reason for the two
> txformers

I've forgotten something ... what's this about needing two of the
microwave transformers? Is this assuming needing a split supply for
the linear (which likely does need split)?

(My application for high voltage is a TWT I found, which is also a
linear, tubular amplifier, but doesn't require split power.)

Bill N1VUX

--
Bill Ricker N1VUX wdr@world.std.com "The freedom of the press belongs
http://world.std.com/~wdr to those who own one."--A.J.Liebling

2649. Re: SPREAD SPECTRUM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-08 00:00:00 UTC
From: "William F. Hagen" <whagen@inreach.com>
Message-ID: <37D710B6.B70987A6@inreach.com>
Source record: 67103

Thats funny!

Dave VanHorn wrote:
>
> <frederic.merle@wanadoo.fr> wrote in message
> news:37d60361.57958388@news.wanadoo.fr...
> > Hi,!!
> >
> > Please confirm if there is a newsgroup for Spread spectrum.?
> > Many thanks for your help.
>
> Yes, but you have to re-assemble it with a special reader.
> They put single bytes in every other newsgroup. :)

--
Please remove the word 'NOREPLY' from the email address, sorry for the
inconvenience, but it helps keep down the spam.

2650. Re: Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-08 00:00:00 UTC
From: Paul Breed <Paul@Netburner.com>
Message-ID: <37D71A93.1E66874E@Netburner.com>
Source record: 67104

>
> Doing everything digitally limits your dynamic range to 12 to 14 bits
> or as we analog dinosaurs would say 74 to 86 dB. You might need more
> dynamic range than that on the air. And that is why we don't do
> everything digitally.
>
If you are doing an I/Q DC receiver... then use a high quality stereo
Audio A/D.
Some have have dynamic range specifications> 120dB. (Far more than 14
effective bits)

Paul Breed Chief Architect, NetBurner
Networking in one day.
http://www.netburner.com

2651. Re: Microwave Oven Transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-08 00:00:00 UTC
From: Woody White <woody.white@att.net>
Message-ID: <37D71ADD.3A1A1B30@att.net>
Source record: 67105

Because one end of the HV secondary is grounded to the core,
using 2 transformers is effectively the same as a center
tapped transformer. Use series diode in each high side for
full wave rectification. If only one is used the best you
could hope for is a single diode half wave circuit - not
good.

Woody

William Ricker wrote:
>
> Richard wrote:
> > Yep the txformer can be used but you need two of the same type and don't
> > forget to take out the lamination shunt between the two windings. and
> > don unearth the bit that goes to earth that the reason for the two
> > txformers
>
> I've forgotten something ... what's this about needing two of the
> microwave transformers? Is this assuming needing a split supply for
> the linear (which likely does need split)?
>
> (My application for high voltage is a TWT I found, which is also a
> linear, tubular amplifier, but doesn't require split power.)
>
> Bill N1VUX
>
> --
> Bill Ricker N1VUX wdr@world.std.com "The freedom of the press belongs
> http://world.std.com/~wdr to those who own one."--A.J.Liebling

--

---------- de Woody, WB4QXE ----------

Ham Homebrew/ATV Circuits -*- Scanning Electron
Microscope Images

http://www.geocities.com/capecanaveral/3722

2652. Re: Tayloe Mixer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-08 00:00:00 UTC
From: "Joseph A. Consugar" <joesugar@erols.com>
Message-ID: <37D72157.537274BE@erols.com>
Source record: 67106

Clifton T. Sharp Jr. wrote:
>
> Richard Karlquist wrote:
> > Further refinements have been made in this general area by Tom Hornak
> > of Hewlett Packard Laboratories (now Agilent Technologies). If you
> > are interested, look at his recent patents. He has an additional patent
> > on a mixer in this class that is still pending. He has taken up this
> > basic concept, identified the major error sources, and figured out how
> > to virtually eliminate them.
>
> Need more clues. I found 21 patents by Thomas Hornak; the most recent seem
> to deal with photoelectronic stuff. Maybe I'm just not used to reading
> patent text, but I couldn't identify anything similar in concept to the
> description I read of the Tayloe mixer.
>

go to http://www.patents.ibm.com/details?pn=US05678222__

2653. Re: MC3362 info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-08 00:00:00 UTC
From: blackm00@cam.org
Message-ID: <blackm00-0809992345300001@dialup-709.hip.cam.org>
Source record: 67107

In article <37D48687.8E81CE4A@melbpc.org.au>, @melbpc.org.au wrote:

> Hi
> Can anyone help with info on incorparating the motorola MC3362 IC into
> a transceiver ,any schematics etc,or PCB detail would be appreciated
> The IC itself is a low power FM receiver.
> regards Mark

What sort of help are you looking for? You really should get the data sheet from Motorola, and application note AN980 is about using it. The data sheet does include a circuit board layout for a prototyping with the IC. Since the information comes from the manufacturer of the IC, it should be the best source, though I suppose there could be errors. The IC is meant for narrow-band FM, so it's not like you have to experiment to get it to work in that application.

QST for February 1999 has an article about a 2Meter receiver using the MC13135 which appears to be just a later version of the IC. The article might prove helpful, since it uses the IC in a synthesized receiver.

The author does mention that the IC's first mixer is a Gilbert Cell mixer (ie the sort of mixer circuit used in the NE602 or the MC1496) and that "These mixers have a low third-order intercept. This limits the receiver's large-signal-handling performance". This would apply to the MC3362, though I'm not sure if he's mentioning it in passing or if he actually found it a problem. If it turns out ot be a problem, one could simply change to a front end made up of discrete components, since the mixer/oscillator in the MC3362 stands alone from the rest of the IC.

I've never used it. The MC3362 must be similar to the MC3359 etc doulbe conversion If Strips, except it adds a first mixer and local oscillator. And the MC3359 is found in all kinds of equipment. So the design must be fairly standardized and provide fair performance.

Michael VE2BVW

2654. Re: HELP! Tube Guru's Advice Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-08 00:00:00 UTC
From: blackm00@cam.org
Message-ID: <blackm00-0809992355350001@dialup-709.hip.cam.org>
Source record: 67108

In article <37D52BF4.78513032@midwestmicro-tek.com>,
rhaub@midwestmicro-tek.com wrote:

> To all you guys who've been helping me with this thanks a lot and here is
> the weekend update.
>
> I spent all day saturday working with the rig and after exausting all other
> possibilities I've come to the conclusion that I managed to fry both of the
> 1625 finals that I had. I ordered two more this morning and I should get
> them by early next week If anyone is still interested in my TX by then I'll
> post a new update. Thanks for your time and advice!
>
> Rick

I don't know how useful I've been (and I lost a few days when the ISP here
suddenly turned off shell access without telling anyone), but I've enjoyed
this thread.

You've been asking for help, unlike a lot of questions where someone
simply wants information. You've kept at it, when a lot of people stop
with one post, or continue it in email when someone bites. You've also
supplied detail, rather than a vague "it doesn't work". Some of the learning
comes with takign that detail and interpreting it, but a lot of people
wouldn't bother with the detail.

As Jim says, we all make mistakes at the beginning. More important, if
we hadn't made those mistakes, we wouldn't have moved forward. I always
assume that more people read a newsgroup than actually post, so perhaps
as you ask for advice others will benefit.

The truth is, I've barely used tubes, and that was a long time ago. I
got into the hobby as tubes were fading out. SOme of my comments
have come from observation, that I could probably make them for any
topic if someone provided the detail you do. But I've also learned
a bit as I look at the schematic and think about your comments.

Michael VE2BVW

2655. Re: Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-08 00:00:00 UTC
From: rick@area.com
Message-ID: <7r72pl$22i$1@vax.area.com>
Source record: 67109

In article <7r6mi9aut1@news1.fast.net>,
Carl R. Stevenson <wa6vse@fast.net> wrote:
>Richard Karlquist <rick@area.com> wrote in message
>> However, the Weaver system is still direct conversion, with all the
>> same problems any DC receiver potentially has: microphonics, ground
>
>I respectfully disagree that the factors you mention above are
>anything close to "show-stoppers."

I said they were potential problems, not show-stoppers

>One approach is to sample the IF, then use a Hilbert transform to
>create the qquadrature channel. Thus, you have only one "LO"
>and one "mixer" ...

Yes, but now you no longer have a direct conversion receiver.
You have a receiver that is conventional through the first IF
with a digital 2nd IF

>> You also have to consider that if you are building a simple
>receiver,
>> you can probably use a CB radio IF filter to do the SSB so why
>> bother with Weaver. If you are building a high performance radio,
>> the low pass audio filtering is going to get complex so again you
>> might be better off building a homebrew crystal filter from
>microprocessor
>> xtals.
>
>Let me see you build a linear phase filter with a cutoff of 1800
>dB/octave
>using microprocessor crystals ... in DSP it takes some care in dealing
>with quantization effects, roundoff, etc. but it's doable ... in the
>analog
>domain, forget it.

Who needs such a filter in ham radio?

>> Another isse, is: what are you going to do on xmit? If you use the
>> Weaver system there, you have the whistle problem.
>
>The "whistle problem" can be esily turned into an advantage,
>using the carrier, inserted at a controlled level as a pilot tone

But a ham using a conventional receiver is going to hear a whistle.

Doing everything digitally limits your dynamic range to 12 to 14 bits
or as we analog dinosaurs would say 74 to 86 dB. You might need more

dynamic range than that on the air. And that is why we don't do everything digitally.

Rick Karlquist N6RK
rick@area.com

2656. Re: Serial port on computer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-08 00:00:00 UTC
From: snoskow11woksons@liame.tom.com
Message-ID: <snoskow11woksons-0809991359360001@il75-fc-mac1-36.acpg.cig.mot.com>
Source record: 67110

Shawn Upton <supton@eece.maine.edu> wrote:

> I'm not sure if this is the right ng to ask, but I have a program to do
> cw on a computer, and I'm wondering how to interface the computer to the
> outside world--there is no documentation w/the program, only a com port
> select. I saw the cw decoder in qst, and I'll just use the tone decoder
> from that, but what do I need as an interface between the serial port
> and the radio/tone decoder? (It's an old laptop btw.) Thanks.

Shawn,

I just did the send part of this with a program called Super Morse.
It, however, has info telling which pins on the serial port are used to
send and receive CW (it doesn't receive very well, but I don't care).
Without documenatation, you'll have to set it up to send then with a meter
see where it is coming out. My guess is it will be one of the control
lines.
Then you'll need to put it into receive mode and feed RS-232 levels into
control inputs from a key or keyer to find which line receives. You need
a circuit which converts the decoder (I assume this is the PIC & LCD
decoder by the fella from Italy) to RS-232 levels. These are plus and
minus 7 to 12 volts. For the control inputs the "mark" can be either the
plus voltage or the minus voltage depending on the software. On mine, the
software allows selecting either polarity.
There's a shareware for Mac called MultiMode which has full info. I
assume there are many others for the PC which are available on the Net
which have documentation.

You might also post the name of the program and see if anyone has info

Regards, Steve K9DCI

--
I know everything, except how to be humble...a.a..and... how to stop
e-spam. Sorry 'bout the address munge, but it has reduced much now.
Use snoskow1 at server email here in mot in the com domain.

2657. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-08 00:00:00 UTC
From: wb5agz@dc.cis.okstate.edu
Message-ID: <7r6hag$t73$1@lotus.onenet.net>
Source record: 67111
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

In article <7q9pudeag1@news1.fast.net>,
Carl R. Stevenson <wa6vse@fast.net> wrote:
>SMT (surface mount technology) isn't any harder to work
>with than through-hole parts ... it just takes different tools
>(not a fortune in them, either) and different techniques.

That is true. Now, let me describe this neat little problem
and muse a bit over how to solve it. I have been building circuits
for around 40 years and am glad to be old enough to appreciate how
far we have come. As a person who is blind, I don't read schematics,
but it is possible to build some pretty neat stuff these days with
IC's, perph board, and judicious use of wire-wrapping and soldering.
As I mentioned several months ago in a thread about home brewing, I
usually solder the wire to components that have round leads because it
sure won't stay any other way. I use a Wahl cordless soldering gun
with the thinest tip they make as it heats up very fast and hot.

I can even do point-to-point wiring on IC sockets that have
.1-inch centers if I hold my mouth right and work carefully and
slowly, but I honestly don't know what to do about surface-mount IC's.
I am not ranting, here, because I don't believe surface mount IC's
represent anything but an attempt to make manufacturing easier,
cheaper, and smaller, but the spacing between the leads is so small
that it just feels like ridges along the edge of the chip and one's
finger nail could easily bounce over two or three while trying to
count.

I have seen adapters such as those used to adapt a 52-pin PLCC
to through-hole design such as one might use in building a 68HC11
project, but these sockets are expensive and only seem to come in
certain common sizes. There seem to be tons of different footprints
and numbers of pins in surface-mount IC's. They definitely don't all
look alike so it is going to require several different styles of base.

When thinking about this problem, some ideas come to mind. I
know that anything to do with microscopes, magnifying glasses, etc is
completely out of the question. Some other things are maybe possible.
Let's say one had a piece of circuit board with the SM footprint on it
and conductors going to some kind of header. It should be possible to
use electrical continuity to tell when the chip is resting squarely on
the right bed. Then, you have this magic glue:-) that doesn't stick
until you have moved everything around and are satisfied with it.
Then you do something like heat it to activate it and it doesn't flow
any conductive material between the pins to cause bridges.

I have heard some real-life examples that sound pretty strange. One case I know of involved a repair to a cam corder. The technician removed the bad chip and put the new chip in by first flowing solder over each edge of the surface-mount chip until every pin was soldered together. Then, he took very fine solder wick and wicked up the solder between pins. Of course, that was a magnifying glass job, but the point is that there are lots of unorthodox ways to work with these chips and I hope I find something that will work because I would really hate to not be able to build anything out of new parts some day.

I definitely agree with those that say that these are the golden days of home construction. I mentioned not reading schematics, but the more or less standard IC's such as logic chips and amplifiers allow one to build fairly sophisticated circuits by just knowing what signals and components are supposed to connect to each pin. The circuit sort of builds itself if you know what you want it to do and also keep in mind the electrical limitations of the IC so as not to fry it.

Back in the sixties and early seventies, it was not as easy to build circuits without a schematic because one had to manually do so much more just to get a simple amplifier or oscillator.

The last project I finished and got working was an audio peak-level alarm using a TLO64 quad op-amp, a LM339 voltage comparator chip, and a NE556 timer chip to produce the alarm tone which fed one of those piezo sounder disks which I stuck to the bottom of the chassis box the circuit is mounted in. I couldn't possibly have built this device and had it work as well as it does had I not been able to stand on the shoulders of the engineers who made the chips, so to speak.

Martin McCormick WB5AGZ Stillwater, OK
OSU Center for Computing and Information Services Data Communications Group

2658. Re: OTs: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-08 00:00:00 UTC
From: odo <odo@mail.blinx.de>
Message-ID: <37D58E53.6698DBB3@mail.blinx.de>
Source record: 67181
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Why do you crosspost your fu...ing picture to non-binary groups ????
This wastes time and MONEY of thousands :-(((

odo

2659. Re: HELP! Tube Guru's Advice Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-08 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19990907213157.01029.00001237@ngol06.aol.com>
Source record: 67182

In article <37D52BF4.78513032@midwestmicro-tek.com>, Rick Haub
<rhaub@midwestmicro-tek.com> writes:

>I spent all day saturday working with the rig and after exausting all other
>possibilities I've come to the conclusion that I managed to fry both of the
>1625 finals that I had. I ordered two more this morning and I should get
>them by early next week If anyone is still interested in my TX by then I'll
>post a new update. Thanks for your time and advice!

Rick,

I've got some 1625s if you need more. I can test them on an I-177 tester, too.

Main rig here runs a pair of 807s in the final, driven by a 12BY7. Puts out a
little over a hundred watts on 80, 40, and 20. Yeah, I did some damage learning
how to build rigs. We all did.

73 and keep us posted. Good luck!

Jim, N2EY

2660. Re: TenTec Transverter 2to 6 meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-08 00:00:00 UTC
From: Paul <pmartin@bright.net>
Message-ID: <37D67426.FAD566DC@bright.net>
Source record: 67183

Mine works GREAT! Highly recommend. 73.

2661. Re: SMT soldering w/hot air sources

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-08 00:00:00 UTC
From: Paul <pmartin@bright.net>
Message-ID: <37D67604.AA3CD36E@bright.net>
Source record: 67184

> For most rework, I use two soldering irons. They serve well enough in
> unsoldering most small components.
>
> I concur, two small temp controlled irons work very well and if you are deft
> the two irons can also lift the part off the board (tip on each side, melt,
> gently squeeze, lift). 73.

2662. Re: Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-09 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7r993g$kr3$1@news1.fast.net>
Source record: 67035

```
-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

Richard Karlquist <rick@area.com> wrote in message
news:7r72pl$22i$1@vax.area.com...
>
> In article <7r6mi9$aut$1@news1.fast.net>,
> Carl R. Stevenson <wa6vse@fast.net> wrote:
> >Richard Karlquist <rick@area.com> wrote in message
> >> However, the Weaver system is still direct conversion, with all
the
> >> same problems any DC receiver potentially has: microphonics,
ground
> >
> >I respectfully disagree that the factors you mention above are
> >anything close to "show-stoppers."
>
> I said they were potential problems, not show-stoppers
>
> >One approach is to sample the IF, then use a Hilbert transform to
> >create the qquadrature channel. Thus, you have only one "LO"
> >and one "mixer" ...
>
> Yes, but now you no longer have a direct conversion receiver.
> You have a receiver that is conventional through the first IF
> with a digital 2nd IF

True, but there can be some advantages ... potentially significant
ones.

> >> You also have to consider that if you are building a simple
> >receiver,
> >> you can probably use a CB radio IF filter to do the SSB so why
> >> bother with Weaver. If you are building a high performance
radio,
> >> the low pass audio filtering is going to get complex so again you
> >> might be better off building a homebrew crystal filter from
> >microprocessor
> >> xtals.
> >
> >Let me see you build a linear phase filter with a cutoff of 1800
> >dB/octave
> >using microprocessor crystals ... in DSP it takes some care in
dealing
> >with quantization effects, roundoff, etc. but it's doable ... in
```

the
> >analog
> >domain, forget it.
>
> Who needs such a filter in ham radio?

Most hams want sharp filters that eliminate adjacent channel
interference.
I simply stated something that's quite a bit better than can be done
in the
analog domain, yet is quite doable in the digital domain.

> >> Another isse, is: what are you going to do on xmit? If you use
the
> >> Weaver system there, you have the whistle problem.
> >
> >The "whistle problem" can be esily turned into an advantage,
> >using the carrier, inserted at a controlled level as a pilot tone
>
> But a ham using a conventional receiver is going to hear a whistle.

The carrier will normally be suppressed ... if the 2nd I/Q mix and
combining in the TX is done in the digital domain (before the DAC)
it can be followed by a digital notch filter to eliminate it even
further,
certainly to the point of inaudibility.

> Doing everything digitally limits your dynamic range to 12 to 14
bits
> or as we analog dinosaurs would say 74 to 86 dB. You might need
more
> dynamic range than that on the air. And that is why we don't do
> everything digitally.

With all due respect, popycock. There are 16-24 bit stereo codecs
with sample rates adequate for CD quality audio (and the two channels
are simultaneous sampling, so they would work well for digitizing I/Q
baseband. The sample rates are high enough to allow simple
anti-aliasing
filters. Adequate dynamic range can be achieved.

73,
- --
Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI
Fellow, Radio Club of America
Senior Member, IEEE
Member, ARRL
Join NCI - Hams for the 21st Century!

Help modernize ham radio and assure its future survival!
http://www.nocode.org

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2663. Re: Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-09 00:00:00 UTC
From: vincent@barbie.student.utwente.nl
Message-ID: <7r99d5$93s$1@dinkel.civ.utwente.nl>
Source record: 67036

In article <7r6moq$b17$1@news1.fast.net>,
"Carl R. Stevenson" <wa6vse@fast.net> writes:

> Vincent Arkesteijn <vincent@barbie.student.utwente.nl> wrote in
> message news:7qqoncsjq1@dinkel.civ.utwente.nl...

>> When using the Weaver-method, you could (and should) halve the
>> bandwidth of the analogue filters. And since designing a good
>> post-mixer filter for a DC RX is non-trivial, I would suggest
>> deciding on Weaver vs. phasing before building everything.

> The point is to digitize, THEN filter ... in DSP ... as long as the
> sample rate is adequate, you can change bandwiths at will.

That depends on the close-in dynamic range you want to achieve.

Vincent.

2664. Re: Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-09 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7r9amc$lb2$1@news1.fast.net>
Source record: 67037

-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

<maddog@io.com> wrote in message news:37d73778.5196035@news.io.com...
> On Wed, 8 Sep 1999 17:52:38 -0400, "Carl R. Stevenson"
> <wa6vse@fast.net> wrote:
>
> >[snip]
> >See US Patent 4,726,069 which I hold. It effectively describes
> >the most flexible, powerful architecture for a multi-mode radio
> >with advanced capabilities
>
> Gee, Carl, is there a DSP filter topology for removing the whistle
> that results from somebody tooting their own horn?
>
> in jest & 73,
> monty N5FC
>

Hey, I'm proud of some of my accomplishments and thought
that some who are interested in the topic might find it
interesting and informative.

73,
- --
Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI
Fellow, Radio Club of America
Senior Member, IEEE
Member, ARRL
Join NCI - Hams for the 21st Century!
Help modernize ham radio and assure its future survival!
http://www.nocode.org

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2665. FA: roller inductor, vacuum variables, air variables

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-09 00:00:00 UTC
From: Bill Clarke <billclarke@bigfoot.com>
Message-ID: <7r9and$gc1$1@birch.prod.itd.earthlink.net>
Source record: 67038
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

2 days left.

roller inductor at
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=158369353

air variables at
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=158366982

Jennings vacuum variables at
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=158364586

2666. Re: FA: roller inductor, vacuum variables, air variables

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-09 00:00:00 UTC
From: "R.Morris" <robrk@pgh.net>
Message-ID: <37D8722E.12B8@pgh.net>
Source record: 67039
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

Please don't turn this news group into another Boatanchors-is-eBay
listing.
There's rec.radio.swap for this stuff.
Anyone on the Web for two days knows about eBay.....

2667. Re: Microwave Oven Transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-09 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <rTqZPTAP2C23Ewx1@ifwtech.demon.co.uk>
Source record: 67040

Clifford Buttschardt wrote:
>Ian and Bill as well as others concerned:
>There is a voltage doubler connection in which one side of the secondary
>can remain grounded. It requires a rather large set capacitors to do this
>but the transformer will not suffer from DC currents. Now days capacitors
>are far cheaper than transformers! Cliff K7RR
>
The problem is that with a typical 2000V secondary, you're heading for about 6kV off load! Also the ripple is a 2:1 variation between alternate half-cycles, and I'd hate to think what the regulation would be with the high-resistance secondary winding that is typical of oven transformers.

Come to think, you could get back down to 3kV by using two identical transformers with secondaries in parallel and primaries in series, but that still leaves the ripple problem.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

2668. Re: 250 or 500Hz CW filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-09 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19990909180448704 32@zetnet.co.uk>
Source record: 67041

The message <37D6B70A.2D6C@ixpres.com>
from Don W6JL <W6JL@ixpres.com> contains these words:

> In addition, if you ever get involved with FSK modes such as RTTY,
> Pactor, or Amtor, you will definitely need the 500Hz filter. 250 Hz is
> too narrow for these modes. So, I have found the 500Hz bandwidth to be
> the best all-around narrow I.F. bandwidth.
==========
Agree with the above. If you really need a narrower passband you
could do that by means of an external audio filter ,analogue or DSP.

Frank , GM0CSZ / KN6WH

2669. tube cw tx project

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-09 00:00:00 UTC
From: ku4yp@aol.com
Message-ID: <19990908203108.27472.00006740@ng-cr1.aol.com>
Source record: 67112

hello,

could someone post or send me to an easy tube cw transmitter
project? i need to get a fist project under my belt and have it work! any help
appreciated. if u could, pls respond by email

73 de KU4YP
Mike Prevatt
Lake Hendry, Fl.

2670. Ham Radio Station For Sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-09 00:00:00 UTC
From: "Jeffery A. Purtle" <jpurtle@home.com>
Message-ID: <37D70DB4.F324A474@home.com>
Source record: 67113
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.packet,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.amateur.swap,rec.radio.scanner

Ham Radio Station For Sale:

Yaesu FT-900AT (100 Khz - 30 Mhz Receive; 1.8 - 30 Mhz Transmit)
Astron RS-35A Power Supply (13.8 Volts/35 Amps)
Yaesu Quick Release Bracket (MMB-67 I think)
Yaesu Separation Kit YSK-900
Yaesu SP-7 mobile speaker
Yaesu FIF-232C Computer Interface
Heil Proset HC-5
Headphone Mic Adapter Cable
Bencher Chrome Iambic Paddle BY-2 with Gold Contacts
Outbacker Perth mobile antenna (80 meters - 10 meters)
B & W Low Pass Filter
80 Meter Whip

AOR AR 8000 (continuous coverage from 100 Khz to 2 Ghz; 1000 Memory
Channels)
Optoelectronics Optolink Computer Interface
Cable wired for Mac
Computer Control Software for Scanner and a MacIntosh Computer

Asking $2400. But, please make an offer if interested.

Will trade for the following package:
Yeasu FT-100
Yeasu FP-1030A (power supply)
Yeasu FTS-27 (tone board)
Yeasu FC-20 (antenna tuner)
Yeasu ATAS-100 (mobile antenna)

--

_____
Jeff Purtle
Amateur Radio: AC6IW
http://purtle.com
http://24.4.121.245
Also check-out
http://gcyo.org
_____

2671. WANTED: Kenwood TU-79

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-09 00:00:00 UTC
From: kd4vrz@arrl.net
Message-ID: <37d71d57.23682557@netnews.att.net>
Source record: 67114
Cross-posted to: alt.ham-radio.marketplace,alt.ham-radio.vhf-uhf,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I am looking for a TU-79 tone board for a old 7950. If anyone has a working one please contact me via email.

Gary
KD4VRZ

2672. WANTED: Kenwood TU-79

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-09 00:00:00 UTC
From: kd4vrz@arrl.net
Message-ID: <37d81ea9.24020716@netnews.att.net>
Source record: 67115
Cross-posted to: alt.ham-radio.marketplace,alt.ham-radio.vhf-uhf,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I am looking for a TU-79 tone board for a old 7950. If anyone has a working one please contact me via email. kd4vrz@arrl.net

Gary
KD4VRZ

2673. Re: Where have all the builders gone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-09 00:00:00 UTC
From: chrism1111@aol.comspamless
Message-ID: <19990908232235.02089.00003027@ng-ba1.aol.com>
Source record: 67116

When I bought my SAturn I found out that for th emost part American made cars resist RF interference, Some have selective probs, but are pretty clean. Chrysler was offering a Guarantee on it!. know when I got close to a TV transmitter just off 128 in Mass. my car worked fine, but my car alarm was shot. Of course they do pump 50 KW so much fer teckno-loggi

73

chris
For free plans and info on solar oven's water and purifiers, that actually work, see<http://www.accessone.com/~sbcn/index.htm>
==========
Sufficiently advance technology is indistinguishable from magic..

2674. FS Bulk lot of Resistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-09 00:00:00 UTC
From: Larry Asp <larry.asp@sympatico.ca>
Message-ID: <37D73180.3A2F@sympatico.ca>
Source record: 67117
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew

I have 3 bulk boxes of old type resistors, about half full, about 2 - 300 per box. 1/2 watt made by IRC 2200 ohms, 220 ohms, 47 ohms. In original boxes. $6.00 for all 3 plus postage of $4.77US.

2675. Re: Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-09 00:00:00 UTC
From: maddog@io.com
Message-ID: <37d73778.5196035@news.io.com>
Source record: 67118

On Wed, 8 Sep 1999 17:52:38 -0400, "Carl R. Stevenson"
<wa6vse@fast.net> wrote:

>[snip]
>See US Patent 4,726,069 which I hold. It effectively describes
>the most flexible, powerful architecture for a multi-mode radio
>with advanced capabilities

Gee, Carl, is there a DSP filter topology for removing the whistle
that results from somebody tooting their own horn?

in jest & 73,
monty N5FC

2676. Morse Clock

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-09 00:00:00 UTC
From: Bob Kimbrell <kimbrell@netcom.com>
Message-ID: <7r7i8i$ien@dfw-ixnews16.ix.netcom.com>
Source record: 67119

I would like to build a clock that sends the time in Morse Code at the touch of a button. I think this would be a great feature for some of the qrp kits to add. It would be a boon to blind hams as well.

73, Bob
KD7AHO Kingman, Arizona

2677. Re: Help identifying Audio Transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-09 00:00:00 UTC
From: Anthony Cirella <handmade@ix.netcom.com>
Message-ID: <7r86bk$ql@dfw-ixnews13.ix.netcom.com>
Source record: 67120

In article <19990903081451.28283.00002909@ng-fl1.aol.com>,
nunnelly@aol.com (Nunnelly) wrote:

>I have two 1k:8 ohm audio transformers from Dan's. Three taps on each side.
>How can I identify the 1k side from the 8 ohm side.
>
>Thanks
>Chuck Nunnelly

Higher dc ohms reading would indicate the primary.
A.C.

A.Cirella
Handmade Electronics
http://www2.netcom.com/~handmade
Parts, supplies, troubleshooting guide

2678. Re: Morse Clock

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-09 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <37D7A4DD.B3643623@erols.com>
Source record: 67121

You have my permission :-)

Bob Kimbrell wrote:
>
> I would like to build a clock that sends the time in Morse Code at the
> touch of a button. I think this would be a great feature for some of the
> qrp kits to add. It would be a boon to blind hams as well.
>
> 73, Bob
> KD7AHO Kingman, Arizona

2679. Re: Microwave Oven Transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-09 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <IFB66FAt9013Ewo$@ifwtech.demon.co.uk>
Source record: 67122

Woody White wrote:
>Because one end of the HV secondary is grounded to the core,
>using 2 transformers is effectively the same as a center
>tapped transformer. Use series diode in each high side for
>full wave rectification. If only one is used the best you
>could hope for is a single diode half wave circuit - not
>good.
>
Unfortunately you still only have half-wave performance from each transformer, because there is DC flowing through each winding. It isn't like a true full-wave center-tapped transformer with both opposing windings on the same core.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

2680. Underwater Communications (Round 2)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-09 00:00:00 UTC
From: Spam Bin <nospam@scotia-technologies.co.uk>
Message-ID: <19990909135616859 11@scotia-technologies.co.uk>
Source record: 67123

Since posting a request a few weeks ago regarding underwater comms, i have been told to use ultrasonics.

I need to know if anybody has come across a (cheap) set of transducers (or even a complete system) that can pass messages upto around 200 yards or so.

I cannot use normal echosounder transducers because of size, weight and frequency (possibly interfere with on-board sounder(s)). There is also the fact that i do not need the same amount of power as this system covers a much shorter distance and is one way communications.

I also need a source of a box to house the electronics and a small(ish) rechargeable battery. I was thinking about a battery no bigger than the ones used in alarm systems. Either that or 4 off 'D' size rechargeables. The box needs to be watertight to a depth of a couple of hundred feet maximum (normally around 100 - 120 feet)....

The box needs to hold the battery, small PCB (about 2"x3") and the transducer (mounted externally).
I also need an external waterproof connector so i can recharge the batteries easily, rather than unscrewing the box to remove them.

Anyone any ideas?
All help greatly appreciated.

Steve

2681. Microwave Oven Transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-09 00:00:00 UTC
From: wlfuqu00@pop.UKy.EDU
Message-ID: <199909091321.JAA18720@pop.uky.edu>
Source record: 67124

At 04:30 AM 9/9/99 PDT, you wrote:

>I've forgotten something ... what's this about needing two of the
>microwave transformers? Is this assuming needing a split supply for
>the linear (which likely does need split)?
>Bill N1VUX

Do not use two transformers.
Either use a voltage doubler or a full wave bridge.
You will have to isolate the grounded side of the secondary,
for a full wave bridge recitfier and make sure it is well
insulated.
The use of two transformers in a full-wave center-tap configuration
will cause the core to saturate due to the DC current on the secondary
of the transformer. The Average DC current flowing in the secondary
needs to be near zero.

73
Bill wa4lav

William L. Fuqua III P.E. E-mail WLFUQU00@POP.UKY.EDU Phone (606) 257-4155
Department of Physics and Astronomy CP-177 Chem. Phys. Bldg.
University of Kentucky , Lexington, Ky 40506-0055

2682. Re: SPREAD SPECTRUM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-09 00:00:00 UTC
From: Jake Brodsky <frussle@erols.com>
Message-ID: <S73XN6fH5ful3RIHPWcRZqWSCZsP@4ax.com>
Source record: 67125

On Wed, 08 Sep 1999 06:34:59 GMT, frederic.merle@wanadoo.fr wrote:

>Please confirm if there is a newsgroup for Spread spectrum.?
>Many thanks for your help.

There is an e-mail reflector hosted by TAPR. See
http://www.tapr.org

73,

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

2683. Re: tube cw tx project

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-09 00:00:00 UTC
From: Mike Silva <mjsilva@jps.net>
Message-ID: <SoQB3.40$ZR.12216@news.wenet.net>
Source record: 67126

Here's a good place to start:

http://www.geocities.com/CapeCanaveral/Hall/8701/hamfiles.htm

Lots of transmitter links all over the page.

73,
Mike, KK6GM

KU4YP wrote in message <19990908203108.27472.00006740@ng-cr1.aol.com>...
>hello,
>
> could someone post or send me to an easy tube cw transmitter
>project? i need to get a fist project under my belt and have it work! any
help
>appreciated. if u could, pls respond by email
>
>73 de KU4YP
>Mike Prevatt
>Lake Hendry, Fl.

2684. Re: Microwave Oven Transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-09 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.990909100809.29864B-100000@oso.slonet.org>
Source record: 67127

Ian and Bill as well as others concerned:
There is a voltage doubler connection in which one side of the secondary can remain grounded. It requires a rather large set capacitors to do this but the transformer will not suffer from DC currents. Now days capacitors are far cheaper than transformers! Cliff K7RR

2685. Building a SCF-based PL decoder

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-09 00:00:00 UTC
From: wb5agz@dc.cis.okstate.edu
Message-ID: <7r8tnt$3jp$1@lotus.onenet.net>
Source record: 67128

I am about to build an audio notch filter to remove the PL
tone frequency from the output of a receiver. I was going to use a
Butterworth circuit based on a good series in the July 1980 "QST" when
I thought it might be a good time to try a SCF IC as the filter
block. Is there a particularly good switched capacitance filter IC
that is easy to find, relatively cheap and available in a through-hole
DIP package?

It is my understanding that one doesn't have to do much except
supply a clock frequency of 8 or 10 times the frequency of interest to
make the SCF do its thing. The one disadvantage to the Butterworth
design is that you have to tweak things a bit to tune it in and it is,
therefore, a little harder to duplicate.

Martin McCormick WB5AGZ Stillwater, OK
OSU Center for Computing and Information Services Data Communications Group

2686. Re: SPREAD SPECTRUM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-09 00:00:00 UTC
From: slug@aeminium.dhis.org
Message-ID: <7r881h$j7q$1@bbs.aeminium.pt>
Source record: 67129

Dave VanHorn <dvanhorn@cedar.net> wrote:
>> Please confirm if there is a newsgroup for Spread spectrum.?
> Yes, but you have to re-assemble it with a special reader.
> They put single bytes in every other newsgroup. :)

hehe

--
http://alumni.dee.uc.pt/~slug
CT1FOX

2687. mc 14517 pll

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-09 00:00:00 UTC
From: orion <orion@otenet.gr>
Message-ID: <7r91cvfub1@newssrv.otenet.gr>
Source record: 67130

hi im chris
im looking for projects using the mc 145170 pll by motorola
orion@otenet.gr

2688. mc145170 PLL

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-09 00:00:00 UTC
From: orion <orion@otenet.gr>
Message-ID: <7r91ju$g8c$1@newssrv.otenet.gr>
Source record: 67131

pls does anyone know where can i purchase the some MC145170 by motorola
using my credit card?
orion@otenet.gr

2689. Re: mc145170 PLL

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-09 00:00:00 UTC
From: quinnja@my-deja.com
Message-ID: <7r98p5$2hn$1@nnrp1.deja.com>
Source record: 67132

In article <7r91ju$g8c$1@newssrv.otenet.gr>,
"orion" <orion@otenet.gr> wrote:
> pls does anyone know where can i purchase the some MC145170 by
motorola
> using my credit card?
> orion@otenet.gr
>
>

Not sure if you can get them from Motorola but DC Kits can supply MC145170 PLL chips each and they will allow you to charge this to your credit card. Send some email to Gary Clifton (clifton@dckits.com) and he will be able to give you some pricing details.

Note that I have no association with DC Kits but I have purchased their EXP-1 PLL experimenters kit and have been very pleased with their email support for non-US customers.

Regards..... Andrew

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2690. Re: MC3362 info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-09 00:00:00 UTC
From: quinnja@my-deja.com
Message-ID: <7r992e$2lj$1@nnrp1.deja.com>
Source record: 67133

> QST for February 1999 has an article about a 2Meter receiver using the
> MC13135 which appears to be just a later version of the IC.

Information about this receiver is available on the web at
http://www.sonic.net/~shageman/2_meter.html This is not the complete
QST article but provides extra information and some component sourcing
notes. It seems to be a good example of using the MC13135 and MC145170
PLL to build a receiver.

If you are interested in getting started with the MC145170 and don't
want the hassle of programming a PIC you can download my free MC145170
programming software for your PC from http://www.qsl.net/zl1wjq

Regards..... Andrew

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2691. re. Help for a friend

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-09 00:00:00 UTC
From: "G.Kuhn" <gkuhn@global.co.za>
Message-ID: <7r95er$sk9$4@ctb-nnrp2.saix.net>
Source record: 67134

Thank you, a BIG thank you to all who responded to my query on a CW reader.
I had so many replies that my ISP threatened to cancel my account !!
Unfortunately it isn't going well with Louie, ZS1HE, and although I now have
more than enough resources, from all reports he is beyond using them.
At least these last few days confirmed the knowledge that there are many
people out there that care about other people.
Thank you again, all of you.
Regards,
G.Kuhn ZS1NZ

2692. TBB200 and TBB202

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-10 00:00:00 UTC
From: Francesco Tamburro IK8PAE <IK8PAE@uniserv.uniplan.it>
Message-ID: <37d831d2.0@NT01.uniplan.it>
Source record: 67042

Please dears OM help me!!!!
I need data sheets of TBB200 and TBB202 (SIEMENS),
PLL and Prescaler I2C bus.
I've wrote to Siemens but at this time no answer!!
I think never!!.
If you have please contact me.
Vy '73 es TNX frm IK8PAE Francesco
JN70FS.

2693. Re: Kenwood 140s Squelch

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-10 00:00:00 UTC
From: n4zss@rfci.net
Message-ID: <37d85693.792905@news.rfci.net>
Source record: 67043

>Sent via Deja.com http://www.deja.com/
>Share what you know. Learn what you don't.

My model of TS-140 the squelch only works in FM mode. I'm not sure if all models are that way or not. There is a mod for freq. exp. on the 140, done by removing a diode on the control board.

2694. Reading a .wav file

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-10 00:00:00 UTC
From: wb5agz@dc.cis.okstate.edu
Message-ID: <7r9s9t$637$1@lotus.onenet.net>
Source record: 67044

What is the name of the document on Microsoft's web site or,
for that mater, any good document that explains how a .wav file is put
together? I want to try my hand at being able to do a byte-by-byte
analysis of a sound recording. I soon realized that I could find the
data portion, but I wasn't seeing what one would normally expect to
see, even taking in to account that these are at least 14-bit samples.
I know that 8-bit A/D converters used in audio or any application that
handles AC signals must be biased at half their maximum value or hex
80 in order to track the whole wave form. The recording I was playing
with was a recording of CW on a quiet background so one should see a
little idling at first then a sine wave sequence during each tone. I
saw nothing that looked obvious after the plain text "data" header.

All I know about the header is that it sets the sample rate
and whether or not the data are to be encoded and decoded as mono or
stereo. This file is mono. Not sure about the sample rate, but all
that would do is squeeze the data points together or spread them out
depending upon how many samples are being taken per second.

Thanks for any constructive ideas.

Martin McCormick WB5AGZ Stillwater, OK
OSU Center for Computing and Information Services Data Communications Group

2695. Re: Source for Precision SMD Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-10 00:00:00 UTC
From: Bobby Atkinson <bobbys@prodigy.net>
Message-ID: <01befb39$741cba60$0100a8c0@ZTU>
Source record: 67045
Cross-posted to:
rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design,sci.electronics.misc,sci.electronics.repair

Hi Wes,
Unless he measures them himself I'd suggest a using trimmer.
1 to 2 % is pretty tight tolerence for small value caps.
For small quanities many manufacturers will send samples if asked.
How's life in the desert ? Bobby

Wes Stewart <n7ws@arrl.net> wrote in article
<37d46995.693924830@news.azstarnet.com>...
> On Mon, 06 Sep 1999 22:10:12 GMT, "clifford kelley"
<cwkelley@inreach.com>
>
> Cliff,
>
> American Technical Ceramics (http://www.atceramics.com)
>
> AVX (http://www.avxcorp.com)
>
> Johanson (http://www.johanson-caps.com/)
>
> and Dielectric Laboratories (http://www.dilabs.com/) all make the parts
you
> probably need.
>
> As to sources for small quantities, that may be a problem AVX and
Johanson are
> sold by AVNET (http://www.avnet.com). They might sell to you in small
quantites
> with a minimum order (probably $50).
>
> Wes -- N7WS
>

2696. Re: Info on monitering Mil Sat Comm?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-10 00:00:00 UTC
From: Bobby Atkinson <bobbys@prodigy.net>
Message-ID: <01befb3a$c1951340$0100a8c0@ZTU>
Source record: 67046

You can find the position of the sats from Norad keps via Nasa or
other source, a tracking program like Nova For Windows will keep
your antennas pointed in the right direction or tell you where to point.
That's the easy part. The hard, they are encrypted. Bobby

Keith <spambox@teleport.com> wrote in article
<37cef8a5.54996278@192.108.254.3>...
> On Thu, 02 Sep 1999 01:41:38 GMT, dr.dongle@juno.com
> <7qkkkg$ih1$1@nnrp1.deja.com> wrote:
>
> > Does any one have any info on monitering military comm satalites?
> >frequencys? latitued and longitude? modes of operation? any info
> >appricated.
> >dr.d
>
> You might ask on the milcom mail list
> milcom@qth.net
> To subscribe send an email to:
> majordomo@qth.net
> in the BODY of the messsage put:
> subscribe milcom youremail@domain.com
>
>
>
> --
> Best Regards,
>
> Keith
> ---
> Home Page http://www.teleport.com/~kew
> Ham Radio Page http://n6jpa.htmlplanet.com/
> Subscribe to SWL Utility Talk Mail List at:
> http://www.onelist.com/subscribe/ute-talk
> ---
> [Posted with Agent 1.6. For info, email agent-info@forteinc.com.]
>

2697. Re: Reading a .wav file

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-10 00:00:00 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <7radlnstn1@nnrp1.deja.com>
Source record: 67047

In article <7r9s9t$637$1@lotus.onenet.net>,
wb5agz@dc.cis.okstate.edu (Martin McCormick) wrote:
>
> What is the name of the document on Microsoft's web site or,
> for that mater, any good document that explains how a .wav file is put
> together? I want to try my hand at being able to do a byte-by-byte
> analysis of a sound recording. I soon realized that I could find the
> data portion, but I wasn't seeing what one would normally expect to
> see, even taking in to account that these are at least 14-bit samples.
> I know that 8-bit A/D converters used in audio or any application that
> handles AC signals must be biased at half their maximum value or hex
> 80 in order to track the whole wave form. The recording I was playing
> with was a recording of CW on a quiet background so one should see a
> little idling at first then a sine wave sequence during each tone. I
> saw nothing that looked obvious after the plain text "data" header.
>
> All I know about the header is that it sets the sample rate
> and whether or not the data are to be encoded and decoded as mono or
> stereo. This file is mono. Not sure about the sample rate, but all
> that would do is squeeze the data points together or spread them out
> depending upon how many samples are being taken per second.

Get a copy of SOX (Sound Exchange), it should be on Simtel. It comes
with source code and converts all sorts of sound file from one format
to another. You should be able to lift bits of the code for your own
use, or simply convert to raw data.

73, Leon
--
Leon Heller, G1HSM
Tel (Mobile): 079 9098 1221 (Work): 01327 357824
Email: leon_heller@hotmail.com
Web: http://www.geocities.com/SiliconValley/Code/1835

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2698. Re: 250 or 500Hz CW filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-10 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <eC2C3.44447$JI.559369@news6.giganews.com>
Source record: 67048

Another strike against the narrower filter is that they tend to ring, and after a while the unpleasantness of it becomes annoying and creates fatigue.

73, Bob K6DDX

2699. Re: Microwave Oven Transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-10 00:00:00 UTC
From: Mike Willis <M.J.Willis@rl.ac.uk>
Message-ID: <37D8B4CF.A18F2227@rl.ac.uk>
Source record: 67049

All these problems with the secondary to frame resistance of microwave transformers can be solved by mounting the transformer on an insulator good for (say) 4kV. The problem then moves to the secondary to mains insulation. This should be good enough but one can always use an isolating transformer.

Most microwave oven transformers are designed for voltage doubling, but not with any significant load capacitance, just 1 or 2 uF. They are unlikely to work well with higher capacitance. They will also run hot. They are designed to. A blower may help cool them down.

How do we know DC will saturate the core in a centre tap biphase ? If it does, does that mean a microwave oven transformer can be used as a swinging choke ?

2700. Re: FA: roller inductor, vacuum variables, air variables

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-10 00:00:00 UTC
From: Bill Clarke <billclarke@bigfoot.com>
Message-ID: <7rah7ujlj1@ash.prod.itd.earthlink.net>
Source record: 67050
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

The last time I found parts for a project I was building, a nice new case and chassis, was here on this group and it was listed in eBay. If the message had not appeared here I would have missed the listing on eBay, as I don't have time to spend hours looking through all the stuff listed on eBay.

If you don't want to look at listings like this, simply filter all messages with FA in the subject line. That's why I put it there, which is the accepted method of posting.

Bill W2BLC

2701. There IS humour in the electronic world?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-10 00:00:00 UTC
From: Harry SM0VPO <harryvpo@hotmail.com>
Message-ID: <7rardv$ckf@newstoo.ericsson.se>
Source record: 67051

A little while ago I decided to get one of these cheap'n nasty battery eliminators for my new FT-290 to charge the batteries. I chose a 'National' battery elim. and the instructions were quite scanty. I then wrote a meaage to national asking them:

>>... and it says in the instructions (and on the box) that it is a
>> "Universal" battery eliminator. I know that National means
>>anywhere within the nation, International means in all nations
>>and global means anywhere on the planet earth. Could you
>>therefore advise me upon what other planets I may use my
>>universal battery eliminator?
>>

The reply I received included the following text:

>... and as soon as we are able to verify we will advise you.
>

I thought it was rather clever!

Harry

2702. Re: Reading a .wav file

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-10 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7rb7bgevi1@nnrp1.deja.com>
Source record: 67052

In article <7radlnstn1@nnrp1.deja.com>,
Leon Heller <leon_heller@hotmail.com> wrote about the innards
of .wav files:
>
> Get a copy of SOX (Sound Exchange), it should be on Simtel. It comes
> with source code and converts all sorts of sound file from one format
> to another. You should be able to lift bits of the code for your own
> use, or simply convert to raw data.

I found the source to the Linux wavplay application to be useful
for this. Have a look on any Linux site (http://metalab.unc.edu
is a good place to start) under applications that relate to sound.
--
Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte
Satellite: VA3SFL on UO-22, KO-25

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2703. 2m PA with GI7b

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-10 00:00:00 UTC
From: Rainer Meergans <dr.r.meergans@bigfoot.de>
Message-ID: <936981990.638197598@saturn.heiden.de>
Source record: 67053

I would like to build a 2m PA with the GI7b - so experiences, especially with the output (transmission line and its dimensions ?)and input section are welcome.

Rainer (DG2DBM)

Bitte Antwort an / Please replay to : dr.r.meergans@bigfoot.de

2704. Re info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-10 00:00:00 UTC
From: berlotti <berlotti@orbit.net.mt>
Message-ID: <01befb5a$a292a320$5d6dccc2@camillerijoseph>
Source record: 67054

Hello ppl
I have found an old marine transiever which it is hybrid construction and
is AM modulation , Does aneone heard of a name AJAX electronics i have
serched a lot but no avail and i wish i make the tubes glow again perhaps i
would hear somthing
all information is appreceated.

email
berlotti@orbit.net.mt

2705. VHF / UHF Power Amp Design

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-10 00:00:00 UTC
From: Martin John Hallsworth <Martin@g1gyc.demon.co.uk>
Message-ID: <936986014.9393.0.nnrp-02.9e98acde@news.demon.co.uk>
Source record: 67055

Hello,
I am looking for some information on designing VHF / UHF
valve (Tube) Power amps.
I would like to know how do you define the size of the strip lines
for the input and output circuits ?
and also how do to come up with the size for tuning "flapper"
capacitor elements ?

There must be some formula for calculating these or is it trial
and error !!

Many thanks Martin G1GYC

~~~~~~
Remove "NOSPAM" from email address to reply
~~~~~~

2706. Do you know the TS530S? I would like to

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-10 00:00:00 UTC
From: "G.W. Field" <angelgrove@nf.sympatico.ca>
Message-ID: <37D970C1.9A989107@nf.sympatico.ca>
Source record: 67056

Ask you a few questions.
1.Is it still possible to find parts for this rig?
2. Which parts are the difficult ones to find?
3. Which parts are the ones which are known to fail the most?
Any or all information/help is greatly appreciated. tx gary

2707. Re: Reading a .wav file

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-10 00:00:00 UTC
From: wb5agz@dc.cis.okstate.edu
Message-ID: <7rbriq$o48$1@lotus.onenet.net>
Source record: 67057

In article <7rb7bgevi1@nnrp1.deja.com>, <marsgal42@hotmail.com> wrote:
>I found the source to the Linux wavplay application to be useful
>for this. Have a look on any Linux site (http://metalab.unc.edu
>is a good place to start) under applications that relate to sound.

Thanks to everyone. I got the sox utility and will now go for
the .wav play utility. I think .wav files are the only file format
that sox doesn't cover. It does cover some older Soundblaster formats
and the audio format of the Sun work station which is the input and
output of an ISDN telephone subscriber chip such as what one would
have in an ISDN telephone. I suspect I will be quite busy for a long
time.:-)

Martin McCormick WB5AGZ Stillwater, OK
OSU Center for Computing and Information Services Data Communications Group

2708. Re: Info on monitering Mil Sat Comm?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-10 00:00:00 UTC
From: dr.dongle@juno.com
Message-ID: <7rc2pb$48m$1@nnrp1.deja.com>
Source record: 67058

In article <01befb3a$c1951340$0100a8c0@ZTU>,
"Bobby Atkinson" <bobbys@prodigy.net> wrote:
> You can find the position of the sats from Norad keps via Nasa or
> other source, a tracking program like Nova For Windows will keep
> your antennas pointed in the right direction or tell you where to
point.
> That's the easy part. The hard, they are encrypted. Bobby
>
> Keith <spambox@teleport.com> wrote in article
> <37cef8a5.54996278@192.108.254.3>...
> > On Thu, 02 Sep 1999 01:41:38 GMT, dr.dongle@juno.com
> > <7qkkkg$ih1$1@nnrp1.deja.com> wrote:
> >
> > > Does any one have any info on monitering military comm satalites?
> > >frequencys? latitued and longitude? modes of operation? any info
> > >appricated.
> > >dr.d
> >
> > You might ask on the milcom mail list
> > milcom@qth.net
> > To subscribe send an email to:
> > majordomo@qth.net
> > in the BODY of the messsage put:
> > subscribe milcom youremail@domain.com
> >
> >
> >
> > --
> > Best Regards,
> >
> > Keith
> > --
> > Home Page http://www.teleport.com/~kew
> > Ham Radio Page http://n6jpa.htmlplanet.com/
> > Subscribe to SWL Utility Talk Mail List at:
> > http://www.onelist.com/subscribe/ute-talk
> > --
> > [Posted with Agent 1.6. For info, email agent-info@forteinc.com.]
> >
>

-- Thanks for the info I am now a subscriber to a Mi monitering news
group.
dr.d

Kiss Technologys
The more complicated the plumbing
the easer it is to stop up the pipes M. Scott

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2709. NE 612 info wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-10 00:00:00 UTC
From: dr.dongle@juno.com
Message-ID: <7rc3no$51i$1@nnrp1.deja.com>
Source record: 67059

I am looking for a URL for a site or sites with aplication and typical
use info on the NE 612 double ballanced mixer. In particular info on
using a varactor to "tune" the internal oscilator.
Also the Phillips www site adress would be helpfull.
Thanks
dr.d
--
Kiss Technologys
The more complicated the plumbing
the easer it is to stop up the pipes M. Scott

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2710. nead hel for blind opperaitor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-10 00:00:00 UTC
From: bob hobnail <bobhobnail@freecall-uk.co.uk>
Message-ID: <37d99210.0@news2.cluster1.telinco.net>
Source record: 67060

Hi all, I write as to enquire if any one knows
of a kit of parts
or a built unit
or a schematic diagram
or ANY suggestions for a incoming power / RF meter,
for a blind (total) operator.
He needs something, so as to read incoming power 5 + ???
Some thing that bleeps with ether a change of tone or
preferably pips as in 1 pip to 9 pips ?
Maybe a press button, and it gives you the required info.
As any one ever heard of such a device.
Does any one know how the meter in a (normal)
Rig, is it driven ? Is it by DC ? Or RF ?
Apologies ! ! !
If I Haven't, explained my self properly.
ANY help would be VERY appreciated.
We have been trying,
to work something out for this chap for years.
You are welcome to e-mail me with any suggestions.
Or any one in N / West UK want to do a joint effort ??
On this very useful project
Thanks in advance from Bob

2711. Re: need help for blind operator (soz fer spellz)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-10 00:00:00 UTC
From: bob hobnail <bobhobnail@freecall-uk.co.uk>
Message-ID: <37d99298.0@news2.cluster1.telinco.net>
Source record: 67061

Hi all, I write as to enquire if any one knows
of a kit of parts
or a built unit
or a schematic diagram
or ANY suggestions for a incoming power / RF meter,
for a blind (total) operator.
He needs something, so as to read incoming power 5 + ???
Some thing that bleeps with ether a change of tone or
preferably pips as in 1 pip to 9 pips ?
Maybe a press button, and it gives you the required info.
As any one ever heard of such a device.
Does any one know how the meter in a (normal)
Rig, is it driven ? Is it by DC ? Or RF ?
Apologies ! ! !
If I Haven't, explained my self properly.
ANY help would be VERY appreciated.
We have been trying,
to work something out for this chap for years.
You are welcome to e-mail me with any suggestions.
Or any one in N / West UK want to do a joint effort ??
On this very useful project
Thanks in advance from Bob

2712. Re: FA: roller inductor, vacuum variables, air variables

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-10 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <37D978A5.510@pop.removethistomailme.net>
Source record: 67062
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

Bill Clarke wrote:
>
> The last time I found parts for a project I was building, a nice new case
> and chassis, was here on this group and it was listed in eBay. If the
> message had not appeared here I would have missed the listing on eBay, as I
> don't have time to spend hours looking through all the stuff listed on eBay.
>
> If you don't want to look at listings like this, simply filter all messages
> with FA in the subject line. That's why I put it there, which is the
> accepted method of posting.
>
> Bill W2BLC

Agreed. I wish we could force people to include [WHINE] or [RANT] in
their subject lines, so I could filter them as effectively as they
(ought to) be able to filter [FS], [FA], or [ebay].

-- jm KE5FX
http://www.qsl.net/ke5fx

Note: My E-mail address has been altered to avoid spam

2713. Re: nead hel for blind opperaitor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-10 00:00:00 UTC
From: pat <1126@nethawk.com>
Message-ID: <37D992A2.252A58ED@nethawk.com>
Source record: 67063

Bob couldn"t you use one of the led drives that are in
portables to indicate rec power and use the drive out puts to
drive a fet audio osc of varing tones to indicate the level.
Some of those chips have the option to turn on only one led
at a time thus only one osc at a time. Just one idea any way.

bob hobnail wrote:

> Hi all, I write as to enquire if any one knows
> of a kit of parts
> or a built unit
> or a schematic diagram
> or ANY suggestions for a incoming power / RF meter,
> for a blind (total) operator.
> He needs something, so as to read incoming power 5 + ???
> Some thing that bleeps with ether a change of tone or
> preferably pips as in 1 pip to 9 pips ?
> Maybe a press button, and it gives you the required info.
> As any one ever heard of such a device.
> Does any one know how the meter in a (normal)
> Rig, is it driven ? Is it by DC ? Or RF ?
> Apologies ! ! !
> If I Haven't, explained my self properly.
> ANY help would be VERY appreciated.
> We have been trying,
> to work something out for this chap for years.
> You are welcome to e-mail me with any suggestions.
> Or any one in N / West UK want to do a joint effort ??
> On this very useful project
> Thanks in advance from Bob

----------== Posted via Newsfeeds.Com, Uncensored Usenet News ==----------
http://www.newsfeeds.com The Largest Usenet Servers in the World!
------== Over 73,000 Newsgroups - Including Dedicated Binaries Servers ==-----

2714. Re: 250 or 500Hz CW filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-10 00:00:00 UTC
From: r_buschner@KNUUT.de
Message-ID: <7Objp2pIkEB@r_buschner.knuut.de>
Source record: 67064

Ray Dahlby wrote in <d5wB3.2152$eG5.193757@cac1.rdr.news.psi.ca>:

> I am "restoring" a Yaesu FT901DM and want to install a CW IF filter.
> Yaesu no longer has any 500Hz units but they do have a 250Hz model
> ($47+shipping). I would appreciate any advice as to whether I should
> spring for the narrow unit or wait and try to locate a 500Hz filter.
> I have no experience with either of these filters.

The 500 Hz filter has the better shape factor!

cu, Ralf, dl5mhk

--
Was fuer 'ne Signatur?

2715. Cobra Curve Tracer?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-10 00:00:00 UTC
From: Jeff <scanner@accessus.net>
Message-ID: <37D9DF44.49075B97@accessus.net>
Source record: 67065

Hello,
Has anyone heard of a Cobra Curve Tracer ? Model CT-751
It is a small box with 3 switches- on/off, gain-junction-leakage,
calibrate,b-e, b-c
a socket for a transister under test, and 3 leads red , black, yellow.
and a place to hook it to the vert & horz. on a scope.
It says it was made in Polaris ,NY which I can't find on any map.
Does anyone know of this device . I have hooked it up and it sames to
work fine but I would like more info on it.
Also as if you couldn't tell it is rather old.
I would be greatful for any help.
Thank you.
Jeff

2716. Re: There IS humour in the electronic world?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-10 00:00:00 UTC
From: Bob Headrick <bobh@proaxis.com>
Message-ID: <rtjln59f1iv33@corp.supernews.com>
Source record: 67066

I think it was National years ago that had very professional datasheets for WOM (write only memories), and non-inverting gates that were drawn as just wires connecting the inputs to the outputs.

- Bob W7OV

Harry SM0VPO <harryvpo@hotmail.com> wrote in message news:7rardv$ckf@newstoo.ericsson.se...
> A little while ago I decided to get one of these cheap'n nasty battery
> eliminators for my new FT-290 to charge the batteries. I chose a 'National'
> battery elim. and the instructions were quite scanty. I then wrote a meaage
> to national asking them:
>
> >>... and it says in the instructions (and on the box) that it is a
> >> "Universal" battery eliminator. I know that National means
> >>anywhere within the nation, International means in all nations
> >>and global means anywhere on the planet earth. Could you
> >>therefore advise me upon what other planets I may use my
> >>universal battery eliminator?
> >>
>
> The reply I received included the following text:
>
> >... and as soon as we are able to verify we will advise you.
> >
>
> I thought it was rather clever!
>
> Harry
>
>
>

2717. Re: Microwave Oven Transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-10 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <7rdvcc$8ej@dfw-ixnews4.ix.netcom.com>
Source record: 67067

In article <rTqZPTAP2C23Ewx1@ifwtech.demon.co.uk>,
Ian White, G3SEK <G3SEK@ifwtech.demon.co.uk> wrote:
>The problem is that with a typical 2000V secondary, you're heading for
>about 6kV off load! Also the ripple is a 2:1 variation between alternate
>half-cycles, and I'd hate to think what the regulation would be with the
>high-resistance secondary winding that is typical of oven transformers.
>
>Come to think, you could get back down to 3kV by using two identical
>transformers with secondaries in parallel and primaries in series, but
>that still leaves the ripple problem.

I though the idea was to run both transformers as full wave doublers,
(like they are in the ovens), but to swap the phase of one primary, so
that the ripple is reduced. You need a couple more diodes (in an oven the
magnetron acts as one of them) and another capacitor. But if you've dug
up two ovens, getting a couple more for the parts shouldn't be a problem
and transformer matching shouldn't be as critial.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

2718. Re: Homebrew Web Sites and good Books?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-11 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <37DA836B.5A16@ix.netcom.com>
Source record: 66985

Algar of Syngar wrote:
>
> Hi Folks!
>
> I am interested in re-educating myself in the ways of radio electronics. I
> got my Advanced class license about 20 years ago, and my education since has
> not been in RF. While I did work as a technician in the 80's, and have a
> degree in Electrical Engineering \ Computer Science, at no point in my
> education could I find a class in Communications, Radio, or anything related
> to my hobby interests. My course work was dedicated to teaching me why a
> transistor worked, how to design VLSI Chips, and the theory of the physics
> of electronics. Now I have been working as a Systems Analyst for the last 5
> years, and find my memory fading somewhat :-(
>
> So, I am looking for a few things.
>
> 1) Suggestions for Web Sites that have some project plans and ideas. Not
> just radio related.
> 2) Web Sites, or good books on radio electronics.
> 3) Are there still any magazines out there on electronics? I don't see
> Popular Electronics or anything similar on news stands any more.
>
> I remember in Tech School, we had a course on T.V. electronics. In that
> class, we had a schematic of a color T.V. and the book went through the
> circuit from beginning to end, explaining each section in detail. I would
> love to find something like this to go over receiver and transmitter design.
> It has been a while since I looked at any of the ARRL books. I have memories
> of them being rather difficult to understand. Years ago I remember reading
> the handbook and wondering what background knowledge was assumed for many of
> the chapters. There either seemed to be too much detail, or not enough. But
> that was a long time ago.
>
> Thanks in advance!
> 73's
> Al
> KA0HLZ

Hi Al -- for homebrew projects -- see URL:
http://www.ac6v.com/pagehb.html
Lots of projects there

For Homebrew antennas -- see URL:
http://www.ac6v.com/pageant.html
Dozens of antennas you can build

For books and mags -- see URL:
http://www.ac6v.com/pagehh.html
Hundreds to choose from

--
73 From Rod In San Diego

AC6V INDEX TO DX AND HAM RADIO
FEATURING 88 PAGES, 400 INDEXED TOPICS, AND 3000 LINKS
Over 450,000 visits on the counter
http://www.ac6v.com/ -- Home Page & Index
http://www.ac6v.com/pagedx.html -- DX Reference Pages

2719. Re: There IS humour in the electronic world?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-11 00:00:00 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <63wC3.2155$Sf.7829@news.rdc1.il.home.com>
Source record: 66986

Greg Werstiuk <greg_werstiuk@email.msn.com> wrote in message
news:wxnaN8diPWxuiZ5VGmk3GvawWJjW@4ax.com...
> In addition to the "cute" specs you describe, National Semiconductor
> also had a very real product titled "Damn Fast Buffer Amplifier".

Ah yes, the LH0066 Damned impressive in it's day!

2720. Re: There IS humour in the electronic world?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-11 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <37DA8DFF.277D@ix.netcom.com>
Source record: 66987

Harry SM0VPO wrote:
>
> A little while ago I decided to get one of these cheap'n nasty battery
> eliminators for my new FT-290 to charge the batteries. I chose a 'National'
> battery elim. and the instructions were quite scanty. I then wrote a meaage
> to national asking them:
>
> >>... and it says in the instructions (and on the box) that it is a
> >> "Universal" battery eliminator. I know that National means
> >>anywhere within the nation, International means in all nations
> >>and global means anywhere on the planet earth. Could you
> >>therefore advise me upon what other planets I may use my
> >>universal battery eliminator?
> >>
>
> The reply I received included the following text:
>
> >... and as soon as we are able to verify we will advise you.
> >
>
> I thought it was rather clever!
>
> Harry

--
Ah Humor --- for DX Humor -- see URL:
http://www.ac6v.com/pageaf.html

Years ago, One of the audio magazines had a cartoon with an audio driver
housed in an out building -- then an enormous exponential horn for 30 or
40 yards -- and the mouth of the horn was the roof of the audiophiles
house!!
Wish I'd clipped that one.
73 From Rod In San Diego

AC6V INDEX TO DX AND HAM RADIO
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Over 450,000 visits on the counter
http://www.ac6v.com/ -- Home Page & Index
http://www.ac6v.com/pagedx.html -- DX Reference Pages

2721. Re: Microwave Oven Transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-11 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <K70RIMA3Qq23Ew34@ifwtech.demon.co.uk>
Source record: 66988

Mark Zenier wrote:
>In article <rTqZPTAP2C23Ewx1@ifwtech.demon.co.uk>,
>Ian White, G3SEK <G3SEK@ifwtech.demon.co.uk> wrote:
>>The problem is that with a typical 2000V secondary, you're heading for
>>about 6kV off load! Also the ripple is a 2:1 variation between alternate
>>half-cycles, and I'd hate to think what the regulation would be with the
>>high-resistance secondary winding that is typical of oven transformers.
>>
>>Come to think, you could get back down to 3kV by using two identical
>>transformers with secondaries in parallel and primaries in series, but
>>that still leaves the ripple problem.
>
>I though the idea was to run both transformers as full wave doublers,
>(like they are in the ovens), but to swap the phase of one primary, so
>that the ripple is reduced. You need a couple more diodes (in an oven the
>magnetron acts as one of them) and another capacitor. But if you've dug
>up two ovens, getting a couple more for the parts shouldn't be a problem
>and transformer matching shouldn't be as critial.

If I'm using the correct terminology, they are still half-wave doublers in the ovens. Whatever you call them, it's a smart idea to use two transformers cross-phased, to avoid the problem of alternating large and small charging pulses. Using two transformers with the primaries in series but cross-phased, you might be able to get 2-3kV that is needed for a small RF power amplifier.

However, the main problem is still voltage regulation. In an oven, it is essential to limit the current through the magnetron (which is only a diode, with no control grid). This is achieved partly by the magnetic shunt in the transformer and partly by using very low values for the capacitors, typically only 1-2uF. Being current-limited means that the voltage regulation is very poor, but that's OK for the intended application.

The secondary resistance of the transformer can be quite high, and with the half-wave voltage doubler you don't have to insulate the start of the secondary winding from the core. Both of these make the transformer cheaper.

The power supply for an RF amplifier is very different - here you ideally need constant voltage. That means much higher values of capacitance (typically 20-30uF) and a transformer that has no magnetic shunt and a much lower secondary resistance. Also, the voltage regulation of a voltage doubler depends very critically on the secondary resistance of the transformer being very low. This is *much* more

important for any kind of doubler than it is for conventional bridge or full-wave rectifiers. All these factors means that - whichever circuit you use - you can't expect oven transformers to perform well in RF power amplifiers rated at more than a few hundred watts.

It's hard to generalize, but I think it's probably better either to use two transformers in a full-wave circuit (and accept that both cores will run closer to saturation), or to live dangerously and use a bridge circuit with the inner end of the secondary winding lifted from the core, than it is to use any kind of voltage doubler.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

2722. Re: Some computer related debris to swap for radio debris

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-11 00:00:00 UTC
From: Sparta Comm <asmet@ptd.net>
Message-ID: <O%BC3.2461$MJ.91204@nnrp1.ptd.net>
Source record: 66989
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.swap,rec.radio.amateur.homebrew

Hey Bob get with the program......It is not 1935

BOB DUCKWORTH <bob@atl.org> wrote in message news:7B69D09D.25B5@atl.org...
> Have some computer related debris at http://www.debris.org and
> while there are prices listed, I'm more keen on swapping for radio
> debris. Interested in anything from old tube boatanchor incunabula
> to latest DSP based, incl bus based (VME, etc.)
> Web page is kinda crude but will improve over time.
> Have 3500 sq foot warehouse of stuff to dispose of over the next 6
> months so will be adding lotsa stuff beginning late September with
> soem additions as time permits between now and then.
> -bob

2723. Re: FA: roller inductor, vacuum variables, air variables

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-11 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <37DAF19B.5402@pop.removethistomailme.net>
Source record: 66990
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

Clifton T. Sharp Jr. wrote:
>
> jmiles@pop.removethistomailme.net wrote:
> > Agreed. I wish we could force people to include [WHINE] or [RANT] in
> > their subject lines, so I could filter them as effectively as they
> > (ought to) be able to filter [FS], [FA], or [ebay].
> > [snip]
> > ----------
> > Note: My E-mail address has been altered to avoid spam
> > ----------
>
> How hypocritical of you. Advertising in violation of the rules is okay with
> you, as long as it's not in your mailbox.
>

Yep. I can get pretty hypocritical sometimes, especially when the
number of complaints exceeds the number of FS:/FA: ads on a newsgroup.
I can even be meta-hypocritical, as this post illustrates.

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

2724. Re: Schematic CAD software?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-11 00:00:00 UTC
From: Michael Chang <pya_cha@alcor.concordia.ca>
Message-ID: <37DB2465.2A2084A2@alcor.concordia.ca>
Source record: 66991

Algar of Syngar wrote:
>
> Hello!
>
> I have been out of cirulation for some time now, and want to get back into
> this hobby. I have a real itch to design and build some of my own equipment.
> Can anyone make some recommendations on an inexpensive CAD program that I
> can use to layout schematics? The programs that I am familer with from when
> I was working as a tech are in the $100's or $1,000's and that is a bit too
> high for a hobby interest :-)
>
> I did run across Design Works Light at http://www.dwlite.com/?0 and my
> initial impression is good. The only thing that frustrates me some is the
> size of the component library. I guess I am somewhat spoiled having used
> professional CAD software :-)
>
> Thanks!
> -Al

Hello Al,

Have a look at: http://www.engr.unl.edu/eeshop/cad.html

Michael

2725. Re: nead hel for blind opperaitor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-11 00:00:00 UTC
From: denton sprague <denton@oregontrail.net>
Message-ID: <37DB23DB.F15EFEEC@oregontrail.net>
Source record: 66992

Here is one suggestion, purchase a noise bridge, then use a double throw, double pole relay to switch it in and out of the line. I am assuming the fellow is using a transmatch.

bob hobnail wrote:

> Hi all, I write as to enquire if any one knows
> of a kit of parts
> or a built unit
> or a schematic diagram
> or ANY suggestions for a incoming power / RF meter,
> for a blind (total) operator.
> He needs something, so as to read incoming power 5 + ???
> Some thing that bleeps with ether a change of tone or
> preferably pips as in 1 pip to 9 pips ?
> Maybe a press button, and it gives you the required info.
> As any one ever heard of such a device.
> Does any one know how the meter in a (normal)
> Rig, is it driven ? Is it by DC ? Or RF ?
> Apologies ! ! !
> If I Haven't, explained my self properly.
> ANY help would be VERY appreciated.
> We have been trying,
> to work something out for this chap for years.
> You are welcome to e-mail me with any suggestions.
> Or any one in N / West UK want to do a joint effort ??
> On this very useful project
> Thanks in advance from Bob

2726. Re: FA: roller inductor, vacuum variables, air variables

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-11 00:00:00 UTC
From: Constantine <wa1wla@juno.com>
Message-ID: <7rcat7$9qt$1@nnrp1.deja.com>
Source record: 67068
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

In article <37D8722E.12B8@pgh.net>,
robrk@pgh.net wrote:
> Please don't turn this news group into another Boatanchors-is-eBay
> listing.
> There's rec.radio.swap for this stuff.
> Anyone on the Web for two days knows about eBay.....

Why this orthodoxy? Where do homebrewers find parts?
I DO NOT read the ones that i think are of no interest to me.
CT
--
A good place to hide your personality,is behind your microphone

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2727. Re: Grid Driven 4-1000 amp schematics anyone???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-11 00:00:00 UTC
From: Constantine <wa1wla@juno.com>
Message-ID: <7rcbl4$a9l$1@nnrp1.deja.com>
Source record: 67069
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <37D46672.35B1F4B4@ameritech.net>,
dharlan <dharlan@ameritech.net> wrote:
>
> Hey Tim,
>
> You may want to take a look at the "K2RIW" type of
VHF/UHF
> amps, they used 4X150's on 2m and 432. Really slick screen
protection
> And control circuits. Just adjust the voltages to fit your
"jug"..
> I applied the above concepts to a 4-400 that I used for rtty and
SSB
> on 80-10m. I could run my SB-104A at 5 w, out on rtty and got
about
> 300 watts outta the 4-400. Worked alot of europe and Africa with
my
> model 22 tty.
(Then the kids were born... oh well)
Glad you found time for that!
CT
>
> GL de
>
> /Dan N8ETQ Cleveland,Oh.
>
> "Gary C. Rogers" wrote:
> >
> > Tim, I remember seeing a full blown schematic of a 4-1000, 80-10
meters amp in
> > one of the ARRL Handbooks. It was a complete build it yourself
project. I
> > have not been able to locate the exact year, but I'm sure if you
call or write
> > to the ARRL they would be able to lead you in the right direction.
Just a
> > thought. Good Luck with your project.....Gary
> > Tim wrote:
> >
> > > Hi.... I am in the process of putting together a bunch of stuff
that I've
> > > had kicking around here together to make a 4-1000 amp... I have at
least a

> > > dozen schematics for GG amps but almost nothing for Cathode grid
driven amps
> > > using the 4-1000. The only real drawback that I've seen so far is
that it
> > > requires a slightly more complicateed power supply (screen voltage
and the
> > > like) but I already have the stuff to incorporate that into it.
The main
> > > advantage that I can see for this amp is that it takes very little
drive to
> > > send a 2500 watt bird slug into oblivion (or at least to cause the
needle
> > > in the meter housing this slug to gently tap the right hand stop
pin). I can
> > > imagine, though maybe not rightly, that this amp may be a little
more
> > > difficult to tame, parasitically speaking, but then I plan to
swamp the heck
> > > out of the input grid circuit to knock down the input drive to a
level that
> > > won't cause the tube to exceed the plate dissipation rating....in
my way of
> > > thinking this would seem to knock down a "possible parasitic"
enough to
> > > where it would never get started... where is Rich Measures when
you need
> > > him...anyway, any info would be helpful I'm looking to start this
project in
> > > the next 1-2 months....
> > > &#
> > > Tim
> > > tvendt@kear.tds.net
>

--
A good place to hide your personality,is behind your microphone

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2728. Energy Concentrator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-11 00:00:00 UTC
From: JWalton <jdwalton@home.com>
Message-ID: <37D9D0F2.32A15251@home.com>
Source record: 67070

Re the article on "free energy" in this month's QST. Will this work?

2729. Re: Do you know the TS530S? I would like to

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-11 00:00:00 UTC
From: w4pqwhs@aol.com
Message-ID: <19990910212405.24171.00007447@ng-fy1.aol.com>
Source record: 67071

Gary the TS 530S is a good rig, it is economy version of TS 830S .. most parts can be replaced with generic parts, some would be hard to find ,fortunately you would probably never need any parts other than tubes and they will be available forever I suppose.. to my knowledge there are no weak areas or likely failures. if the digital readout failed I doubt that you would ever find one. the rig would still be usable without readout.I was once an authorized Kenwood Service tech.. I would not hesitate to run a TS 530 ,it`s one of the "good ones"old but good. good luck Harold W4PQW

2730. Re: FA: roller inductor, vacuum variables, air variables

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-11 00:00:00 UTC
From: k6mhe@arrl.net
Message-ID: <37dbb694.1149377@news.mcn.org>
Source record: 67072

On Fri, 10 Sep 1999 15:31:17 -0600, John Miles
<jmiles@pop.removethistomailme.net> wrote:

>Bill Clarke wrote:
>>
>> The last time I found parts for a project I was building, a nice new case
>> and chassis, was here on this group and it was listed in eBay. If the
>> message had not appeared here I would have missed the listing on eBay, as I
>> don't have time to spend hours looking through all the stuff listed on eBay.
>>
>> If you don't want to look at listings like this, simply filter all messages
>> with FA in the subject line. That's why I put it there, which is the
>> accepted method of posting.
>>
>> Bill W2BLC
>
>Agreed. I wish we could force people to include [WHINE] or [RANT] in
>their subject lines, so I could filter them as effectively as they
>(ought to) be able to filter [FS], [FA], or [ebay].
>
>-- jm KE5FX

Still all in all, he has a point. There is a NG for selling stuff and
proper net etiquette would be to post FS items there.

73
Danny, K6MHE

2731. Re: There IS humour in the electronic world?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-11 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37DA0621.15F74847@teleport.com>
Source record: 67073

My favorite part of the WOM data sheet was the number-of-remaining-pins
vs. number-of-socket-insertions graph.

Back when I first went to work for Tektronix, the draftsman could still
put a cartoon here and there on a schematic to end up in the manual. But
all humor disappeared when the engineer founder relinquished control of
the company to the bean counters.

Roy Lewallen, W7EL

Bob Headrick wrote:
>
> I think it was National years ago that had very professional datasheets for WOM
> (write only memories), and non-inverting gates that were drawn as just wires
> connecting the inputs to the outputs.
>
> - Bob W7OV

2732. Re: There IS humour in the electronic world?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-11 00:00:00 UTC
From: Greg Werstiuk <greg_werstiuk@email.msn.com>
Message-ID: <wxnaN8diPWxuiZ5VGmk3GvawWJjW@4ax.com>
Source record: 67074

In addition to the "cute" specs you describe, National Semiconductor also had a very real product titled "Damn Fast Buffer Amplifier".

Product families at the time ran something like "Buffer Amplifiers" and "Fast Buffer Amplifiers". Creation of a new, much higher performance device forced them to choose a new adjective to describe it's general performance. "Ultra" wasn't in use in those days.

2733. Re: FA: roller inductor, vacuum variables, air variables

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-11 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <37DA25E5.5DD32656@corecomm.net>
Source record: 67075
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

Constantine wrote:
> robrk@pgh.net wrote:
> > Please don't turn this news group into another Boatanchors-is-eBay
> > listing.
> > There's rec.radio.swap for this stuff.
> > Anyone on the Web for two days knows about eBay.....
>
> Why this orthodoxy? Where do homebrewers find parts?

Don't read very well, do you? Right above, it says

> There's rec.radio.swap for this stuff.

> I DO NOT read the ones that i think are of no interest to me.

Spammer's favorite chant.

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+

2734. Re: FA: roller inductor, vacuum variables, air variables

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-11 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <37DA2765.1D2D5859@corecomm.net>
Source record: 67076

Dan Richardson wrote:
> <jmiles@pop.removethistomailme.net> wrote:
> >Bill Clarke wrote:
> >> The last time I found parts for a project I was building, a nice new case
> >> and chassis, was here on this group and it was listed in eBay. If the
> >> message had not appeared here I would have missed the listing on eBay, as I
> >> don't have time to spend hours looking through all the stuff listed on eBay.
> >>
> >> If you don't want to look at listings like this, simply filter all messages
> >> with FA in the subject line. That's why I put it there, which is the
> >> accepted method of posting.

No. The accepted method of posting is to post it in a newsgroup where the
charter allows it, and not to post it in newsgroups where charter forbids.
Unless your definition of "accepted" is "whatever Bill Clarke wants" (and
it probably is).

> >Agreed. I wish we could force people to include [WHINE] or [RANT] in
> >their subject lines, so I could filter them as effectively as they
> >(ought to) be able to filter [FS], [FA], or [ebay].

Ah, The spammer chant; "if you don't want to see it, don't look."

> Still all in all, he has a point. There is a NG for selling stuff and
> proper net etiquette would be to post FS items there.

Don't bother the spammers. Things like etiquette and rules only get in
their way. Playing nicely with others doesn't get them what they want.

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

2735. Re: FA: roller inductor, vacuum variables, air variables

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-11 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <37DA28DD.5CF4055D@corecomm.net>
Source record: 67077
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

```
jmiles@pop.removethistomailme.net wrote:
> Agreed. I wish we could force people to include [WHINE] or [RANT] in
> their subject lines, so I could filter them as effectively as they
> (ought to) be able to filter [FS], [FA], or [ebay].
> [snip]
> ----------------------------------------------------
> Note: My E-mail address has been altered to avoid spam
> ----------------------------------------------------

How hypocritical of you. Advertising in violation of the rules is okay with
you, as long as it's not in your mailbox.

--
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
```

2736. Re: There IS humour in the electronic world?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-11 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <37DA29A4.2A76E812@corecomm.net>
Source record: 67078

Bob Headrick wrote:
> I think it was National years ago that had very professional datasheets for WOM
> (write only memories), and non-inverting gates that were drawn as just wires
> connecting the inputs to the outputs.

Signetics had the 9046-by-N write-only memory. Wish I still had my copy
of the datasheet.

Electro-Voice had a spoof about some enormous hi-fi speaker systems. One
part of it said each speaker was shipped unassembled in two boxcars. An
accessory offering was a kit that let you convert the boxcars into a
summer home.

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

2737. Re: nead hel for blind opperaitor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-11 00:00:00 UTC
From: wb5agz@dc.cis.okstate.edu
Message-ID: <7rdjr5$jh4$1@lotus.onenet.net>
Source record: 67079

There have been many good tuning aid designs for blind hams for literally decades. The first one I saw was on a DX 100 which was at the Oklahoma School for the Blind in 1964 or so. This particular one was a transistor oscillator that received the same voltage which appeared across the movement of the meter that showed either grid drive or final PA plate current depending upon how one set the meter function switch. The device was actually a VCO or voltage controlled oscillator which would give a higher frequency tone as the meter went higher. There was also a pot whose knob had a pointer on it that pointed to a scale of raised dots that corresponded to similar reference points on the meter. The game was to flip a slide switch on the tuning aid to one position in which the meter controlled the tone and then slide the switch to the other position in which the knob controlled the pitch. When the knob's pitch equaled the meter's pitch, then one could read the pointer and, indirectly, the meter.

I have seen at least one other copy of this same tuning aid across the meter of a Heath Kit Warier linear so I am pretty sure the design came out of a "QST" or "73" article of the late fifties or early sixties.

There have also been many, many updates to this design as technology improved and different people solved the same problem so a visit to the local library and a look at an index of "QST" or any other ham radio magazine that has construction articles should yield several tuning devices over the last 40 or so years. Remember that even old designs may have valid ideas in them so while one might not want to totally duplicate that 1964 or 65-vintage tuning device, the principle on which it is based is just as good today as it ever was.

Of course, if the modification is being made to a modern transceiver with a digital display, then all bets are off. One will have to use what is there such as maybe building a tuning aid that uses field strength or connects like a SWR meter and not directly to the rig's own display. Also, remember to keep safety topmost in one's mind. A meter movement in a transmitter may only have half a volt or so across it, but that potential may be totally different when measured between the meter or anything connected to it and ground. One might find 2,499.5 volts between one side of a meter and ground and 2,500 volts on the other side. I'd sure want to be on the low side of that, right?:-) The point is to know what you are doing and be familiar enough with the circuit to make sure there are no booby traps involved in the modification.

Another possible resource for information could be Handyhams
of Golden Valley Minnesota. They are an organization which helps hams
who are blind with study materials and in solving the technical
problems with getting on the air.

Martin McCormick WB5AGZ Stillwater, OK
OSU Center for Computing and Information Services Data Communications Group

2738. Schematic CAD software?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-11 00:00:00 UTC
From: Algar of Syngar <algar@ZAPP.charter.net>
Message-ID: <rtktam371iv87@corp.supernews.com>
Source record: 67080

Hello!

I have been out of cirulation for some time now, and want to get back into this hobby. I have a real itch to design and build some of my own equipment. Can anyone make some recommendations on an inexpensive CAD program that I can use to layout schematics? The programs that I am familer with from when I was working as a tech are in the $100's or $1,000's and that is a bit too high for a hobby interest :-)

I did run across Design Works Light at http://www.dwlite.com/?0 and my initial impression is good. The only thing that frustrates me some is the size of the component library. I guess I am somewhat spoiled having used professional CAD software :-)

Thanks!
-Al

2739. 16c73a programmer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-11 00:00:00 UTC
From: orion <orion@otenet.gr>
Message-ID: <7rdsv5$6jn$1@newssrv.otenet.gr>
Source record: 67081

Hi there
im looking for a pic 16C73A microcontroller programmer?
pls help:)

Chris
orion@otenet.gr

2740. 1999 AWA Auction Results are posted with photos

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-11 00:00:00 UTC
From: "John Dilks, K2TQN" <oldradio@worldnet.att.net>
Message-ID: <37DA79EE.30F9@worldnet.att.net>
Source record: 67082
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.swap,rec.antiques.radio+phono

To all,

The 1999 AWA Auction Results are posted with photos on the following web page:

http://www.eht.com/oldradio/awa/

Note: Why not have your Radio Club link directly to this web page. It's always fresh and loaded with radio history and important radio collecting information. Call it "Page 2" -- and please let me know if you do, thanks. There are about 5 or 6 linking here already, that I know about.

Also on this page: Radio History articles, Old Radio Shows, Big Band Music, an Events calendar, radio museum tours and links - and more all the time.

--
73' John Dilks, K2TQN

2741. Homebrew Web Sites and good Books?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-11 00:00:00 UTC
From: Algar of Syngar <algar@ZAPP.charter.net>
Message-ID: <rtkuc2mf1iv38@corp.supernews.com>
Source record: 67083

Hi Folks!

I am interested in re-educating myself in the ways of radio electronics. I got my Advanced class license about 20 years ago, and my education since has not been in RF. While I did work as a technician in the 80's, and have a degree in Electrical Engineering \ Computer Science, at no point in my education could I find a class in Communications, Radio, or anything related to my hobby interests. My course work was dedicated to teaching me why a transistor worked, how to design VLSI Chips, and the theory of the physics of electronics. Now I have been working as a Systems Analyst for the last 5 years, and find my memory fading somewhat :-(

So, I am looking for a few things.

1) Suggestions for Web Sites that have some project plans and ideas. Not just radio related.
2) Web Sites, or good books on radio electronics.
3) Are there still any magazines out there on electronics? I don't see Popular Electronics or anything similar on news stands any more.

I remember in Tech School, we had a course on T.V. electronics. In that class, we had a schematic of a color T.V. and the book went through the circuit from beginning to end, explaining each section in detail. I would love to find something like this to go over receiver and transmitter design. It has been a while since I looked at any of the ARRL books. I have memories of them being rather difficult to understand. Years ago I remember reading the handbook and wondering what background knowledge was assumed for many of the chapters. There either seemed to be too much detail, or not enough. But that was a long time ago.

Thanks in advance!
73's
Al
KA0HLZ

2742. 16C73 A PROGRAMMER

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-11 00:00:00 UTC
From: orion <orion@otenet.gr>
Message-ID: <7rdtkr$82m$1@newssrv.otenet.gr>
Source record: 67084

Hi there
im looking for a pic 16C73A microcontroller programmer?
pls help:)

Chris
orion@otenet.gr

2743. Re: 16c73a programmer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-12 00:00:00 UTC
From: "Mr. Muckle" <jdwalton2@home.com>
Message-ID: <37DB2327.83A5D185@home.com>
Source record: 66993

post to "comp.arch.embedded" for the answer.

Personally, I use the PIC Start Plus - cause they give it to you at the Microchip seminar, along with all their books, a CDRom, power supply and a 16C84. It has a very useful ZIF socket and can program all the midrange devices.

orion wrote:

> Hi there
> im looking for a pic 16C73A microcontroller programmer?
> pls help:)
>
> Chris
> orion@otenet.gr

2744. Re: Building a SCF-based PL decoder

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-12 00:00:00 UTC
From: yvon roy <soj@sympatico.ca>
Message-ID: <37DB3D09.AEF0F3E7@sympatico.ca>
Source record: 66994

What is the frequency of the signal that you want to eleminate? Regards

Martin McCormick wrote:

> I am about to build an audio notch filter to remove the PL
> tone frequency from the output of a receiver. I was going to use a
> Butterworth circuit based on a good series in the July 1980 "QST" when
> I thought it might be a good time to try a SCF IC as the filter
> block. Is there a particularly good switched capacitance filter IC
> that is easy to find, relatively cheap and available in a through-hole
> DIP package?
>
> It is my understanding that one doesn't have to do much except
> supply a clock frequency of 8 or 10 times the frequency of interest to
> make the SCF do its thing. The one disadvantage to the Butterworth
> design is that you have to tweak things a bit to tune it in and it is,
> therefore, a little harder to duplicate.
>
> Martin McCormick WB5AGZ Stillwater, OK
> OSU Center for Computing and Information Services Data Communications Group

2745. Re: Building a SCF-based PL decoder

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-12 00:00:00 UTC
From: "Joseph A. Consugar" <joesugar@erols.com>
Message-ID: <37DB2760.2913535D@erols.com>
Source record: 66995

Martin McCormick wrote:
>
> I am about to build an audio notch filter to remove the PL
> tone frequency from the output of a receiver. I was going to use a
> Butterworth circuit based on a good series in the July 1980 "QST" when
> I thought it might be a good time to try a SCF IC as the filter
> block. Is there a particularly good switched capacitance filter IC
> that is easy to find, relatively cheap and available in a through-hole
> DIP package?
>
> It is my understanding that one doesn't have to do much except
> supply a clock frequency of 8 or 10 times the frequency of interest to
> make the SCF do its thing. The one disadvantage to the Butterworth
> design is that you have to tweak things a bit to tune it in and it is,
> therefore, a little harder to duplicate.
>
> Martin McCormick WB5AGZ Stillwater, OK
> OSU Center for Computing and Information Services Data Communications Group

I believe DigiKey sells a number of switched capacitor chips. The
general purpose one I like to use is the MF10. Using this one, you
can put together a number of different filter types, not just a notch.
Try looking in their latest catalog.

Joseph

2746. Mastering Static Electricity - HOW?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-12 00:00:00 UTC
From: James Ek <JIM-EK@worldnet.att.net>
Message-ID: <7rfgv7$45j$1@bgtnsc02.worldnet.att.net>
Source record: 66996

I want to use a Kite and line as an antenna for a 2 meter handheld.

No hardplan at this point in time. Kite with kitestring/looking for about a 1,000 ft altitude. Probably end up having to have about 2,000 ft of line out to get the altitude.

Along with the line to the kite, plan to have about 26 guage bright wire (from craft shop) to use as antenna connected to handheld. Plan on flying when clear blue sky, but still concerned about static electricity buildup.

Can anyone suggest reference material for learning how to overcome static electricity in this situation. I just recently passed my technicians test and am waiting on call sign, so I have quite a bit to learn.

Thanks,
Jim

2747. Re: Schematic CAD software?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-12 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7rg8ph$k5n$1@news1.fast.net>
Source record: 66997

-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

> Algar of Syngar wrote:
> >
> > Hello!
> >
> > I have been out of cirulation for some time now, and want to get
back into
> > this hobby. I have a real itch to design and build some of my own
equipment.
> > Can anyone make some recommendations on an inexpensive CAD program
that I
> > can use to layout schematics? The programs that I am familer with
from when
> > I was working as a tech are in the $100's or $1,000's and that is
a bit too
> > high for a hobby interest :-)
> >
> > I did run across Design Works Light at http://www.dwlite.com/?0
and my
> > initial impression is good. The only thing that frustrates me some
is the
> > size of the component library. I guess I am somewhat spoiled
having used
> > professional CAD software :-)
> >
> > Thanks!
> > -Al

You might also check out the freeware version of Eagle from CadSoft at

http://www.cadsoftusa.com/

This is integrated schematic capture and PCB layout with autorouter.
The
freeware version is limited to 2 layers and 1 schematic sheet (no
hierarchical
structures) and the board size is limited, but otherwise it's supposed
to do
everything that the "professional" version does.

I own the professional version and for the money it's the best I've
found.

Eagle is also now available under Linux as well as Win9x and NT.

I have no connection to this company other than as a customer.

73,
- --
Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI
Fellow, Radio Club of America
Senior Member, IEEE
Member, ARRL
Join NCI - Hams for the 21st Century!
Help modernize ham radio and assure its future survival!
http://www.nocode.org

-----BEGIN PGP SIGNATURE-----
Version: PGP for Personal Privacy 5.5.3

iQA/AwUBN9ul+pe+N6+q84HiEQKoDACfY0EhNLKKe4MvApmujfR2hXbnYKwAnRew
NA+7p83GWw+WbHEECerUdhoA
=Cc4F
-----END PGP SIGNATURE-----

2748. Re: NE 612 info wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-12 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <7rgcpbtiq1@nnrp1.deja.com>
Source record: 66998

In article <7rc3no$51i$1@nnrp1.deja.com>,
dr.dongle@juno.com wrote:
> I am looking for a URL for a site or sites with aplication and
typical
> use info on the NE 612 double ballanced mixer. In particular info on
> using a varactor to "tune" the internal oscilator.
> Also the Phillips www site adress would be helpfull.
> Thanks
> dr.d
> --
> Kiss Technologys
> The more complicated the plumbing
> the easer it is to stop up the pipes M. Scott
>
> Sent via Deja.com http://www.deja.com/
> Share what you know. Learn what you don't.
>

Dear Dr. d,

The Philips components homepage is
http://www-us3.semiconductors.com/pip/ and you must type NE612 or SA612
on the search 'exact product name' window; you will get the info on it.
Data sheets are available for SA612 in .pdf format (you have to have
Acrobat Reader from Adobe to read these files; it is free).

Good luck,

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2749. Re: Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-12 00:00:00 UTC
From: rick@area.com
Message-ID: <7rghpoqgm1@vax.area.com>
Source record: 66999

In article <37D71A93.1E66874E@Netburner.com>,
Paul Breed <Paul@Netburner.com> wrote:
>>
>> Doing everything digitally limits your dynamic range to 12 to 14 bits
>> or as we analog dinosaurs would say 74 to 86 dB. You might need more
>> dynamic range than that on the air. And that is why we don't do
>> everything digitally.
>>
>If you are doing an I/Q DC receiver... then use a high quality stereo
>Audio A/D.
>Some have have dynamic range specifications> 120dB. (Far more than 14
>effective bits)
>
>
>--
>Paul Breed Chief Architect, NetBurner
>Networking in one day.
>http://www.netburner.com

Yes, but then we are back to using analog techniques for eliminating the
image again.

Rick N6RK

2750. Re: HELP! BC2500XLT Schematic/S-Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-12 00:00:00 UTC
From: fishlure <fishlure@pacbell.net>
Message-ID: <37DBD873.69F49307@pacbell.net>
Source record: 67000
Cross-posted to:
rec.radio.scanner,rec.radio.amatuer.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave

HELP HELP- ANY INFORMATION APPRECIATED

I'm having NO luck finding any information on:

1. Locating a schematic for Uniden BC 2500XLT

2. Locating a schematic for Uniden BC-200XLT

3. In addition to obtaining these schematics, I really want to
know how and where to install an analog S-METER on both of the
above scanners(the specfic place on the circuit board to tap into,
so an external s-meter can be installed}. THANKS FOR YOUR HELP.

2751. CCS PCM C compiler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-12 00:00:00 UTC
From: orion <orion@otenet.gr>
Message-ID: <7rglo7$a7t$1@newssrv.otenet.gr>
Source record: 67001

Hi all!

I'm looking for a place to download the above C compiler for PIC
microcontrollers. Is there such a link?

Christos

2752. Re: Mastering Static Electricity - HOW?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-12 00:00:00 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <EWQC3.3586$Sf.11357@news.rdc1.il.home.com>
Source record: 67002

> Can anyone suggest reference material for learning how to overcome static
> electricity in this situation. I just recently passed my technicians test
> and am waiting on call sign, so I have quite a bit to learn.

You could use a 1-1 transformer at the bottom, keeping the antenna line
grounded at all times, and coupling only the signal into the radio.

A few turns around a toroid, and a couple of BNC connectors should do it.

Are you going to run longwire, or small (lossy/expensive) coax to a dipole
or some such?

2753. Re: Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-12 00:00:00 UTC
From: Paul Breed <Paul@Netburner.com>
Message-ID: <37DBF768.400EFE5D@Netburner.com>
Source record: 67003

> Yes, but then we are back to using analog techniques for eliminating the
> image again.

I don't follow......
All of the filtering and phase shifting is done in the DSP.
The only analog component is a simple low pass filter ahead of the
STEREO (2 ch simultainous sampling etc...) 96kHz A/D.

The low pass filter has to:
-> attenuate 48Khz
-> pass 3Khz
-> provide a constant load impedance to the mixers.

It does not have to be linear in phase,
and many minor imperfections can calibrated out and fixed in the DSP.

Paul KL7JG

Paul Breed Chief Architect, NetBurner
Networking in one day.
http://www.netburner.com

2754. Re: SPREAD SPECTRUM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-12 00:00:00 UTC
From: Dan Schultz <n8fgv@amsat.org>
Message-ID: <37DBFDB5.CA0D7EB5@amsat.org>
Source record: 67004

You can join TAPR's spread spectrum mailing list by visiting
http://www.tapr.org/tapr/html/ssf.html

Dan Schultz N8FGV

frederic.merle@wanadoo.fr wrote:

> Hi,!!
>
> Please confirm if there is a newsgroup for Spread spectrum.?
> Many thanks for your help.
>
> Bst Rgds.

2755. Re: Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-12 00:00:00 UTC
From: Rocci <rocci@att.net>
Message-ID: <37DC0F2E.ECFF09C0@att.net>
Source record: 67005

Also, keeping thinking about the Weaver method as a demod technique that is more tolerant of hardware deficiencies. Minor cancellation imperfections do not result in loss of image rejection, they merely cause audio distortion. With 25-30 dB of cancellation, this should be inaudible. The image rejection will be as good as the shape factor of the audio low pass filters.
Joe
WA3CMQ

Paul Breed wrote:

> > > Yes, but then we are back to using analog techniques for eliminating the
> > > image again.
> >
> > I don't follow......
> > All of the filtering and phase shifting is done in the DSP.
> > The only analog component is a simple low pass filter ahead of the
> > STEREO (2 ch simultainous sampling etc...) 96kHz A/D.
> >
> > The low pass filter has to:
> > -> attenuate 48Khz
> > -> pass 3Khz
> > -> provide a constant load impedance to the mixers.
> >
> > It does not have to be linear in phase,
> > and many minor imperfections can calibrated out and fixed in the DSP.
> >
> > Paul KL7JG
> > ---------------------------------------
> > Paul Breed Chief Architect, NetBurner
> > Networking in one day.
> > http://www.netburner.com

2756. FT8000 Template

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-12 00:00:00 UTC
From: Esp1 <esp1@null.net>
Message-ID: <7QVC3.1083$TZ3.107740@juliett.dax.net>
Source record: 67006

Hi :-)
I am the lucky owner of an FT8000 and the ADMS-2d software... but i am not able to make the template-file. The computer downloads the radio unto 100% is reach... but then i get the message: "Receive timeout". I have tried allmost evrything.. but my settings are correct and my cable is also ok.

If someone has a xxx.tpl file for the FT8000r to mail me i'll be glad :-)
That way i can test if its possible to upload anything to the radio....

Best regards
Espen@Esp1.no

2757. Trade nice air variable for smaller one

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-12 00:00:00 UTC
From: Doug Snowden <ssnowden@primeline.com>
Message-ID: <37DC5DF5.E70B23D5@primeline.com>
Source record: 67007
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

I have a couple of nice transmitting air vairiables
that are physically too big for an amplifier I am building.
I Need a smaller 1000pf at about 1kv air variable in trade.
I have (trade either of them)

1 Johnson air variable, dual section, each section 11 plates spaced
.25 inch. Part number/value is not readable. Estimate about 150pf total.

1 Cardwell air variable, 1000pf with .1 inch spacing. 47 plates, single
section. This is a brute, but is too big physically. The value is
perfect. Heavy construction.

Doug N4IJ
snowden@primeline.com

2758. Re: Reducing 110vac to 55vac

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-13 00:00:00 UTC
From: Michael Chang <pya_cha@alcor.concordia.ca>
Message-ID: <37DDDDD9.443B6722@alcor.concordia.ca>
Source record: 66935

john cunningham wrote:

> Or you could connect a diode in series so that the heating element only
> conducts on one half cycle and therefore halving the power input.

Darn.. now why didn't I think of that? :ï¿½

Goes to show what a bit of careful thinking can do.

Michael

2759. Re: S-Meter Output : SSB vs FM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-13 00:00:00 UTC
From: Woody White <woody.white@att.net>
Message-ID: <37DDBF00.EA34855A@att.net>
Source record: 66936

Huh? Hit send too soon? If you are asking about FM signal
strength, monitor the discriminator voltage. RF (input)
attenuators will likely be needed to avoid saturation.
Woody

Luke Enriquez wrote:
>
> Good Afternoon People,
>
> I am currently facing an interesting problem with
> out current fox-hunting setup (t-hunting, radio sport, whatever).
> Our team uses a fairly

--

---------- de Woody, WB4QXE ----------

Ham Homebrew/ATV Circuits -*- Scanning Electron
Microscope Images

http://www.geocities.com/capecanaveral/3722

2760. Re: wireline remote control?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-13 00:00:00 UTC
From: rick@area.com
Message-ID: <7rkfj5$99v$1@vax.area.com>
Source record: 66937
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

In article <7rikqn$cv9$1@nnrp1.deja.com>, <yew_hoo@my-deja.com> wrote:
>I'm looking for information about wireline remote control of an amateur
>radio station. I'm looking for both technical info and regulatory

I have been trying to get a handle on this for a couple of years now
and it seems that the only "turnkey" solution is to buy a Kachina
transceiver with its remote option. You can also apparently buy the
TRZ control software (which works for various rigs) but you need
one phone line for the data link and another for the audio path.
AEA used to make a "hamlink" remote control system that is probably
what you and I really want. I just missed out on buying a used one
for $175.

If anyone is aware of any better solutions, please post them.

Rick Karlquist N6RK
rick@area.com

2761. Re: Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-13 00:00:00 UTC
From: rick@area.com
Message-ID: <7rkgf7$ad4$1@vax.area.com>
Source record: 66938

In article <7rju8a$ks1$1@news1.fast.net>,
Carl R. Stevenson <wa6vse@fast.net> wrote:
>-----BEGIN PGP SIGNED MESSAGE-----
>Hash: SHA1
>
>> Yes, but then we are back to using analog techniques for eliminating
>the
>> image again.
>
>How so? The stereo codecs sample I/Q baseband from a pair of mizers.
>The two channels sample simultaneously. From there, it can all be
>done
>in the digital domain.
>
>All you need is a bit of anti-aliasing filter before each A/D channel
>... and
>with the available sample rates and the characteristics of sigma-delta
>A/Ds,
>the requirement should be minimal ... maybe just a single R-C pole.
>
>You can also use the Weaver technique rather than the "conventional"
>phasing technique.

If you use an I/Q downconverter and upconverter with a digital audio
system, in the non-Weaver case you are depending on the goodness of the analog
circuitry for opposite sideband rejection (receive and transmit) and
for transmit carrier suppression. In the Weaver case, you are
depending on the goodness of the analog circuitry for whistle suppression.
If you do the Weaver technique digitally, then the analog IF is no
longer centered at zero frequency and you are back to the first case above.

BTW, is your patented architecture in production anywhere? What
specs does the product have? It would be interesting to compare
it to the performance of Tom Hornak's IC implementation.

Rick Karlquist N6RK
rick@area.com

2762. Re: NE 612 info wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-13 00:00:00 UTC
From: dr.dongle@juno.com
Message-ID: <7rhhakksl1@nnrp1.deja.com>
Source record: 67008

In article <7rgcpbtiq1@nnrp1.deja.com>,
py1ll@my-deja.com wrote:
> In article <7rc3no$51i$1@nnrp1.deja.com>,
> dr.dongle@juno.com wrote:
> > I am looking for a URL for a site or sites with aplication and
> typical
> > use info on the NE 612 double ballanced mixer. In particular info on
> > using a varactor to "tune" the internal oscilator.
> > Also the Phillips www site adress would be helpfull.
> > Thanks
> > dr.d
> > --
> > Kiss Technologys
> > The more complicated the plumbing
> > the easer it is to stop up the pipes M. Scott
> >
> > Sent via Deja.com http://www.deja.com/
> > Share what you know. Learn what you don't.
> >
>
> Dear Dr. d,
>
> The Philips components homepage is
> http://www-us3.semiconductors.com/pip/ and you must type NE612 or
SA612
> on the search 'exact product name' window; you will get the info on
it.
> Data sheets are available for SA612 in .pdf format (you have to have
> Acrobat Reader from Adobe to read these files; it is free).
>
> Good luck,
>
> Luiz - PY1LL
>
> Sent via Deja.com http://www.deja.com/
> Share what you know. Learn what you don't.
>
Mnay thanks
dr.d
--
Kiss Technologys
The more complicated the plumbing
the easer it is to stop up the pipes M. Scott

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2763. Re: NE 612 info wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-13 00:00:00 UTC
From: wa4rlo@aol.com
Message-ID: <19990913014541.23252.00004444@ng-fb1.aol.com>
Source record: 67009

The NE612 is the same as the NE602

2764. Kenwood 6 conductor Power Connectors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-13 00:00:00 UTC
From: dontspammedown@yahoo.com
Message-ID: <37e99b2d.18590901@news.i-plus.net>
Source record: 67010
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.homebrew

Does anyone know a where one can get Power connectors for Kenwood HF
Radio's? I think $40 is a bit over-priced for a cable, don't you? I
think Icom uses the same plug. Thanks for any info

73's from KF4ABM, Doug
Come visit my home page at http://www.radiolink.net/kf4abm
my real e-mail address is kf4abm.spamfilter@radiolink.net
I use a false address so I don't get junk email.
You need to remove the ".spamfilter" before the @ symbol

2765. S-Meter Output : SSB vs FM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-13 00:00:00 UTC
From: luke@trio.COM.AU
Message-ID: <199909130636.XAA24330@mailbox2.ucsd.edu>
Source record: 67011

Good Afternoon People,

I am currently facing an interesting problem with
out current fox-hunting setup (t-hunting, radio sport, whatever).
Our team uses a fairly

2766. wireline remote control?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-13 00:00:00 UTC
From: yew_hoo@my-deja.com
Message-ID: <7rikqn$cv9$1@nnrp1.deja.com>
Source record: 67012
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

I'm looking for information about wireline remote control of an amateur radio station. I'm looking for both technical info and regulatory insight. The Part 97 stuff gives some definitions, but no real discussion to enlighten me.

If there are any good books on the subject, or internet sites, I'd like to check them out. Anybody have any experience with this?

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2767. Re: Homebrew Web Sites and good Books?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-13 00:00:00 UTC
From: k7on@arrl.net
Message-ID: <MPG.12470149f7caf5c49897a3@news.speedchoice.com>
Source record: 67013

> So, I am looking for a few things.
>
> 1) Suggestions for Web Sites that have some project plans and ideas. Not
> just radio related.
> 2) Web Sites, or good books on radio electronics.
> 3) Are there still any magazines out there on electronics? I don't see
> Popular Electronics or anything similar on news stands any more.

Try: http://www.qex.net/k7on/

--
Brian Short, K7ON 1994 E. Laguna Dr. Tempe, Az 85282
bshort@speedchoice.com >or< http://www.qex.net/k7on/
--

2768. Houston TX Swapfest

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-13 00:00:00 UTC
From: Bob Biekert KA5GLX <ka5glx@arrl.net>
Message-ID: <nI6D3.882$814.62138@typhoon01.swbell.net>
Source record: 67014

The Clear Lake ARC will hold SwapFest'99 on Sept 18th at the Webster TX
Civic Center (NASA area)
Currently there are 30 tables left - so first come first served.
Ham tables are $6 which includes the $3 entry fee - please send in your
name/call/phone with your monies to CLARC SwapFest, pob 57714 Webster TX
77598.

Vendors include:
KCOMM
Houston Amateur Radio Supply
PointeCom
GHG internet
Battery-Tech
Coastal Communications
Radio Shack
Cyberbye Computers
WindWeather Warning Systems

see www.clarc.org/swapfest.htm for all the details

73

--
Bob Biekert
Let's get back to Hamming!
www.clarc.org
ka5glx@arrl.net

2769. WANTED: Kenwood TU-79

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-13 00:00:00 UTC
From: kd4vrz@arrl.net
Message-ID: <37dd446d.1524128@netnews.att.net>
Source record: 67015
Cross-posted to: alt.ham-radio.marketplace,alt.ham-radio.vhf-uhf,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I am looking for a TU-79 tone board for a old 7950. If anyone has a working one please contact me via email. kd4vrz@arrl.net

Gary
KD4VRZ

2770. Re: 250 or 500Hz CW filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-13 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <37DD45FE.6C02@ixpres.com>
Source record: 67016

Frank Dinger wrote:
>
> The message <37D6B70A.2D6C@ixpres.com>
> from Don W6JL <W6JL@ixpres.com> contains these words:
>
> > In addition, if you ever get involved with FSK modes such as RTTY,
> > Pactor, or Amtor, you will definitely need the 500Hz filter. 250 Hz is
> > too narrow for these modes. So, I have found the 500Hz bandwidth to be
> > the best all-around narrow I.F. bandwidth.
> ==
> Agree with the above. If you really need a narrower passband you
> could do that by means of an external audio filter ,analogue or DSP.
>
> Frank , GM0CSZ / KN6WH

One thing, an external audio filter will not help with strong QRM in the I.F. passband of the receiver, controlling the AGC,and preventing good copy of weak signals. The selectivity needs to be before the product detector and AGC detector, not after. Sort of like letting the horse out of the barn before closing the door. When a receiver is direct-conversion to baseband, then all the filtering can be done in DSP at baseband. This is an advantage of direct-conversion receivers that is just starting to be exploited by homebrewers.

73,
Don, W6JL

2771. Reducing 110vac to 55vac

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-13 00:00:00 UTC
From: Paperboy <btslfke@poboxes.com>
Message-ID: <7rjfv1lav1@zook.lafn.org>
Source record: 67017

I'm interested in reducing the heating power of an electric
frying pan by one-fourth. Went to the local Radio Shack hoping
to find a Variac for the experiment but they've never heard of them.
They do have 100vac to 25vac transformers but that's too low for
my experiment. Then I saw the kit they sell travelers for adapting
appliances to different plug designs and reducing 220vac to 110vac.
I assumed that that device had a 2 to 1 transformer inside and would
be just what I was looking for. No such luck. When plugged into 110vac
it put out close to zilch. Looked inside and saw not a transformer
but what looked like an SCR, three resistors, one cap, and what
looked like a diode. One of the resistors was a 100k variable.
It made little difference to the zilch output when plugged into 110vac.

My question: Does anyone know if this circuit is modifiable to do
what I want, ie., reduce 110vac to 55vac - or therebouts?

2772. Use your PC as a DSP for SWL

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-13 00:00:00 UTC
From: "Thomas F. Swezey" <swezeyt@winternet.com>
Message-ID: <37DD4681.1291A70A@winternet.com>
Source record: 67018

I am a professional software engineer and a long time short wave
listener.

I have developed a Windows program that allows you to filter audio in
real time.

Connect the "Line Out" on your short wave radio to the "Line In" on your
PC's sound card.

The program takes the signal, digitally enhances it and plays it out
through your PC's speakers!

No special hardware or modifications needed.

It does require a fast PC - 200 Mhz or better.

For more information and a Shareware copy you can try for 30 days visit
my web site:

http://www.winternet.com/~swezeyt/dsp.htm

Thanks a lot,
--Tom Swezey
--
**** Signature **** (KISS: Keep It Simple, STUPID!) ****
Check out my Web Site: http://www.winternet.com/~swezeyt
E-mail me at swezeyt@winternet.com (o o)
oOO**( )**OOo*

2773. Re: Do you know the TS530S? I would like to

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-13 00:00:00 UTC
From: Clif Holland <clif@avvid.com>
Message-ID: <37DD4844.6C5@avvid.com>
Source record: 67019

Don W6JL wrote:
>
> G.W. Field wrote:
> >
> > Ask you a few questions.
> > 1.Is it still possible to find parts for this rig?
> > 2. Which parts are the difficult ones to find?
> > 3. Which parts are the ones which are known to fail the most?
> > Any or all information/help is greatly appreciated. tx gary
>
> GW,
> One thing I forgot to mention is that the 520 and 820 without the "S"
> do not have digital display. I have none in my TS820, and have never
> found a need for it in 22 years of operating. You can read the analog
> dial to within about 100Hz or so, which I have found to be sufficient
> for all my needs. My homebrew gear has no dial calibrations
> whatsoever, and I find that suitable also.
> 73,
> Don, W6JL

Read closely, he was talking about the 530/830. The 530 is a bare-bones
version of the 830.
--
Clif Holland, KA5IPF
Owner of AVVid, an Authorized Kenwood and Icom Service Center
For more info click on the following
http://www.avvid.com/
or call 1-800-214-5779

2774. Re: Do you know the TS530S? I would like to

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-13 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <37DD4801.4907@ixpres.com>
Source record: 67020

W4pqw HS wrote:
>
> Gary the TS 530S is a good rig, it is economy version of TS 830S .. most parts
> can be replaced with generic parts, some would be hard to find ,fortunately you
> would probably never need any parts other than tubes and they will be available
> forever I suppose.. to my knowledge there are no weak areas or likely failures.
> if the digital readout failed I doubt that you would ever find one. the rig
> would still be usable without readout.I was once an authorized Kenwood Service
> tech.. I would not hesitate to run a TS 530 ,it`s one of the "good ones"old
> but good. good luck Harold W4PQW

Gary OM,

The TS520 is an excellent rig. It is not an "ecomony version of the
TS820". It is merely a previous model. They will run for many years
with no problems. My TS820 has thousands of hours of CW and FSK
operation (the 820 has built in FSK, the 520 does not). I have used it
continuously in daily use since 1978. I have never had a failure. All
parts are original.
Do not worry yourself about "which parts fail more often" There is no
answer to that from this group probably. All the basic electrical
components are standard available items. Since it is mostly discrete
circuitry, you can repair to the component level if necessary.
I highly recommend the Kenwood TS5xx 8xx series of rigs, as excellent,
rugged, reliable, and REPAIRABLE rigs. With the pi-net output, you
eliminate one of the big problems with solid state transceivers, namely
the requirement of a near-50 ohm match in order to develop full output.
Throw in a built-in AC supply and almost no price depreciation (use it
for years, sell it for same or more), and I think it is an excellent
cost-effective solution for starting hams as well as established ops.

73,
Don, W6JL

2775. Re: Do you know the TS530S? I would like to

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-13 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <37DD48D0.4C8A@ixpres.com>
Source record: 67021

G.W. Field wrote:
>
> Ask you a few questions.
> 1.Is it still possible to find parts for this rig?
> 2. Which parts are the difficult ones to find?
> 3. Which parts are the ones which are known to fail the most?
> Any or all information/help is greatly appreciated. tx gary

GW,
One thing I forgot to mention is that the 520 and 820 without the "S" do not have digital display. I have none in my TS820, and have never found a need for it in 22 years of operating. You can read the analog dial to within about 100Hz or so, which I have found to be sufficient for all my needs. My homebrew gear has no dial calibrations whatsoever, and I find that suitable also.
73,
Don, W6JL

2776. Re: 16c73a programmer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-13 00:00:00 UTC
From: glass2@glass2.lexington.ibm.com
Message-ID: <7rjhtb$1cai$2@ausnews.austin.ibm.com>
Source record: 67022

In <37DB2327.83A5D185@home.com>, "Mr. Muckle" <jdwalton2@home.com> writes:
>post to "comp.arch.embedded" for the answer.
>
>Personally, I use the PIC Start Plus - cause they give it to you at the
>Microchip seminar, along with all their books, a CDRom, power supply and
>a 16C84. It has a very useful ZIF socket and can program all the
>midrange devices.
>
>orion wrote:
>
>> Hi there
>> im looking for a pic 16C73A microcontroller programmer?
>> pls help:)
>>
>> Chris
>> orion@otenet.gr
>

Be careful here. I seem to remember that the data format for the
16C73A was different than that for the 16C84, which the PIC Start Plus
board supports. If my fuzzy memory is correct, the 16C84 uses 14 bit
data for programming, while the 16C73A uses 16 bit data. But, verify
this first, since it's been about a year since I've been involved with
PICs.

Dave

P.S. Standard Disclaimer: I work for them, but I don't speak for them.

2777. Help: SB-10 SSB Adapter to Viking II transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-13 00:00:00 UTC
From: Walter Wilson <wewilson@techemail.com>
Message-ID: <rtqmvvij1iv47@corp.supernews.com>
Source record: 67023
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Can anyone send me information on how to connect the Heathkit SB-10 SSB Adapter to the Johnson Viking II transmitter. Even having information on how to hook it to a Heathkit DX-100 might help.

Thanks in advance.
--
Walter Wilson
ARS KK4DF

2778. Re: Building a SCF-based PL decoder

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-13 00:00:00 UTC
From: wb5agz@dc.cis.okstate.edu
Message-ID: <7rhq27$8oo$1@lotus.onenet.net>
Source record: 67024

In article <37DB2760.2913535D@erols.com>,
Joseph A. Consugar <joesugar@erols.com> wrote:
>I believe DigiKey sells a number of switched capacitor chips. The
>general purpose one I like to use is the MF10. Using this one, you
>can put together a number of different filter types, not just a notch.
>Try looking in their latest catalog.

That sounds just like what I need. I'll check in to that.

Thank you.

73

2779. Re: Reducing 110vac to 55vac

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-13 00:00:00 UTC
From: Michael Chang <pya_cha@alcor.concordia.ca>
Message-ID: <37DD8895.36D4EB0D@alcor.concordia.ca>
Source record: 67025

Paperboy wrote:
>
> I'm interested in reducing the heating power of an electric
> frying pan by one-fourth. Went to the local Radio Shack hoping
> to find a Variac for the experiment but they've never heard of them.
> They do have 100vac to 25vac transformers but that's too low for
> my experiment. Then I saw the kit they sell travelers for adapting
> appliances to different plug designs and reducing 220vac to 110vac.
> I assumed that that device had a 2 to 1 transformer inside and would
> be just what I was looking for. No such luck. When plugged into 110vac
> it put out close to zilch. Looked inside and saw not a transformer
> but what looked like an SCR, three resistors, one cap, and what
> looked like a diode. One of the resistors was a 100k variable.
> It made little difference to the zilch output when plugged into 110vac.
>
> My question: Does anyone know if this circuit is modifiable to do
> what I want, ie., reduce 110vac to 55vac - or therebouts?

You'd need to know the maximum power dissipated by the
heating element in your fryer, which might be around
500-1500W resistive. There are two inexpensive ways to
control it's output:

1. Buy/build a high power light dimmer type circuit, which
chops the AC waveform, producing a variable reduction in the
average current through the fryer.
2. Gut a clothes iron or toaster-oven, and use the
thermostat assembly to "pulse width modulate" your fryer to
keep it at a preset temperature.

A traveler's adapter is typically designed for low power
applications such as shavers, requiring rated line voltage
to properly operate; I doubt you can modify it to work in
your application. It might just be more cost effective to
buy a variable temperature fryer.

Michael

2780. FA: Jennings Vac Var 5KV 3.7-255 mmf

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-13 00:00:00 UTC
From: Joe Christian <k5hmd@bigfoot.com>
Message-ID: <7rjp5ghuc1@bgtnsc02.worldnet.att.net>
Source record: 67026

For Auction: Jennings Vacuum Variable 5KV 3.7-255 MMF
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=164184093

2781. Help identify this radio...homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-13 00:00:00 UTC
From: Robert Mozeleski <moz@ncx.com>
Message-ID: <90560AFFDC7C9C66.89B45A182B97C2B2.43A879D96FC669C1@lp.airnews.net>
Source record: 67027

http://www.ezaccess.net/moz/DCP00237.JPG
i'm really stumped on if it was homemade or manufactured....it seems almost perfect to oreintation of all the parts and on the back it has gold stickers for A bat, B bat, aerial, gnd....the wood work is almost perfect routing and fit.....but there is one bakelite spacer or holder that looks as if it was moved , as there are holes for it and then it was placed 1" from there.....i can't seem to find any model plate or any words on it or even if there was any there and they fell off.....if someone did homebrew it they did a hell of a nice job..a few socket and coil names i found are...HAVEN on the variable inductor, ERLA on one of the tube sockets, BRADLEYSTAT on the filament controls, JEFFERSON on the transformers, AEROVOX on the fixed grid leak resistors(which are shaped like fuses), and WORKRITE on 2 condensers....thanks...bob

> Looks like a high-end homebrew..... I have an AK that has similar
> characteristics. Different knobs, however.
>

2782. Re: Reducing 110vac to 55vac

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-13 00:00:00 UTC
From: john cunningham <john.jc@virgin.net>
Message-ID: <7rjppn$a6i$1@nclient15-gui.server.virgin.net>
Source record: 67028

Michael Chang <pya_cha@alcor.concordia.ca> wrote in message
news:37DD8895.36D4EB0D@alcor.concordia.ca...
>
>
> Paperboy wrote:
> >
> > I'm interested in reducing the heating power of an electric
> > frying pan by one-fourth. Went to the local Radio Shack hoping
> > to find a Variac for the experiment but they've never heard of them.
> > They do have 100vac to 25vac transformers but that's too low for
> > my experiment. Then I saw the kit they sell travelers for adapting
> > appliances to different plug designs and reducing 220vac to 110vac.
> > I assumed that that device had a 2 to 1 transformer inside and would
> > be just what I was looking for. No such luck. When plugged into 110vac
> > it put out close to zilch. Looked inside and saw not a transformer
> > but what looked like an SCR, three resistors, one cap, and what
> > looked like a diode. One of the resistors was a 100k variable.
> > It made little difference to the zilch output when plugged into 110vac.
> >
> > My question: Does anyone know if this circuit is modifiable to do
> > what I want, ie., reduce 110vac to 55vac - or therebouts?
>
Or you could connect a diode in series so that the heating element only
conducts on one half cycle and therefore halving the power input.

2783. Pye VHF transmitter T30 and UHF receiver R470

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-13 00:00:00 UTC
From: john cunningham <john.jc@virgin.net>
Message-ID: <7rjqd6$ah9$1@nclient15-gui.server.virgin.net>
Source record: 67029

I have aquired the Pye T30 VHF transmitter and the R470 UHF receiver. Does anyone have any information on either of these items? I am not looking for the full handbook, I just wand a basic description of each of the building blocks. john.jc@virgin.net please if you can help.

2784. Re: 250 or 500Hz CW filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-13 00:00:00 UTC
From: Ray Dahlby <rdahlby@istar.ca>
Message-ID: <62eD3.445$LJ6.24707@cac1.rdr.news.psi.ca>
Source record: 67030

Thanks for all the advice! Much appreciated. In spite of the suggestions to the contrary, I went ahead and ordered the 250Hz filter from Yaesu, but will be keeping a lookout for a used 500Hz filter at a reasonable price. Now I bought a Viking Ranger at a local fleamarket...more fun ahead!

Ray, VE7ITG

2785. Atmel Processor demo app

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-13 00:00:00 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <JveD3.4890$Sf.15835@news.rdc1.il.home.com>
Source record: 67031

Version 2.0 of my "Getting Started" application for the Atmel AVR8515 is now online at www.dontronics.com/8515

It has drivers for VFD and LCD displays, RC servos, Stepper motors, Text to Morse code conversion and output, serial I/O, many fun bits. It's basically a cooperative RTOS. You'll need the assembler and simulator from www.atmel.com and a chip.
There are shareware programmers available on the web that will program the chip directly from a PC paralell port with a very simple cable.

If you want to go whole hog, atmel has a new emulator for $200

The "Getting Started" code is, of course, free.

For example, you could make a basic repeater controller in about 15 minutes.

--
"Failure is NOT an option! It's part of the operating system!"
Where's dave? Try http://www.aprs.net:8000/kc6ete-9

2786. Re: Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-13 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7rju8a$ks1$1@news1.fast.net>
Source record: 67032

```
-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

Richard Karlquist <rick@area.com> wrote in message
news:7rghpo$qgm$1@vax.area.com...
> In article <37D71A93.1E66874E@Netburner.com>,
> Paul Breed <Paul@Netburner.com> wrote:
> >>
> >> Doing everything digitally limits your dynamic range to 12 to 14
bits
> >> or as we analog dinosaurs would say 74 to 86 dB. You might need
more
> >> dynamic range than that on the air. And that is why we don't do
> >> everything digitally.
> >>
> >If you are doing an I/Q DC receiver... then use a high quality
stereo
> >Audio A/D.
> >Some have have dynamic range specifications> 120dB. (Far more than
14
> >effective bits)
> >
> >
> >----------------------------------------
> >Paul Breed Chief Architect, NetBurner
> >Networking in one day.
> >http://www.netburner.com
>
>
> Yes, but then we are back to using analog techniques for eliminating
the
> image again.

How so? The stereo codecs sample I/Q baseband from a pair of mizers.
The two channels sample simultaneously. From there, it can all be
done
in the digital domain.

All you need is a bit of anti-aliasing filter before each A/D channel
... and
with the available sample rates and the characteristics of sigma-delta
A/Ds,
the requirement should be minimal ... maybe just a single R-C pole.
```

You can also use the Weaver technique rather than the "conventional"
phasing technique.

73,
- --
Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI
Fellow, Radio Club of America
Senior Member, IEEE
Member, ARRL
Join NCI - Hams for the 21st Century!
Help modernize ham radio and assure its future survival!
http://www.nocode.org

-----BEGIN PGP SIGNATURE-----
Version: PGP for Personal Privacy 5.5.3

iQA/AwUBN917uZe+N6+q84HiEQLkyQCgkFZTpG3NeH9enatST7IsoSq1qHQAoMeJ
RIBu+zAPNt2PDSj/CECp940B
=md5p
-----END PGP SIGNATURE-----

2787. Re: Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-13 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7rjue4$ku2$1@news1.fast.net>
Source record: 67033

```
-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

Rocci <rocci@att.net> wrote in message
news:37DC0F2E.ECFF09C0@att.net...
> Also, keeping thinking about the Weaver method as a demod technique
that is
> more tolerant of hardware deficiencies. Minor cancellation
imperfections do
> not result in loss of image rejection, they merely cause audio
distortion.

Actually, in the Weaver architecture the image occupies exactly the
same band as the desired sideband, centered on the carrier. You do
get a "loss of image rejection" with imperfect cancellation, but it
doesn't
splatter into an adjacent channel, but simply appears as distortion in
your channel, which, as you point out is well below your desired
signal and quite tolerable.

73,
- --
Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI
Fellow, Radio Club of America
Senior Member, IEEE
Member, ARRL
Join NCI - Hams for the 21st Century!
Help modernize ham radio and assure its future survival!
http://www.nocode.org

-----BEGIN PGP SIGNATURE-----
Version: PGP for Personal Privacy 5.5.3

iQA/AwUBN918dZe+N6+q84HiEQIeVwCfdRwaq/NJL/oYSHJL7+Dnyw2PCH4AmwQN
Von7EB0elDsQv1o7NPVTYbBf
=leNm
-----END PGP SIGNATURE-----
```

2788. Re: Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-13 00:00:00 UTC
From: Rocci <rocci@att.net>
Message-ID: <37DD9321.8AD45DB7@att.net>
Source record: 67034

In the Weaver method, the LO is in the center of the audio information channel, so the 'image' is one half of the desired audio spectrum. The output of this mixing process is passed through a lowpass filter, so any signal removed from mid-channel by an amount that exceeds the filter bandwidth is rejected. The filter alone sets the interference rejection from out-of-channel signals. Insufficient cancellation merely results in audible aliasing products (aka 'distortion') that should have been suppressed by the second stage I/Q process. The Weaver method therefor has much better and controllable rejection of what most people consider to be the 'image' in a DC receiver, ie, signals on the other side of the received SSB suppressed carrier.
As to the feared 'whistle', this should be non-existant in a DSP based receiver, because the whistle is produced in the second I/Q mixing process. Since this is done mathematically, the audio frequency LO should be completely suppressed. In transmit mode the final LO, though in the center of the channel, is injected in a mixer which has relatively high level RF output. 40 dB or more of 'carrier suppression' is doable, as most of the commercial radio art demonstrates.

Joe
WA3CMQ

"Carl R. Stevenson" wrote:

> -----BEGIN PGP SIGNED MESSAGE-----
> Hash: SHA1
>
> Rocci <rocci@att.net> wrote in message
> news:37DC0F2E.ECFF09C0@att.net...
> > Also, keeping thinking about the Weaver method as a demod technique
> that is
> > more tolerant of hardware deficiencies. Minor cancellation
> imperfections do
> > not result in loss of image rejection, they merely cause audio
> distortion.
>
> Actually, in the Weaver architecture the image occupies exactly the
> same band as the desired sideband, centered on the carrier. You do
> get a "loss of image rejection" with imperfect cancellation, but it
> doesn't
> splatter into an adjacent channel, but simply appears as distortion in
> your channel, which, as you point out is well below your desired
> signal and quite tolerable.
>
> 73,

> - --
> Carl R. Stevenson - WA6VSE
> mailto:wa6vse@fast.net
> http://www.users.fast.net/~wa6vse
> NCI #1052
> Director, NCI
> Fellow, Radio Club of America
> Senior Member, IEEE
> Member, ARRL
> Join NCI - Hams for the 21st Century!
> Help modernize ham radio and assure its future survival!
> http://www.nocode.org
>
> -----BEGIN PGP SIGNATURE-----
> Version: PGP for Personal Privacy 5.5.3
>
> iQA/AwUBN918dZe+N6+q84HiEQIeVwCfdRwaq/NJL/oYSHJL7+Dnyw2PCH4AmwQN
> Von7EB0elDsQv1o7NPVTYbBf
> =leNm
> -----END PGP SIGNATURE-----

2789. 2nd Try: S-Meter Output : SSB vs FM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-14 00:00:00 UTC
From: luke@trio.COM.AU
Message-ID: <199909140329.UAA01185@mailbox2.ucsd.edu>
Source record: 66939

Note : This is try No 2. Something went wrong yesterday, and
my message got truncated. I also did not get the digest,
and had to re-subscribe! BTW - Does anyone know how
to read the .Z files that these digests seem to be encoded
in on the FTP site?

Good Afternoon People,

I am currently facing an interesting problem with
out current fox-hunting setup (t-hunting, radio sport, whatever).
Our team uses a fairly elaborate automated system called
Rotor Hunter. You can get a brief of this system at
http://www.qsl.net/~vk3zpf/vk3zpfp1.htm

This system uses a laptop and ADC to sample RSSI
voltage and postion and plot the result in polar format.
One of the weak links in out system was the FM receiver,
which had a poor front end, a wide IF bandwidth, and
low sensitivity.

I built a high performance down-converter, which uses
a double-balanced mixer, helical tuned front end, and
low noise overtone crystal oscillator (Many thanks to
Larry for help with the oscillator). The down-converter
IF is 23MHz-25MHz.

We use an ICOM 738 (I think) as the HF receiver. The
S-meter output is picked off (before any dampening),
and is amplified by a DC amplifier. This voltage is then
sampled by the ADC. The problem is the lack of
S-meter output on SSB. On FM it is quite useable,
but SSB is hopeless! You need heaps of signal to
get a small S-meter movement.

You can certainly hear the signal a lot earlier with
SSB, but you can see S-meter movement first
on FM. What would happen if I used the SSB filter,
and hooked up a log detector on the SSB filter output,
like the AD8307 from Analog Devices. The ADC could
then sample the log detector output.

What we really need is better
sensitivity and selectivty than FM can offer, but
similar S-meter output.

Keep in mind, that in Australia, mobile foxhunts
are often weak unmodulated carriers, sometimes

pulsed so you can tell them apart from unwanted
birdies.

All comments or questions are welcome.
Regards,
Luke
--

2790. Re: Reducing 110vac to 55vac

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-14 00:00:00 UTC
From: btslfke@poboxes.com
Message-ID: <7rkni0$i5r$1@zook.lafn.org>
Source record: 66940

On 1999-09-13 pya_cha@alcor.concordia.ca said:
>Newsgroups: rec.radio.amateur.homebrew
>Paperboy wrote:
>> I'm interested in reducing the heating power of an electric
>> frying pan by one-fourth. Went to the local Radio Shack hoping
<snip>

>You'd need to know the maximum power dissipated by the
>heating element in your fryer, which might be around
>500-1500W resistive. There are two inexpensive ways to
>control it's output:
>1. Buy/build a high power light dimmer type circuit, which
>chops the AC waveform, producing a variable reduction in the
>average current through the fryer.
>2. Gut a clothes iron or toaster-oven, and use the
>thermostat assembly to "pulse width modulate" your fryer to
>keep it at a preset temperature.

The fryer already has that capability with a temperature
sensing bimetallic-controlled sw.

>A traveler's adapter is typically designed for low power
>applications such as shavers, requiring rated line voltage
>to properly operate; I doubt you can modify it to work in
>your application. It might just be more cost effective to
>buy a variable temperature fryer.
>Michael

Thanks for the dimmer idea. And also thanks for John Cunningham's
diode idea..
Maybe I'd better explain myself a bit more.
What I want to do is to operate my pan portably with a cheap
300 watt inverter. The pan is 1000 watts. I plan to insulate
the pan and use it as a saturated air or steam cooker.
The French call this type of thing a "bain marie."
How would the dimmer vs the diode approaches work with this
additional info? Don't want to overload the dimmer.

How would the inverter like being connected to the diode-limited load?
Seems like it would overload the inverter if only on the positive swings.

2791. Complete Motorola TAC UHF Receive Site Voting System

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-14 00:00:00 UTC
From: Bob Grosse <BobGrosse@quality-enterprisesNOSPAM.com>
Message-ID: <37DDE822.40FF8975@quality-enterprisesNOSPAM.com>
Source record: 66941

Complete Motorola TAC UHF Receive Site Voting System

See info and photos: http://quality-enterprises.com/See_Photo/

2792. Source of AD8307 Log Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-14 00:00:00 UTC
From: Xjshillw6ivw@earthlink.net
Message-ID: <37dde401.3480231@news.earthlink.net>
Source record: 66942

The Analog Devices AD8307 log amplifier described on page 77 of the
Summer 1999 Communications Quarterly looks like it could be really
useful device. Does anyone know where I can buy a small quantity, like
two? I don't want the surface mount version. I'm retired, so getting
an evaluation sample for use at work could be a problem.
Thanks, Jim
Delete the X before using my e-mail address.
The X was added to stop spam.

2793. Re: Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-14 00:00:00 UTC
From: Frederic Rible <frederic.rible@ercom.fr>
Message-ID: <37DDFFE8.BCA660B2@ercom.fr>
Source record: 66943

Another advantage for the Weaver method : as the ADC input
bandwidth is half the one required for "conventional" DC receiver,
the computing power is divided by 2.

--
Frederic RIBLE Tel : +33 1 39 46 50 50
ERCOM SA Fax : +33 1 39 46 25 25
13, Avenue Morane-Saulnier Email : frederic.rible@ercom.fr
F-78140 VELIZY Web : http://www.ercom.fr

2794. Mini Radio & Electronics Equipment Fair

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-14 00:00:00 UTC
From: Duncan Walters <tesla@cwcom.net>
Message-ID: <37DE1C36.2F1114A1@cwcom.net>
Source record: 66944
Cross-posted to:
uk.radio.amateur,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.antenna

South Normanton & District Amateur Radio Club
are to hold a Mini Radio & Electronics Equipment Fair
at the New Street Community Centre, South Normanton
(Near Alfreton) Derbyshire on Monday 15th November 1999
6.00pm start.
Easy access from M1 J28 and A38.
Strictly limited number of tables available on a first-come,
first-served
basis, so early booking is essential.
Everyone invited - refreshments available.
For all enquiries, and to reserve tables, please telephone
Russell Bradley G0OKD on 01773 863892
or e-mail Duncan Walters G4DFV on tesla@cwcom.net

2795. LCU-3 Interface

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-14 00:00:00 UTC
From: Ted Hay <tedh@xcelco.on.ca>
Message-ID: <rtsbb49b1iv41@corp.supernews.com>
Source record: 66945

HI

Found a LCU-3 interface made by W1GEE Products in a box of junk I bought at a hamfest. Anyone know whats its application is?

Ted VE3ONJ

2796. Re: 2nd Try: S-Meter Output : SSB vs FM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-14 00:00:00 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <37DE288B.B5C1530F@dialpoint.net>
Source record: 66946

You could try to rectify the audio output and use it to give a signal
for the ssb mode. You might need to put some delay circuit in to take
care of the pulsing signals. Also see if there is a way to disable the
AGC of the receiver. This will probably kill the s-meter of the
receiver, but you won't be using it anyway.

Luke Enriquez wrote:
>
> Note : This is try No 2. Something went wrong yesterday, and
> my message got truncated. I also did not get the digest,
> and had to re-subscribe! BTW - Does anyone know how
> to read the .Z files that these digests seem to be encoded
> in on the FTP site?
>
> Good Afternoon People,
>
> I am currently facing an interesting problem with
> out current fox-hunting setup (t-hunting, radio sport, whatever).
> Our team uses a fairly elaborate automated system called
> Rotor Hunter. You can get a brief of this system at
> http://www.qsl.net/~vk3zpf/vk3zpfp1.htm
>
> This system uses a laptop and ADC to sample RSSI
> voltage and postion and plot the result in polar format.
> One of the weak links in out system was the FM receiver,
> which had a poor front end, a wide IF bandwidth, and
> low sensitivity.
>
> I built a high performance down-converter, which uses
> a double-balanced mixer, helical tuned front end, and
> low noise overtone crystal oscillator (Many thanks to
> Larry for help with the oscillator). The down-converter
> IF is 23MHz-25MHz.
>
> We use an ICOM 738 (I think) as the HF receiver. The
> S-meter output is picked off (before any dampening),
> and is amplified by a DC amplifier. This voltage is then
> sampled by the ADC. The problem is the lack of
> S-meter output on SSB. On FM it is quite useable,
> but SSB is hopeless! You need heaps of signal to
> get a small S-meter movement.
>
> You can certainly hear the signal a lot earlier with
> SSB, but you can see S-meter movement first

> on FM. What would happen if I used the SSB filter,
> and hooked up a log detector on the SSB filter output,
> like the AD8307 from Analog Devices. The ADC could
> then sample the log detector output.
>
> What we really need is better
> sensitivity and selectivty than FM can offer, but
> similar S-meter output.
>
> Keep in mind, that in Australia, mobile foxhunts
> are often weak unmodulated carriers, sometimes
> pulsed so you can tell them apart from unwanted
> birdies.
>
> All comments or questions are welcome.
> Regards,
> Luke
> --

----------== Posted via Newsfeeds.Com, Uncensored Usenet News ==----------
http://www.newsfeeds.com The Largest Usenet Servers in the World!
------== Over 73,000 Newsgroups - Including Dedicated Binaries Servers ==-----

2797. EM Software, FREE GRATIS YES FREE!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-14 00:00:00 UTC
From: spam@nospam.com
Message-ID: <37de2ec2.17852565@news.lin.foa.se>
Source record: 66947

Whilst nothing is free nowadays, this offer seems to good to be true.
If you go to http://www.sonnetusa.com you can download the Sonnet Lite
EM-simulator for FREE!! If you decide to register the s/w (still free
no money!!!) the capabilities of the program will be even greater.

The complete package icluding tutorials and manuals in PDF is less
than 14 Megs.

This would be a killer add-on to ARRL RF designer!
BTW I just downloade my copy. Looks great! I still have to find out
what the catches are......
Have fun!!

Cheers

2798. Re: S-Meter Output : SSB vs FM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-14 00:00:00 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <37DE2719.F5BEFE66@dialpoint.net>
Source record: 66948

The discriminator voltage shows how far off frequency a signal is. It
will normally show zero volts and will not change with a weaker or
stronger signal. Many times the limiter signal is the one to use for
simple meters.

Woody White wrote:
>
> Huh? Hit send too soon? If you are asking about FM signal
> strength, monitor the discriminator voltage. RF (input)
> attenuators will likely be needed to avoid saturation.
> Woody
> -------------------------
> Luke Enriquez wrote:
> >
> > Good Afternoon People,
> >
> > I am currently facing an interesting problem with
> > out current fox-hunting setup (t-hunting, radio sport, whatever).
> > Our team uses a fairly
>
> --
>
> ----------- de Woody, WB4QXE -----------
>
> Ham Homebrew/ATV Circuits -*- Scanning Electron
> Microscope Images
>
> http://www.geocities.com/capecanaveral/3722

------------== Posted via Newsfeeds.Com, Uncensored Usenet News ==----------
http://www.newsfeeds.com The Largest Usenet Servers in the World!
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2799. Re: Source of AD8307 Log Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-14 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7rln3hkri1@nnrp1.deja.com>
Source record: 66949

In article <37dde401.3480231@news.earthlink.net>,
Xjshillw6ivw@earthlink.net (Jim Hill) wrote:
> The Analog Devices AD8307 log amplifier described on page 77 of the
> Summer 1999 Communications Quarterly looks like it could be really
> useful device. Does anyone know where I can buy a small quantity, like
> two? I don't want the surface mount version. I'm retired, so getting
> an evaluation sample for use at work could be a problem.
> Thanks, Jim

Newark.

The SMD version is actually easier to work with...
--
Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte
Satellite: VA3SFL on UO-22, KO-25

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2800. Re: Source of AD8307 Log Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-14 00:00:00 UTC
From: JW <jdwalton@home.com>
Message-ID: <37DE66CC.442AEBC0@home.com>
Source record: 66950

I got some from Newark Electronics.

There are some interesting schematics on the web using this chip -
spectrum analyser etc.

Jim Hill wrote:

> The Analog Devices AD8307 log amplifier described on page 77 of the
> Summer 1999 Communications Quarterly looks like it could be really
> useful device. Does anyone know where I can buy a small quantity, like
> two? I don't want the surface mount version. I'm retired, so getting
> an evaluation sample for use at work could be a problem.
> Thanks, Jim
> Delete the X before using my e-mail address.
> The X was added to stop spam.

2801. Re: Reducing 110vac to 55vac

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-14 00:00:00 UTC
From: noone@nowhere.com
Message-ID: <37de769a.30299156@news.wizvax.net>
Source record: 66951

On 14 Sep 1999 05:47:44 GMT, btslfke@poboxes.com wrote:

>
>On 1999-09-13 pya_cha@alcor.concordia.ca said:
> >Newsgroups: rec.radio.amateur.homebrew
> >Paperboy wrote:
> >> I'm interested in reducing the heating power of an electric
> >> frying pan by one-fourth. Went to the local Radio Shack hoping
> <snip>
>
> >You'd need to know the maximum power dissipated by the
> >heating element in your fryer, which might be around
> >500-1500W resistive. There are two inexpensive ways to
> >control it's output:
> >1. Buy/build a high power light dimmer type circuit, which
> >chops the AC waveform, producing a variable reduction in the
> >average current through the fryer.
> >2. Gut a clothes iron or toaster-oven, and use the
> >thermostat assembly to "pulse width modulate" your fryer to
> >keep it at a preset temperature.
>
>The fryer already has that capability with a temperature
>sensing bimetallic-controlled sw.
>
> >A traveler's adapter is typically designed for low power
> >applications such as shavers, requiring rated line voltage
> >to properly operate; I doubt you can modify it to work in
> >your application. It might just be more cost effective to
> >buy a variable temperature fryer.
> >Michael
>
>Thanks for the dimmer idea. And also thanks for John Cunningham's
>diode idea..
>Maybe I'd better explain myself a bit more.
>What I want to do is to operate my pan portably with a cheap
>300 watt inverter. The pan is 1000 watts. I plan to insulate
>the pan and use it as a saturated air or steam cooker.
>The French call this type of thing a "bain marie."
>How would the dimmer vs the diode approaches work with this
>additional info? Don't want to overload the dimmer.
>
>How would the inverter like being connected to the diode-limited load?
>Seems like it would overload the inverter if only on the positive swings.

The average current would be less, but the peak current would be the same as if run on full power, when using the diode method, or a dimmer on half power.

You're talking about a lot of power for portable operation, I have to think there's a simpler approach.

1) use a lower wattage cooker. A $20 crock pot from wallmart, or something.

2) use a propane or charcoal cooker. cheaper than running an auto engine just to cook something.

3) cook on the auto manifold! Remember, if a car engine is 30% efficient as an engine, it's 70% efficient as a space heater! (only half kidding here)

4) if you have to use this pan, build your own inverter from a set of plans that uses 12v to 110v transformers, but use transformers with a center tapped 110v winding, use a half wave rectifier to get about 50V.

5) Use a 12v cooker. Try either a discount store, or jc whittney catalog.

6) Build your own heater. It's a lot easier to build a heater than an inverter or regulator. Some people build them by accident when they're trying to build something else.

Just random thoughts

2802. Re: Reducing 110vac to 55vac

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-14 00:00:00 UTC
From: Dennis Breeden <d.breeden@mci.com>
Message-ID: <37DE5C5C.A59BEAD5@mci.com>
Source record: 66952

For a "Variac" (Variable Auto Transformer) check Fair Radio Sales. There current catalog they have them in stock. They are also on the web.

A second route are "buck and boost" transformers. These are made for the commercial market and sold through commercial electrical supply houses. I know G.E. made theses and was sold through their General Electrical Supply Company (GESCO). I sure Westinghouse and other manufactures also sell them as well as distributor such as Tri-State (DC area) and Gray-Bar electric supplies houses list theses. These were available in split primary 120/240, split secondary (12/24 or 24/48 and some others) in various wattage's for 125W to 2KW and could be run as low voltage transformers or wired as auto transformers the lower (buck) or raise (boost) voltage.

2803. Re: Source of AD8307 Log Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-14 00:00:00 UTC
From: hans.de.bok@philips.com
Message-ID: <8E41A8977hansdebokphilipscom@news-proxy>
Source record: 66953

jdwalton@home.com (JW) wrote in <37DE66CC.442AEBC0@home.com>:

>I got some from Newark Electronics.
>
>There are some interesting schematics on the web using this chip -
>spectrum analyser etc.
>

Can you give some URL's ?

Thanks !

Hans

2804. ** FLEA at MIT ** Sunday September 19th Cambridge MA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-14 00:00:00 UTC
From: w1gsl@mit.edu
Message-ID: <7rlub7$q6j@senator-bedfellow.MIT.EDU>
Source record: 66954
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc,rec.radio.info,sci.electronics.misc,ne.forsale,ne.general,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Subject: ** FLEA at MIT ** Sunday Sept. 19th Cambridge MA
Summary: Buy Sell SWAP Ham Radio Electronics Computers 9AM - 2PM

This coming Sunday ...

*** !!!! In our Traditional GARAGE and lot !!!! ****
so come rain or shine or super heat the Flea is on !!!

********* $1 buyers discount with hardcopy of this notice ********

COMPUTERS - ELECTRONICS - HAM RADIO - COMPUTERS - ELECTRONICS - HAM RADIO

FLEA all SUMMER at MIT
Sunday September 19th 1999
9AM-2PM

Come to the city for a great flea - plenty of free parking.

MIT's electronics and ham radio flea will take
place on the third Sunday of each month this summer,
April thru October.

There is tailgate space for over 600 sellers and
free, off-street parking for >2000 cars!

Buyers admission is $4 (you get $1 off if
you're lucky enough to have a copy of our ad)
and sellers spaces are $10.00-each at the gate.

The flea will be held at the corner of Albany and
Main streets in Cambridge; right in the Kendall
Square area from 9AM to 2PM, with sellers set-up
time starting at 7AM.

*** Attention Sellers ***
Prepaid vendors.. Season Pass or monthly,
will be admitted FIRST.
Separate lines will form prior to gate opening
for prepaid and nonprepaid vendors

!! RAIN or SHINE !! Have no fear of rain, a covered
well illuminated tailgate area is available for all
sellers (6'8" clearance).

Talk-in: 146.52 and W1XM/R-449.725/444.725 (PL 114.8/2A).

Sponsors: MIT Electronics Research Society
MIT UHF Repeater Association (W1XM)
MIT Radio Society (W1MX)
Harvard Wireless Club (W1AF)

For more info / advanced reservations 617 253 3776

********** $1 buyers discount with hard copy of this notice ************

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City..... State..... Zip.....

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Spaces Required ___ Season @ $50 / space = $ ..... CK # .....

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___ Aug ____ Sept ___ Oct

Total Monthly spaces @ $9/ Space = $ ..... CK # .....

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Enclose SASE for return by mail.

****
Steve Finberg W1GSL w1gsl@mit.edu
PO Box 82 MIT Br Cambridge MA 02139-7082 617 258 3754
****

2805. FS:4cx1500b tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-14 00:00:00 UTC
From: dennis <bigd422@earthlink.net>
Message-ID: <7rm2m2$6td$1@birch.prod.itd.earthlink.net>
Source record: 66955
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.cb,rec.radio.swap

```
4cx1500b tubes pull ex condition $ 100.00 ea

kb7wfv dennis
```

2806. Re: Help: SB-10 SSB Adapter to Viking II transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-14 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <37DE9B59.6C29@ixpres.com>
Source record: 66956
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Walter Wilson wrote:
>
> Can anyone send me information on how to connect the Heathkit SB-10 SSB
> Adapter to the Johnson Viking II transmitter. Even having information on
> how to hook it to a Heathkit DX-100 might help.
>
> Thanks in advance.
> --
> Walter Wilson
> ARS KK4DF

Walt OM,

Why don't you get manuals for the SB-10 and Viking II from one of the manual suppliers? HI-Manuals is one possible source. The SB-10 manual shows the connections to a DX-100, and you can infer from that how to connect up to a Viking II. It requires modification of the final amp circuit to run AB1 (linear) instead of class C, which requires the addition of voltage regulation (VR) tubes for the screens. The modifications are not that difficult.

73 and GL,
Don, W6JL

73 and GL,
Don, W6JL

2807. Re: Do you know the TS530S? I would like to

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-14 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <37DE9A28.3858@ixpres.com>
Source record: 66957

>
> Read closely, he was talking about the 530/830. The 530 is a bare-bones
> version of the 830.
> --
> Clif Holland, KA5IPF
> Owner of AVVid, an Authorized Kenwood and Icom Service Center
> For more info click on the following
> http://www.avvid.com/
> or call 1-800-214-5779

Clif OM,

OOPS! Sorry about that. In that case, forget about FSK, as neither
the 530 or the 830 has it.

73,
Don, W6JL

2808. FA: Johnson Roller Inductor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-14 00:00:00 UTC
From: Bill Clarke <billclarke@bigfoot.com>
Message-ID: <7rmdpo$8i1$1@fir.prod.itd.earthlink.net>
Source record: 66958
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

Can be seen at:

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=163616973

No reserve

Bill W2BLC

2809. False rumor; American made boots are not obsolete

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-14 00:00:00 UTC
From: mamardneck@aol.com
Message-ID: <19990914173000.02157.00000212@ng-fb1.aol.com>
Source record: 66959

Whites/Buffalo handmade boots, rebuildable and widths up to EEE ;
Georgia steel & non steel toe boots, warm & dry Gortex boots
available... Ask about our superior raingear and our wide selection of
Carhartt....Visit us at http://redneck.anthill.com

The Redneck Store
Mama Redneck

2810. Re: Source of AD8307 Log Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-14 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <37DEBF27.736F1EFD@midwestmicro-tek.com>
Source record: 66960

marsgal42@hotmail.com wrote:

> In article <37dde401.3480231@news.earthlink.net>,
> Xjshillw6ivw@earthlink.net (Jim Hill) wrote:
> > The Analog Devices AD8307 log amplifier described on page 77 of the
> > Summer 1999 Communications Quarterly looks like it could be really
> > useful device. Does anyone know where I can buy a small quantity, like
> > two? I don't want the surface mount version. I'm retired, so getting
> > an evaluation sample for use at work could be a problem.
> > Thanks, Jim
>
> Newark.
>
> The SMD version is actually easier to work with...

Hmmmmm..... I've been designing and prototyping professionaly for 12 years
now and I've seen some discusion lately on this SMD easier/not easier. For
me when I'm prototyping I *hate* using SMD, give me through hole any time.

Rick

> --
> Laura Halliday VA3LDH "Que les nuages soient notre pied
> Grid: FN03gs a terre..." - Hospital/Shafte
> Satellite: VA3SFL on UO-22, KO-25
>
> Sent via Deja.com http://www.deja.com/
> Share what you know. Learn what you don't.

2811. Triplexer design reqd.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-14 00:00:00 UTC
From: Ian Barraclough <Ian.nb@virgin.net>
Message-ID: <7rmhks$7m7$1@nclient15-gui.server.virgin.net>
Source record: 66961

Does anyone out there have a design for a 50Mhz / 144 Mhz / 430Mhz
triplexer. I need two to split the signal from a tri band hand held down,and
re combine it after amplification, to feed into a tri band antenna.

Any ideas, or can will someone disect a commercial unit to crib a drawing
for me?

Cheers de Ian, G7DWY
G7DWY @ Hotmail.com

2812. Re: Source of AD8307 Log Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-14 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <37DEC607.4D38@pop.removethistomailme.net>
Source record: 66962

Rick Haub wrote:
>
> marsgal42@hotmail.com wrote:
>
> Hmmmmm....... I've been designing and prototyping professionaly for 12 years
> now and I've seen some discusion lately on this SMD easier/not easier. For
> me when I'm prototyping I *hate* using SMD, give me through hole any time.
>
> Rick

Surface-mount parts aren't necessarily impossible to work with, if you use an iron with a small, clean tip. See http://www.qsl.net/ke5fx/uwave/demod2.jpg for example. I've used the same basic technique on packages with up to 68 pins, and haven't damaged anything yet (knock on wood).

That doesn't mean I wouldn't _prefer_ working with DIP packages, but the unfortunate truth is that most of the interesting new parts just aren't getting released in DIPs anymore.

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

2813. Re: 6 Ghz Waveguide fittings

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-14 00:00:00 UTC
From: la8ak@online.no
Message-ID: <37dec2b0.435263336@news.online.no>
Source record: 66963

On Sat, 04 Sep 1999 22:14:48 -0400, "S.W.Drinkard" <wa4phy@groupz.net>
wrote:

>Hi all,
>
> I've got a collection of 6 Ghz Andrew fittings, flex, and so forth
>I'd like to see put to a good use. All are new, some still in bags.
>The collection consists primarily of CPR and CMR and maybe a UG or two.
>The flex is 18" stuff. I've posted to a couple of other sites, but
>apparently there's not much interest in that kind of hardware except for
>maybe selling it as scrap. I suspect I have maybe 50-60 lbs of this
>stuff. If you'd be interested in acquiring it drop me a note, either to
>the address shown in header or to sam@wa4phy.dyndns.org. I need the
>space it occupies in my workshop!
>
> I'd appreciate a cc: of any followups due to my limited news reading
>time.
>
>Thanks...
>
>
should be some interest..... I passed two 6G WG multipliers to USA
last year

73 jan-martin LA8AK

2814. Re: 250 or 500Hz CW filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-14 00:00:00 UTC
From: la8ak@online.no
Message-ID: <37dec983.437011300@news.online.no>
Source record: 66964

On Mon, 13 Sep 1999 14:34:49 -0700, "Ray Dahlby" <rdahlby@istar.ca>
wrote:

>Thanks for all the advice! Much appreciated. In spite of the suggestions to
>the contrary, I went ahead and ordered the 250Hz filter from Yaesu, but will
>be keeping a lookout for a used 500Hz filter at a reasonable price. Now I
>bought a Viking Ranger at a local fleamarket...more fun ahead!
>
>
>Ray, VE7ITG
>
>
Hi

I work some hundreds CW QSO's in a year using the rig (FT-902) with
500Hz filter (or is it 600Hz ?) , particularly in contests on 80/40
and VHF/UHF, it is wide enough for tuning around on cw band segments.
Also have DSP-9 attached to the receiver, it is a great improvement -
even set to 500Hz BW, and sometimes I use narrower BW, just few times
100Hz BW, but it is difficult to tune - particularly with the old
YAESU rig.

73 jan-martin LA8AK

2815. Re: Do you know the TS530S? I would like to

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-14 00:00:00 UTC
From: la8ak@online.no
Message-ID: <37deca49.437208387@news.online.no>
Source record: 66965

On Mon, 13 Sep 1999 13:53:56 -0500, Clif Holland <clif@avvid.com>
wrote:

>Don W6JL wrote:
>>
>> G.W. Field wrote:
>> >
>> > Ask you a few questions.
>> > 1.Is it still possible to find parts for this rig?
>> > 2. Which parts are the difficult ones to find?
>> > 3. Which parts are the ones which are known to fail the most?
>> > Any or all information/help is greatly appreciated. tx gary
>>
>> GW,
>> One thing I forgot to mention is that the 520 and 820 without the "S"
>> do not have digital display. I have none in my TS820, and have never
>> found a need for it in 22 years of operating. You can read the analog
>> dial to within about 100Hz or so, which I have found to be sufficient
>> for all my needs. My homebrew gear has no dial calibrations
>> whatsoever, and I find that suitable also.
>> 73,
>> Don, W6JL
>
>Read closely, he was talking about the 530/830. The 530 is a bare-bones
>version of the 830.
>--
>Clif Holland, KA5IPF

spareparts for old digital displays might be a problem.... hi!

73
Jan-Martin LA8AK

2816. Re: S-Meter Output : SSB vs FM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-14 00:00:00 UTC
From: Woody White <woody.white@att.net>
Message-ID: <37DEE89D.2CBC4DDD@att.net>
Source record: 66966

Opps...! Sill me. Meant Limiter... Was late! Woody

Ralph Mowery wrote:
>
> The discriminator voltage shows how far off frequency a signal is. It
> will normally show zero volts and will not change with a weaker or
> stronger signal. Many times the limiter signal is the one to use for
> simple meters.
>
> Woody White wrote:
> >
> > Huh? Hit send too soon? If you are asking about FM signal
> > strength, monitor the discriminator voltage. RF (input)
> > attenuators will likely be needed to avoid saturation.
> > Woody
> > ---
> >
--

---- de Woody, WB4QXE ----

Ham Homebrew/ATV Circuits -*- Scanning Electron
Microscope Images

http://www.geocities.com/capecanaveral/3722

2817. Re: Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-14 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7rmt0n$7vc$1@news1.fast.net>
Source record: 66967

-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

Richard Karlquist <rick@area.com> wrote in message
news:7rkgf7$ad4$1@vax.area.com...
>
>
> If you use an I/Q downconverter and upconverter with a digital audio
> system, in the non-Weaver case you are depending on the goodness of
the analog
> circuitry for opposite sideband rejection (receive and transmit) and
> for transmit carrier suppression.

Assuming that you don't make any attempt to calibrate/correct
for any amplitude/phase imbalances in the digital domain, but
why would one waste the opportunity to do so?

> In the Weaver case, you are
> depending on the goodness of the analog circuitry for whistle
suppression.

No, not if the summing is done in the digital domain before a single
DAC.

> If you do the Weaver technique digitally, then the analog IF is no
> longer centered at zero frequency and you are back to the first case
above.

Huh??? The above statement makes no sense. (it's incorrect, too)

> BTW, is your patented architecture in production anywhere?

At the risk of being blunt, my business dealings are none of your
business.
I merely mentioned the patent because I thought it would be
interesting
reading from some who've been discussing the subject of digital DC
receivers.

> What
> specs does the product have? It would be interesting to compare
> it to the performance of Tom Hornak's IC implementation.

Can you provide a reference to this technique? Mr. Hornak's
work doesn't immediately ring a bell, though it's possible that I've
heard of it in the past and just don't recall.

73,
- --
Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI
Fellow, Radio Club of America
Senior Member, IEEE
Member, ARRL
Join NCI - Hams for the 21st Century!
Help modernize ham radio and assure its future survival!
http://www.nocode.org

-----BEGIN PGP SIGNATURE-----
Version: PGP for Personal Privacy 5.5.3

iQA/AwUBN972y5e+N6+q84HiEQJhDwCg+MHYgIaA7jquS60rvIYQtZhA+gEAoMAM
ZuHU2n5KTxIWYtf8DADL9XR5
=xIrN
-----END PGP SIGNATURE-----

2818. "Channel Guard" circuit needed...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-14 00:00:00 UTC
From: Woody White <woody.white@att.net>
Message-ID: <37DEFAB0.7D3B9E7E@att.net>
Source record: 66968

Hi all,

I need to add subaudible tone to some of my aging rigs. I also have some resonator/crystals and ICs used in an some old General Electric VHF/UHF products. Trouble is, I have lost the circuit! The parts have GE numbers on them. The resonator is a Statek, GE# 19A134279-136.5 (I know it is a 136.5 Hz unit - what I need). The associated oscillator IC number is: ICC 7-257 6009 P1 618A (one is probably date code, but unsure which).

Anyone able to send me a scanned image of the circuit from the service manual?

Thanks Much, Woody

---------- de Woody, WB4QXE ----------

Ham Homebrew/ATV Circuits -*- Scanning Electron Microscope Images

http://www.geocities.com/capecanaveral/3722

2819. Re: Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-14 00:00:00 UTC
From: rick@area.com
Message-ID: <7rmvr7$r4g$1@vax.area.com>
Source record: 66969

In article <7rmt0n$7vc$1@news1.fast.net>,
Carl R. Stevenson <wa6vse@fast.net> wrote:
>>
>> If you use an I/Q downconverter and upconverter with a digital audio
>> system, in the non-Weaver case you are depending on the goodness of
>the analog
>> circuitry for opposite sideband rejection (receive and transmit) and
>> for transmit carrier suppression.
>
>Assuming that you don't make any attempt to calibrate/correct
>for any amplitude/phase imbalances in the digital domain, but
>why would one waste the opportunity to do so?

Yes, that is done in some HP instruments I know of. The problem
is that any change of temperature vs time makes the calibration
a moving target, thus there are limits to how well you can
successfully correct for these imbalances.

>
>> In the Weaver case, you are
>> depending on the goodness of the analog circuitry for whistle
>suppression.
>
>No, not if the summing is done in the digital domain before a single
>DAC.

If you only have a single DAC, then you need a conventional analog
IF to upconverter, with the image rejection problems.

>> BTW, is your patented architecture in production anywhere?
>At the risk of being blunt, my business dealings are none of your
>business.

You mentioned the patent in the context of very superlative claims.
Whenever that kind of statement is made, it is natural to ask
whether the invention is actually being exploited.

>Can you provide a reference to this technique? Mr. Hornak's

See US patent 5,678,222.

Rick Karlquist N6RK
rick@area.com

2820. Re: Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-15 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7rp88jnvm1@news1.fast.net>
Source record: 66885

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-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

Richard Karlquist <rick@area.com> wrote in message
news:7rmvr7$r4g$1@vax.area.com...
> In article <7rmt0n$7vc$1@news1.fast.net>,
> Carl R. Stevenson <wa6vse@fast.net> wrote:
> >>
> >> If you use an I/Q downconverter and upconverter with a digital
audio
> >> system, in the non-Weaver case you are depending on the goodness
of
> >the analog
> >> circuitry for opposite sideband rejection (receive and transmit)
and
> >> for transmit carrier suppression.
> >>
> >Assuming that you don't make any attempt to calibrate/correct
> >for any amplitude/phase imbalances in the digital domain, but
> >why would one waste the opportunity to do so?
>
> Yes, that is done in some HP instruments I know of. The problem
> is that any change of temperature vs time makes the calibration
> a moving target, thus there are limits to how well you can
> successfully correct for these imbalances.

That's a good reason for using the Weaver architecture then, isn't
it? :-)

> >> In the Weaver case, you are
> >> depending on the goodness of the analog circuitry for whistle
> >suppression.
> >>
> >No, not if the summing is done in the digital domain before a
single
> >DAC.
>
> If you only have a single DAC, then you need a conventional analog
> IF to upconverter, with the image rejection problems.

Why? There are 14 bit DACs that run at >100MSPS ... thats'
more than enough dynamic range for a transmitter.

> >> BTW, is your patented architecture in production anywhere?
> >At the risk of being blunt, my business dealings are none of your
> >business.
```

>
> You mentioned the patent in the context of very superlative claims.
> Whenever that kind of statement is made, it is natural to ask
> whether the invention is actually being exploited.
>
> >Can you provide a reference to this technique? Mr. Hornak's
>
> See US patent 5,678,222.

Thanks for the reference.

- --

Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI
Fellow, Radio Club of America
Senior Member, IEEE
Member, ARRL
Join NCI - Hams for the 21st Century!
Help modernize ham radio and assure its future survival!
http://www.nocode.org

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=adgH
-----END PGP SIGNATURE-----

2821. Re: Direct Conversion DSP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-15 00:00:00 UTC
From: Rocci <rocci@att.net>
Message-ID: <37E03A63.D2C3C89C@att.net>
Source record: 66886

I don't think the whistle is an issue with a DSP implementation of the Weaver receiver. The first (RF) LO is placed midway in the audio channel (1200 hz away from the suppressed carrier in the SSB case), which 'folds' the 2.4 khz audio channel onto itself so it only occupies 1/2 the original bandwidth. This allows the output to be processed in a narrow (1.2 khz) lowpass filter which establishes overall selectivity (forget for now where's the best place for this filter).The mid-band LO comes out of this mixing process as a DC component. This can be eliminated with AC coupling. No whistle so far.
The I and Q outputs then go to the second stage I/Q demod which is done in DSP. In this demod (or re-mod, more accurately, since it restores the original audio spectrum), the folded spectrum is quadrature mixed with a mid-band (ie, 1200 hz) LO. Since this mixing process is mathematically perfect, the 1200 hz LO should be completely suppressed. No whistle.
The transmit case is more problematic, and Weaver method might not be the right choice. For transmit, the DSP might 'switch gears' and process the signal in the typical phasing method of SSB generation. Image rejection might not be as good as in the Weaver receiver, but it doesn't have to be as good. For a receiver, I want the image product to be better than 60 dB down. For transmit, I might be happy with opposite sideband suppression of 45dB.

"Carl R. Stevenson" wrote:

> -----BEGIN PGP SIGNED MESSAGE-----
> Hash: SHA1
>
> Richard Karlquist <rick@area.com> wrote in message
> news:7rmvr7$r4g$1@vax.area.com...
> > In article <7rmt0n$7vc$1@news1.fast.net>,
> > Carl R. Stevenson <wa6vse@fast.net> wrote:
> > >>
> > >> If you use an I/Q downconverter and upconverter with a digital
> audio
> > >> system, in the non-Weaver case you are depending on the goodness
> of
> > >the analog
> > >> circuitry for opposite sideband rejection (receive and transmit)
> and
> > >> for transmit carrier suppression.
> > >
> > >Assuming that you don't make any attempt to calibrate/correct
> > >for any amplitude/phase imbalances in the digital domain, but
> > >why would one waste the opportunity to do so?
> >

> > Yes, that is done in some HP instruments I know of. The problem
> > is that any change of temperature vs time makes the calibration
> > a moving target, thus there are limits to how well you can
> > successfully correct for these imbalances.
>
> That's a good reason for using the Weaver architecture then, isn't
> it? :-)
>
> > >> In the Weaver case, you are
> > >> depending on the goodness of the analog circuitry for whistle
> > >suppression.
> > >
> > >No, not if the summing is done in the digital domain before a
> single
> > >DAC.
> >
> > If you only have a single DAC, then you need a conventional analog
> > IF to upconverter, with the image rejection problems.
>
> Why? There are 14 bit DACs that run at >100MSPS ... thats'
> more than enough dynamic range for a transmitter.
>
> > >> BTW, is your patented architecture in production anywhere?
> > >At the risk of being blunt, my business dealings are none of your
> > >business.
> >
> > You mentioned the patent in the context of very superlative claims.
> > Whenever that kind of statement is made, it is natural to ask
> > whether the invention is actually being exploited.
> >
> > >Can you provide a reference to this technique? Mr. Hornak's
> >
> > See US patent 5,678,222.
>
> Thanks for the reference.
>
> - --
>
> Carl R. Stevenson - WA6VSE
> mailto:wa6vse@fast.net
> http://www.users.fast.net/~wa6vse
> NCI #1052
> Director, NCI
> Fellow, Radio Club of America
> Senior Member, IEEE
> Member, ARRL
> Join NCI - Hams for the 21st Century!
> Help modernize ham radio and assure its future survival!
> http://www.nocode.org
>

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> ZjAAZTRI5MhcbZS7ZdOGnrJx
> =adgH
> -----END PGP SIGNATURE-----
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2822. Merit plate transformer specs?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-15 00:00:00 UTC
From: Lynn Coffelt <lynnc@sos.net>
Message-ID: <37E03EB4.53775C54@sos.net>
Source record: 66887

anybody with time to look in their files for an old "Merit Coil and Transformer" catalog to help me with the specs for a Merit P4062 plate transformer? My once complete stack of catalogs has been eroded by time. I acquired this transformer years ago for a planned linear amplifier. I think the plan was for 115vac in and enough out for a pair of 813's grounded grid. Well, the data plate's total technical data is "300ma". Fine! A little more would be helpful!
Anybody with time and resources to help?
Thanks in advance, Lynn, W7LTQ

2823. Free Buy Sell Trade page

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-15 00:00:00 UTC
From: Netminder <netminder@lakeisabella.net>
Message-ID: <7rph4r$g51$1@ash.prod.itd.earthlink.net>
Source record: 66888
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

```
Check out the Bulletin Board at:

http://www.lakeisabella.net/amateur
```

2824. Re: 250 or 500Hz CW filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-15 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19990914221106.01077.00000131@ngol08.aol.com>
Source record: 66970

In article <d5wB3.2152$eG5.193757@cac1.rdr.news.psi.ca>, "Ray Dahlby" <rdahlby@istar.ca> writes:

>I am "restoring" a Yaesu FT901DM and want to install a CW IF filter. Yaesu >no longer has any 500Hz units but they do have a 250Hz model ($47+shipping). >I would appreciate any advice as to whether I should spring for the narrow >unit or wait and try to locate a 500Hz filter. I have no experience with >either of these filters.

Hello Ray,

The best answer is to install both filters, if possible. Some rigs (like the better Ten Tecs) let you do that, while others allow only one narrow filter. I had a Ten Tec Argosy with the 250 Hz filter for a few years back in the early '80s, and it was great.

The 500 Hz filter is good for all around use, but when the going gets tough, a 250 Hz filter can make the difference.

Some narrow filters do "ring", but that is a result of inadequate design for the application. The above mentioned 250 Hz Ten Tec filter did not ring.

Some folks don't like to use narrow filters because "tuning is critical". This is actually an indication that the tuning mechanism of the rig is inadequate for the job. Most analog VFOs on commercial gear give 18 to 25 kHz per turn or more, which is way too fast. They were designed that way because a really good reduction drive costs money, and also because many hams don't like to have to crank the knob a couple of dozen times to get from one end of the band to the other. Newer rigs, with synthesized VFOs, are usually much slower - less than 10 kHz per turn - because they use optical encoders, and an encoder with fewer slots is cheaper. Plus you can make big frequency jumps with the keypad.

Audio filters can have impressive specs, but they are of limited use because they are so far from the antenna.

AGC is of limited usefulness in CW reception because it responds to the sum total of all the signals in the passband. In most QRM situations, turning off the AGC, reducing the RF gain and raising the AF gain to compensate will make a world of difference. Sadly, most "modern" rigs don't allow you to turn off the AGC. Best bet with them is to use as much AF gain and as little RF gain as possible. The fact that the S meter doesn't work under those conditions is of no consequence.

What do I use? Glad you asked.

The main HF rig here is a homebrew three-band CW transceiver. Receiver filters are a pair of milspec 8 pole 500 Hz units, cascaded. I found the filters at a

hamfest about a decade ago - each one has a shape factor of better than 4:1, combined shape factor is 2.5:1. No AGC. No S-meter. No ringing. Main dial uses the integral gear-reduction/tuning cap from a WW2 frequency meter - absolutely no backlash, and does 5 kHz per turn of the big 2-3/4" skirted knob. There is a passive LC audio filter at the output too. I wish the filters were a little narrower, but they were the only ones available. The rig was literally built around them.

Good luck and hope you find a 500 Hz filter so you have both!

73 de Jim, N2EY

2825. Re: Reducing 110vac to 55vac

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-15 00:00:00 UTC
From: Terry Sanford <tsanford@roadrunner.nf.net>
Message-ID: <37DF09C9.3703@roadrunner.nf.net>
Source record: 66971

Paperboy wrote:
>
> I'm interested in reducing the heating power of an electric
> frying pan by one-fourth. ....

Reading the various posts I think what you are saying is "reduce the heating power 'TO' one fourth". ie one quarter of the power by halving the voltage. Right??????? (v x v)/r = w

Presuming your inverter is powered with, say, 12 volts and your electric fry pan is 1200 to 1500 watts when operated 'normally' on 115 volts AC and if you are successful your will need about 300 watts at 'half voltage'.

300 watts at 12 volts is roughly 25 amps. Quite a load! You may get one hour out of a normal car battery if well charged?

I think the safest method would be to use a 2:1 transformer. 110 in 55 out. A conventional primary/secondary transformer would need to handle the whole 300 watts. However it is possible to connect in a voltage 'bucking' arrangement so that the transformer only carries half the wattage. Also a centre tapped auto transformer might do it. In all cases the transformer windings would need to carry the approximate 6 amps of current required; 6amps X 55volts = 330 watts (ie. one quarter the 'original' power).

I frequently use a 500 watt transformer to power a 230 volt electric drill from 115 volts (ie. to step UP the voltage). What you want to do is to step DOWN the voltage.

The diode idea may still result in 'full' current flowing on the conducting half cycle of the diode, which may be bad for the inverter? And would result in 'half power' (say 600 t0 700 watts) not a quarter. I think that right.

Just some thoughts. Terry S.

2826. QEX.Net Has Moved

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-15 00:00:00 UTC
From: k7on@arrl.net
Message-ID: <MPG.124932dca5851c3b9897a9@news.speedchoice.com>
Source record: 66972

QEX.Net Has Moved

If you have had problems accessing my web pages,
it is because I have a new IP address.

What does this mean? It means that it may have
been inaccessible while DNS updated.

Anyway, you should be able to access it as:
http://www.qex.net/k7on/

If not, try:
http://24.221.112.33/k7on/

i.e. the new IP address is 24.221.112.33

--
mailto:k7on@arrl.net
--

2827. Re: Reducing 110vac to 55vac

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-15 00:00:00 UTC
From: Paperboy <btslfke@poboxes.com>
Message-ID: <7rn9vb$d7d$1@zook.lafn.org>
Source record: 66973

Some very interesting thinking shown on this thread. Thanks for it.
I thought I wouldn't have to say much on "my experiment" but I can see
now I was mistaken, as it is an end-to-end kind of thing.

I have found that I can operate a small 1000w electric frying pan
set to about 190 degrees at an average power consumption of approx 5 watts.
To do this I insulated the pan as best I could and monitored it closely.
In the end I hoped to be able to operate the thing from a 12v battery.

Large wattage fry pans maintain their temperature with a dandy little
bimetalic-strip-operated off-on switch. They are not like crock pots which
(on the low setting) just balance off the input power of a constantly *on*
coil with the heat dissipation characteristic of the entire appliance
at household temp. A crock pot's only *regulation* is that it always
has some water in the mixture and that keeps the innards from going
above the local boiling point of water. Insulating a crock pot will
only help it get up to speed more quickly. Once that occurs the insulation
only increases the hazard of the operation.

Well I couldn't do anything about the resistance of the built-in heating
coil but I *could* reduce the incoming voltage.
I figured that if I could reduce the input voltage by about half,
I would reduce the pan's power by about one-fourth or to 250 watts.
(hope I did this right!) 250 watts was just right because it not
only gave the extra oomph the pan needed to get up to temperature
in a reasonable length of time but it also made a cheap 300W inverter
possible.

As to the suggestion that I use a husky diode in the line, that sounds
like the way to go - even elegant! But I wonder how the inverter
feeding this diode-pan combo will feel about it. Won't it be overloaded
on the up swings and not loaded at all on the downswings?
Will it be able to average this out without getting fried itself?

Maybe the thing to do at this point is to just try it.

2828. Re: Reducing 110vac to 55vac

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-15 00:00:00 UTC
From: davem@groucho.cs.ubc.ca
Message-ID: <7rnl66$iei@groucho.cs.ubc.ca>
Source record: 66974

Paperboy <btslfke@poboxes.com> writes:

>As to the suggestion that I use a husky diode in the line, that sounds
>like the way to go - even elegant! But I wonder how the inverter
>feeding this diode-pan combo will feel about it. Won't it be overloaded
>on the up swings and not loaded at all on the downswings?
>Will it be able to average this out without getting fried itself?

How the inverter reacts depends on the inverter itself.

Some inverters (you can recognize them because they're relatively
large and heavy for their power rating) operate by feeding 12 V
alternately between the two halves of the primary of a transformer
at 60 Hz. (For example, the primary center tap goes to +12, and
the two ends of the primary go to the collectors of transistors
with their emitters at ground. By energizing the two transistors
alternately, you produce 60 Hz square wave AC in the transformer.
The secondary provides 120 V.

This sort of inverter might well be unhappy with a diode in its output,
because there is then a large DC component to the transformer current -
it might saturate.

Another style of inverter (smaller and lighter for their power
output) run the inverter circuitry at ultrasonic frequencies,
perhaps 50 kHz. There's a step-up transformer used here, but it
can be much smaller because of the higher frequency. The AC out
of the transformer is rectified to about 170 V DC. Then a set of
4 transistors called an "H bridge" turns the DC into AC by connecting
the two AC output wires to the 170 V supply in alternating sequence.
(i.e. "hot" is connected to +170 V while "neutral" is connected to
0 V for 8.3 ms, then "hot" is connected to 0 V while "neutral" is
connected to 170 V for the next 8.3 ms).

If you connected a load with a diode in series to this inverter,
it would likely not be disturbed. The transformer is still operating
with symmetric AC no matter how asymmetric the output load is. One
half of the H-bridge is essentially doing nothing, but as long as
the total power you're drawing is less than half the rating of the
inverter, the other half of the H-bridge is fine. Note that if
you try to draw *more* than half the inverter rating, you might
overstress the H-bridge transistors, since they are designed to
provide at most half the rated load power.

Dave

2829. Frequency Reference

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-15 00:00:00 UTC
From: douglas dwyer <doug@ddwyer.demon.co.uk>
Message-ID: <6ki1fHAze133EwIA@ddwyer.demon.co.uk>
Source record: 66975

Got some more of these frequency references, unused precision SC
cut oven controlled crystal oscillators at 16.384 MHz that can be
divided down to
1,2,4kHz etc., they approach small rubidium in long term stability and
do better in short term stability.
This is the only frequency I have, as Im an oscillator designer I
recognised these (parts in ten to the eleven/day) oscillators when they
came on the market from a cancelled cellular phone system in the UK,
Now 10% list price ie UK pounds ï¿½50 or $equivilent + postage many units
shipped to US etc.
Email for more details and circuit to lock any other crystal around
10MHZ in 1kHz steps.
--
douglas dwyer

2830. Help - any circuits for auto notch?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-15 00:00:00 UTC
From: jacques@takeone.com
Message-ID: <XjJD3.16745$m4.68263023@news.magma.ca>
Source record: 66976

Am looking for a circuit one can build to add to my SW radio to have the auto notch feature. IF or audio but most likely the audio version is easier to put together. Also anyone know where on could purchase such an item? YES, I know about DSP's and have one but am looking for something smaller to add to radio (possibly inside with switches?). Thanks.

Jacques VE3TSC

2831. New Triode Board from G3SEK

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-15 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <DWpD+HAEb333EwM9@ifwtech.demon.co.uk>
Source record: 66977

[This is a one-time announcement.]

The Triode Board is a new solution to the control and protection of triode power amplifiers. It follows the same successful formula as G3SEK's Tetrode Boards: all the necessary control, protection and metering circuits on a ready-made PC board, along with a comprehensive User Manual and on-line support.

The Triode Board is configurable to use with almost any amateur-size grounded-grid amplifier, and has been tested on a wide range of triodes. More details on the web site!

The kit includes a double-sided PC board with printed component locations, all the components for the PC board and the 38-page User Manual. Experienced constructors can buy the bare board and the User Manual, which includes a complete parts list.

For details of the Triode Board and Tetrode Boards, visit
http://www.ifwtech.demon.co.uk/g3sek

Triode Boards are available NOW from G3SEK.

In the USA, Triode Boards and kits will be available in mid-October from Down East Microwave, Inc at (908) 996-3584.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

2832. Re: Source of AD8307 Log Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-15 00:00:00 UTC
From: JW <jdwalton@home.com>
Message-ID: <37DFB784.17445230@home.com>
Source record: 66978

I'm sorry, the article which I was able to find was on the AD606 - "A High Precision Logarithmic IF Amplifier" by Dr. Ing Jirmann, DB1NV. - http://vhfcomm.co.uk/ifamp2.htm

Also - search Analog's web site for a manual section "RF/IF Subsystems" or "Dynamic Range Compression". I don't havae the URL.

Hans de Bok wrote:

> jdwalton@home.com (JW) wrote in <37DE66CC.442AEBC0@home.com>:
>
> >I got some from Newark Electronics.
> >
> >There are some interesting schematics on the web using this chip -
> >spectrum analyser etc.
> >
>
> Can you give some URL's ?
>
> Thanks !
>
> Hans

2833. Re: Source of AD8307 Log Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-15 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7rojob$mu1$1@nnrp1.deja.com>
Source record: 66979

The URL to start with is http://www.analog.com

The AD8307 data sheet includes a number of applications.
Most AD606 applications are applicable too.

--
Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte
Satellite: VA3SFL on UO-22, KO-25

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2834. Re: Schematic CAD software?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-15 00:00:00 UTC
From: douglas dwyer <doug@ddwyer.demon.co.uk>
Message-ID: <7Z6lQJAQc433Ewbh@ddwyer.demon.co.uk>
Source record: 66980

In article <7rg8ph$k5n$1@news1.fast.net>, "Carl R. Stevenson"
<wa6vse@fast.net> writes
>You might also check out the freeware version of Eagle from CadSoft at
>
>http://www.cadsoftusa.com/

I have both Design Works Lite and the Eagle freeware version.
If you only want to draw a schematic DWL is quick and intuitive the
components you need are almost all available from the generic list.
Creating special components is fairly easy.
Just started using Eagle and so far looks very good.
--
douglas dwyer

2835. Re: Source of AD8307 Log Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-15 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <37DFC09C.8E5E0B57@midwestmicro-tek.com>
Source record: 66981

John Miles wrote:

> Rick Haub wrote:
> >
> > marsgal42@hotmail.com wrote:
> >
> > Hmmmmm..... I've been designing and prototyping professionaly for 12 years
> > now and I've seen some discusion lately on this SMD easier/not easier. For
> > me when I'm prototyping I *hate* using SMD, give me through hole any time.
> >
> > Rick
>
> Surface-mount parts aren't necessarily impossible to work with, if you
> use an iron with a small, clean tip. See
> http://www.qsl.net/ke5fx/uwave/demod2.jpg for example. I've used the
> same basic technique on packages with up to 68 pins, and haven't damaged
> anything yet (knock on wood).
>
> That doesn't mean I wouldn't _prefer_ working with DIP packages, but the
> unfortunate truth is that most of the interesting new parts just aren't
> getting released in DIPs anymore.
>

I know what you mean, we've been soldering SMD stuff by hand here for 10 years, we just recently got $80,000 worth of pick and place but we still prototype by hand.We had to use a 144 pin SMD flat pack VGA controller in a recent project and we use Press-n-Peel to make a small adapter board so we could wire wrap to it. It was tough getting that small of lines using P-n-P but it worked just fine untill I blew the chip and had to replace the whole thing when all the pads came up when I tried to remove the chip. When it comes to prototyping and one-of-a-kind boards, give me sockets, but if not I wish the surf board people would make adaptors for large chips.

> -- jm KE5FX
>
> --
> Note: My E-mail address has been altered to avoid spam
> --

2836. Heath Zenith educational materials and Heath Manuals FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-15 00:00:00 UTC
From: Ken Simpson <W8EK@fdt.net>
Message-ID: <nfRD3.953$fq2.25240@monger.newsread.com>
Source record: 66982

I have several Heathkit Zenith Educational Systems
courses available. They are from the 1978 time frame,
but since they are theory books, should still be
useful. Each book is $ 7. All are in good shape.

I have the following:

DC Electronics - Current and voltage through
Inductance and Capacitance

AC Electronics - AC, transformers, tuned circuits, etc.

Semiconductor Devices - Diodes, Bipolar, FETs,
Opto devices, ICs, Thyristors

Digital Techniques - Book 1 - Logic Circuits, ICs,
Flip Flops, Shift Registers, Logic Circuits

Digital Techniques - Book 2 - Counters,
Shift Registers, and Clocks

I also have some Heath manuals available.
All are ORIGINALS, not copies, and are in
good condition.

Heath HM-2102 VHF Wattmeter $ 8

Heath IM-28 VTVM $ 7

IO-103 Five inch scope $ 10

GR-2000 TV Set $ 10
GR-2050 TV Set - Five book set $ 18
GRA-2000-1 TV Clock $ 3
GRA-601 TV Clock $ 5

Prices do not include shipping from Florida.

Thanks.

73,

Ken, W8EK

Ken Simpson
E-Mail to W8EK@fdt.net

2837. We'r searching two transceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-15 00:00:00 UTC
From: Lofe <severi.staccioli@tin.it>
Message-ID: <7roi3mfel3@nslave1.tin.it>
Source record: 66983

Hello, our names are Zipp&#65533;ro and Napalm
We will found a radio community on FM 88-108.8 Mhz
We want two transciver at 10$ each thanks!

2838. Re: Pye VHF transmitter T30 and UHF receiver R470

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-15 00:00:00 UTC
From: la8ak@online.no
Message-ID: <37dee089.442906063@news.online.no>
Source record: 66984

On Mon, 13 Sep 1999 22:25:39 +0100, "john cunningham"
<john.jc@virgin.net> wrote:

>I have aquired the Pye T30 VHF transmitter and the R470 UHF receiver. Does
>anyone have any information on either of these items? I am not looking for
>the full handbook, I just wand a basic description of each of the building
>blocks. john.jc@virgin.net please if you can help.
>
>
T30FM is a quite good NBFM tx provided you do some 8-10 hrs
modifications on it, some old versions are hard to drive to full
power, but with mods it is easy to get 25-30W on 145MHz
believe it is T30MN and T30AM versions, too. I've worked with several
T30FM at work and at home. The original version may have spurs, I
remember one caused interference on nearby 2182kHz receiver, but all
problems are easily solved

73 jan-martin LA8AK

2839. GDO help please

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-16 00:00:00 UTC
From: bob hobnail <bobhobnail@freecall-uk.co.uk>
Message-ID: <37e04a1a.0@news2.cluster1.telinco.net>
Source record: 66889

Hello all,
I have just bought a not working GDO,
from a rally, its got the box, meter, coils etc.
but it aint sending out any signal.
Its getting on a bit , so.
I would like to use the bits, to make a new GDO.
Has any one a schematic of a GDO circuit ?
With a board print out, I can develop using UV light box. (last project)
So I can make and reassemble this box of tricks.
Thanks. Bob

2840. Looking for CK722 projects/Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-16 00:00:00 UTC
From: wardwardj@aol.com
Message-ID: <19990915223832.02692.00000854@ng-cd1.aol.com>
Source record: 66890

Hello,

I've been doing research on the classic CK722 germanium transistor from the 1950's/60's. You can find details at:

http://www.geocities.com/~ck722transistor/

i'm always looking for CK722's to add to the collection. Also, if you have any homebrew projects that were built with the CK722, I'd like to know about it.

Thanks

Jack W
wardwardj@aol.com

2841. Re: Reducing 110vac to 55vac

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-16 00:00:00 UTC
From: btslfke@poboxes.com
Message-ID: <7rpp2j$78t$1@zook.lafn.org>
Source record: 66891

Must apologize for clumsy wording in my post.
Said: Reduce 1000 watt pan power *by* one-fourth.
Meant to say: Reduce 1000 watt pan power *to* one fourth (250w)
Thanks for the correcting email.

2842. Re: Looking for CK722 projects/Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-16 00:00:00 UTC
From: Jim <nospam@nospam.com>
Message-ID: <37E08916.65F6@nospam.com>
Source record: 66892

WARDWARDJ wrote:
>
> Hello,
>
> I've been doing research on the classic CK722 germanium transistor from the
> 1950's/60's. You can find details at:
>
> http://www.geocities.com/~ck722transistor/
>
> i'm always looking for CK722's to add to the collection. Also, if you have any
> homebrew projects that were built with the CK722, I'd like to know about it.
>
> Thanks
>
> Jack W
> wardwardj@aol.com

Jack:

My gosh...

Yes, my radio and electronics construction experience began with the CK722 when I first built (in 1960) the One Stage Audio Amplifier then later with, Combination Crystal Diode And Transistor Radio Receiver that was described in The Boy's First Book of Radio Electonics by Alfred P. Morgan. The transistors were bought across town at the Lafayette radio store on 111 Jericho Turnpike, Long Island, New York.

The mere mention of the book series by Morgan ought to spark untold memories from the past; and now the CK722 whoa... a double whammer for sure. Check that series for more circuits using that transistor; there were five books in all. Get the older editions; the new ones used different parts.

BTW, anyone know what the original tube (octal) was that Morgan used in the one tube amplifier in the old 'First Book' (it wasn't a 6BF6).

2843. Re: Reducing 110vac to 55vac

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-16 00:00:00 UTC
From: john cunningham <john.jc@virgin.net>
Message-ID: <7rq9d9$i62$1@nclient13-gui.server.virgin.net>
Source record: 66893

How about using a non-electrolytic capacitor in series, calculating the
value using 'Xc=1/2piPI*F'. If the invertor works at high frequency, only a
small value will be needed
John Cunningham

Terry Sanford <tsanford@roadrunner.nf.net> wrote in message
news:37DF09C9.3703@roadrunner.nf.net...
> Paperboy wrote:
> >
> > I'm interested in reducing the heating power of an electric
> > frying pan by one-fourth. .....
>
> Reading the various posts I think what you are saying is "reduce the
> heating power 'TO' one fourth". ie one quarter of the power by halving
> the voltage. Right??????? (v x v)/r = w
>
> Presuming your inverter is powered with, say, 12 volts and your electric
> fry pan is 1200 to 1500 watts when operated 'normally' on 115 volts AC
> and if you are successful your will need about 300 watts at 'half
> voltage'.
>
> 300 watts at 12 volts is roughly 25 amps. Quite a load! You may get one
> hour out of a normal car battery if well charged?
>
> I think the safest method would be to use a 2:1 transformer. 110 in 55
> out. A conventional primary/secondary transformer would need to handle
> the whole 300 watts. However it is possible to connect in a voltage
> 'bucking' arrangement so that the transformer only carries half the
> wattage. Also a centre tapped auto transformer might do it. In all cases
> the transformer windings would need to carry the approximate 6 amps of
> current required; 6amps X 55volts = 330 watts (ie. one quarter the
> 'original' power).
>
> I frequently use a 500 watt transformer to power a 230 volt electric
> drill from 115 volts (ie. to step UP the voltage). What you want to do
> is to step DOWN the voltage.
>
> The diode idea may still result in 'full' current flowing on the
> conducting half cycle of the diode, which may be bad for the inverter?
> And would result in 'half power' (say 600 t0 700 watts) not a quarter. I
> think that right.
>
> Just some thoughts. Terry S.

2844. Re: GDO help please

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-16 00:00:00 UTC
From: JW <jdwalton@home.com>
Message-ID: <37E122F3.1E340443@home.com>
Source record: 66894

GDO is a pretty simple oscillator. When the frequency of the oscillator matches the frequency of the test circuit an absorbance of energy ocurs causing a decrease in grid current.

Is the B+ working? Is the tube OK?

bob hobnail wrote:

> Hello all,
> I have just bought a not working GDO,
> from a rally, its got the box, meter, coils etc.
> but it aint sending out any signal.
> Its getting on a bit , so.
> I would like to use the bits, to make a new GDO.
> Has any one a schematic of a GDO circuit ?
> With a board print out, I can develop using UV light box. (last project)
> So I can make and reassemble this box of tricks.
> Thanks. Bob

2845. Help-Repeater mods for KNWD TS-600&TS-700

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-16 00:00:00 UTC
From: VE6INM <ve6inm@telusplanet.net>
Message-ID: <7rro1gtj1@nnrp1.deja.com>
Source record: 66895
Cross-posted to: alt.ham-radio.vhf-uhf;,rec.radio.amateur.homebrew

I have a pair of old Kenwood VHF rigs: TS-600 & TS-700. Currently, both radios function in one mHz "bands" for 6 and 2 mx. I am looking for mods that will allow a 1mHz RX-TX split for repeater operation on the TS-600 for 6mx FM use. Currently it is simplex only use. On the TS-700, Kenwood has designed repeater offsets into the radio. However, 144,145,146 can only be negative offsets and 147 can only be a positive offset. We have a local repeater with 146.46 input and 147.06 output. I'm looking for a method of allowing this different offset. What I need here is different from "repeater reverse" which the TS-700SP already has. Any help or ideas will be greatly appreciated.
Glenn, VE6INM

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2846. Re: Reducing 110vac to 55vac

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-16 00:00:00 UTC
From: Terry Sanford <tsanford@roadrunner.nf.net>
Message-ID: <37E132B9.5281@roadrunner.nf.net>
Source record: 66896

john cunningham wrote:
>
> How about using a non-electrolytic capacitor in series, calculating the
> value using 'Xc=1/2piPI*F'. If the invertor works at high frequency, only a
> small value will be needed
> John Cunningham
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
John: Yes I've done this. Note 1.

For example at 60 cycle (yes I know it's hertz now) a one microfarad capacitor has a reactance (Xc) of approximately 3000 ohms.(Roughly, after all some capacitors are made to to plus/minus 20%!). One microfarad is 10 to the-minus 6 Farads.

Without bothering to draw a vector diagram (which is the proper way) one can, roughly, say "lets see I want pass 6 amps". (You can also note that the R ohms of the frying pan or whatever he is using is fairly low. For example at 1200 watts, thats roughly 10 amps at 110 volts; so, V/A = R is 110/10 = 11 ohms.).

Voltage is 110 (well lets make it 120 it's easier!) So, 120/6 = 20 ohms. so I will need 3000/20 = about a 150 microfarads non polarized (AC) capacitor that can withstand peak voltages of around 160 volts, continously.

All very rough and ready. But works!

Note 1. At one time I operated the filament/heater of a tube which required I recall 0.3 amps in series with a capacitor and the 230 volt 50 cycle mains. Lets see if I can recall the calculation. 230/0.3 = 700 ohms (Xc).
Since one microfarad is 'approx' 3600 at 50 hertz; a 5 microfarad capacitor was used.
I recall using scrap, paper wound telephone equipment capacitors (condensors), which, while only 'rated' for 48 to 52 volts were routinely tested to 2000 volts. They came in 1, 2, 4 and 0.5 and 0.2 microfarad sizes so you could paralell for different values.

Note 2. BTW; on the subject of capacitors/condensors and AC; Many years ago (like 30 maybe), someone gave us a high quality equipment fan saying that the only way it would start was if you spun it by hand and even then when it was running it had no power! We still use it to this day, fastened to a piece of plywood, to exhaust attic heat in summer, dust from workshop or as portable powerful high output fan. The trick was to use one of the capacitors mentioned above to provide a pahase shift to the secondary fan motor winding with 'full' 110 v AC to the 'main'

winding. Only replaced the 48 volt rated capacitor (0.5 microfarad I think) once; in about 30 years. It works so well that I have never bothered to experiment with different capacitor values! Just plug it in and off it goes like a dust storm; motor not hot either.

All the best. Sorry to be so long winded!

Terry S.

2847. DDS Chip

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-16 00:00:00 UTC
From: artky1k@northlandlink.com
Message-ID: <37e1388b.20906025@news.tds.net>
Source record: 66897

Hi Everyone,

I need a DDS chip, and would rather NOT use the Analog Devices chips (if possible). I need a SIMPLE DDS chip, don't need amplitude control, PSK generating/phase shift capability and 1 hz steps up to 500 kc output frequency would be great.

Parallel or simple serial inputs to control the output frequency would be a plus.

Does anyone make DDS chips or am I stuck with the AD super chip?

Thanks,

Art

2848. Re: DDS Chip

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-16 00:00:00 UTC
From: Paul Breed <Paul@Netburner.com>
Message-ID: <37E15180.3C4B5DF4@Netburner.com>
Source record: 66898

> Does anyone make DDS chips or am I stuck with the AD super chip?
>
AD makes a number of DDS chips from simple to complex.

2849. Re: 2nd Try: S-Meter Output : SSB vs FM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-16 00:00:00 UTC
From: la8ak@online.no
Message-ID: <37e15e35.606173926@news.online.no>
Source record: 66899

On 14 Sep 99 03:30:30 GMT, luke@trio.COM.AU (Luke Enriquez) wrote:

>
>Note : This is try No 2. Something went wrong yesterday, and
>my message got truncated. I also did not get the digest,
>and had to re-subscribe! BTW - Does anyone know how
>to read the .Z files that these digests seem to be encoded
>in on the FTP site?
>
>Good Afternoon People,
>
> I am currently facing an interesting problem with
>out current fox-hunting setup (t-hunting, radio sport, whatever).
>Our team uses a fairly elaborate automated system called
>Rotor Hunter. You can get a brief of this system at
>http://www.qsl.net/~vk3zpf/vk3zpfp1.htm
>
>This system uses a laptop and ADC to sample RSSI
>voltage and postion and plot the result in polar format.
....
are you motorized? In Denmark they use to drive around in cars for
160m DF, while most other countries use 80m CW or 2m FM and it is
important to use lightweight equipment
>
>We use an ICOM 738 (I think) as the HF receiver.

not particularly lightweight ....

>The
>S-meter output is picked off (before any dampening),
>and is amplified by a DC amplifier. This voltage is then
>sampled by the ADC. The problem is the lack of
>S-meter output on SSB. On FM it is quite useable,
>but SSB is hopeless! You need heaps of signal to
>get a small S-meter movement.

no, S-meter or AGC derived reading on cw/ssb is often useless, why not
install an IC and use RSSI for FM as well as SSB/CW, I have good
experience using MC3356P in my FT-902 on all modes - 70dB range is far
more than needed, but AD8307 is even miuch better. Another problem is
that you don't need large range because then you cannot read small
signal variations, perhaps a provision for 20dB range would help for
fine adjustment of DF-antenna.
>
>You can certainly hear the signal a lot earlier with

>SSB, but you can see S-meter movement first
>on FM. What would happen if I used the SSB filter,
>and hooked up a log detector on the SSB filter output,
>like the AD8307 from Analog Devices. The ADC could
>then sample the log detector output.
>
>What we really need is better
>sensitivity and selectivty than FM can offer, but
>similar S-meter output.
>
it seems to be a minor problem on ssb and cw that MC3356 has no
S-meter hang effect, I would assume the same problem exists for
AD8307, you need to attach a simple sample & hold circuit

>Keep in mind, that in Australia, mobile foxhunts
>are often weak unmodulated carriers, sometimes
>pulsed so you can tell them apart from unwanted
>birdies.
>
>All comments or questions are welcome.
>Regards,
>Luke
>--
>

2850. Crossed Field Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-16 00:00:00 UTC
From: Alan Ralph <G8xlh@tesco.net>
Message-ID: <7rrof2$d4d$1@epos.tesco.net>
Source record: 66900

I see that there is quite a lot of interest in CFA's has any built one, is it from a published design ? I have seen some details on the Internet, but usually you have to subscribe (as in money) to get details. I dont mind paying, but I would like to see what I am paying for in advance.

regards
Alan G8XLH

2851. New Amateur Radio Website!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-16 00:00:00 UTC
From: compcnsult@aol.com
Message-ID: <19990916181148.01524.00001080@ng-fh1.aol.com>
Source record: 66901

New Amateur Radio Website!

Visit the new online Hamfest:

http://www.ehamfest.com

All ads placed free!

See the FAQ page for details!

2852. Re: Looking for CK722 projects/Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-16 00:00:00 UTC
From: "Cestyll O. Dywod" <willi6@erols.com>
Message-ID: <37E18394.248C@erols.com>
Source record: 66902

Right up there with the 2N107 and the 2N170......

One day in the early 70's I was in one of the larger electronics stores in the Northern Virginia area. A "Grandmother" came in with her "Grandson" about 10 years old. He had a schematic from a Cub Scout Book, and was seeking parts.

The clerk (no older than 20) started with the CK-722, and said he had never seen a number like that before, didn't have any of those, but he would look up the equivalent in his big book. The equivalent turned out to be a 2N##### something and cost about $10.00 or so.

Grandma decided they were in over their head and told the clerk they would have to think about it. She wasn't sure that the little Scout badge was worth that much money. They left.

I followed them out, introduced myself as a Ham and a former Scout and asked if I could see the schematic. It turned out to be a very generic one-transistor receiver. I went back inside with them, purchased a cheap (about a dollar as I recall) generic xstor and gave it to the young man along with my phone number in case they had any problems. He and Grandma spent another few dollars for a couple resistors, a ferrite loopstick, a small variable capacitor, some battery stuff, and a little earphone.

I got a call about two weeks later that he and his Grandma got the radio together and had heard several local stations. They were going to have the neighbor help with a little longer antenna and would take the radio to his next Scout meeting. I got a second call a couple weeks after that when the Scout received his badge - I think it was either his Bear badge, or a Silver Arrow for his Bear Badge.

I think about that kid every year about October when jamboree On The Air (JOTA) time rolls around and all the Hams and Scouts take to the airwaves. Sometimes it all works out right!

73, Dave K7HMP

= = = = = = = = = =

WARDWARDJ wrote:
>
> Hello,
>
> I've been doing research on the classic CK722 germanium transistor from the
> 1950's/60's. You can find details at:
>

> http://www.geocities.com/~ck722transistor/
>
> i'm always looking for CK722's to add to the collection. Also, if you have any
> homebrew projects that were built with the CK722, I'd like to know about it.
>
> Thanks
>
> Jack W
> wardwardj@aol.com

2853. The Old Radio Museum will be at the Marshfield Mass. Hamfest Saturday. --info--

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-16 00:00:00 UTC
From: "John Dilks, K2TQN" <oldradio@worldnet.att.net>
Message-ID: <37E18EE5.600E@worldnet.att.net>
Source record: 66903
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.swap,rec.antiques.radio+phono

The Old Radio Museum will be at the Marshfield Mass. Hamfest Saturday.

To all,

The Old Radio Museum, recently seen in QST magazine, Antique Radio
Classified and the AWA OTB, will be at the GENESIS AMATEUR RADIO SOCIETY
Hamfest in Marshfield Mass. this Saturday, September 18th.

Marshfield is located between Boston and Plymouth Mass., just off of
Rt 3. The meet is at the Marshfield Fair Grounds. It looks like the
weather and the meet will be great! Hope to see you all there.

Hamfest information:
http://www.capecod.net/~tebolus/flea/flea.html

Museum information:
http://www.eht.com/oldradio/museum/

Hope to see you all there.
--
73' John Dilks, K2TQN

Please visit my OldRadio Museum
http://www.eht.com/oldradio/museum/

2854. Re: Crossed Field Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-16 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37E1AE97.24E27481@teleport.com>
Source record: 66904

This topic comes up periodically in rec.radio.amateur.antenna, and there's been a lot of discussion there about it. You might take a look in Deja-News (http://www.deja.com) to see what's been said. It seems that very few people have acutally built one, and of those who have, I don't believe any have been able to come anywhere near getting the claimed results. Only Egyptian broadcasters with questionable measuring equipment seem able to pull it off.

Roy Lewallen, W7EL

Alan Ralph wrote:
>
> I see that there is quite a lot of interest in CFA's has any built one, is
> it from a published design ? I have seen some details on the Internet, but
> usually you have to subscribe (as in money) to get details. I dont mind
> paying, but I would like to see what I am paying for in advance.
>
> regards
> Alan G8XLH

2855. Fm Reciever Help???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-16 00:00:00 UTC
From: Brian Snyder <ussc@technologist.com>
Message-ID: <37E1CB66.3D3A5F17@technologist.com>
Source record: 66905

I am looking for some plans/schematics to build a simple FM reciever. I

have scoured the web and find a ton of stuff on transmittrs and now that

I have built a dozen or so tx's, I want to build a matching reciever
that is tuned to them. I have been using a store bought reciever to
test my little transmitters but would now like to learn how to build a
basic reciever for them.

Can anyone help me out here?

Please email me: ussc@technologist.com

2856. Re: DDS Chip

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-17 00:00:00 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <7rss81$q9a$1@nnrp1.deja.com>
Source record: 66906

In article <37e1388b.20906025@news.tds.net>,
artky1k@northlandlink.com wrote:
> Hi Everyone,
>
> I need a DDS chip, and would rather NOT use the Analog Devices chips
> (if possible). I need a SIMPLE DDS chip, don't need amplitude control,
> PSK generating/phase shift capability and 1 hz steps up to 500 kc
> output frequency would be great.
>
> Parallel or simple serial inputs to control the output frequency would
> be a plus.
>
> Does anyone make DDS chips or am I stuck with the AD super chip?

The older Harris NCO chip should do what you want. However, by the time
you've added the DAC etc. you will probably wish you'd used one of the
ADI devices.

Leon
--
Leon Heller, G1HSM
Tel (Mobile): 079 9098 1221 (Work): 01327 357824
Email: leon_heller@hotmail.com
Web: http://www.geocities.com/SiliconValley/Code/1835

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2857. Re: Looking for CK722 projects/Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-17 00:00:00 UTC
From: wardwardj@aol.com
Message-ID: <19990916201838.01491.00001153@ng-ca1.aol.com>
Source record: 66907

Dave,

Great CK722 story - hope to put it on the webpage.

jack W

2858. Coax adjustable in length, how??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-17 00:00:00 UTC
From: franspin@my-deja.com
Message-ID: <7rt801$1te$1@nnrp1.deja.com>
Source record: 66908

I am looking for constructional details of a coax line which can be
adjusted in length by sliding in/out. It is less destructive in
experiments than cutting cable to the required length.
I have heard about it. Searched the net but can not find any reference,
since I do not know the propper English name for it.

How can help me?

Thanks,

Frans Pinkse, PA2F

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2859. Voice-over-IP repeater linking?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-17 00:00:00 UTC
From: dogbert@mindless.com
Message-ID: <37e230c4.471500920@news.earthlink.net>
Source record: 66909

Pardon my ignorance on this topic, but are there repeater controllers
for linking repeaters which can use the public telephone network
(dial-up) instead of RF as the linking mechanism? (And if so, are
there any recommendations on brands or pointers to web sites to any
products like this?)

There is some interest in my ham club to link two repeaters at
opposite ends of the continent using voice-over-IP technology,
both as a technology showcase and also to link people with
similar interests despite the wide geographic separation.

I figure this is "homebrew" because at the very least,
some additional hardware and possibly firmware would
need to be developed by our club to meet custom requirements.

Any pointers or leads are appreciated!

-- Ross

2860. Re: Voice-over-IP repeater linking?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-17 00:00:00 UTC
From: davem@groucho.cs.ubc.ca
Message-ID: <7rst69$hoi@groucho.cs.ubc.ca>
Source record: 66910

dogbert@mindless.com (Ross Archer) writes:

>There is some interest in my ham club to link two repeaters at
>opposite ends of the continent using voice-over-IP technology,
>both as a technology showcase and also to link people with
>similar interests despite the wide geographic separation.

Take a look at http://www.irlp.net/irlp/
This is the Internet Radio Linking Project, something that one of our club members has been working on for a couple of years. There are currently 6 repeaters that can be linked on command (DTMF codes transmitted over the air) to our local VHF repeater. The other repeaters are mostly in BC, Alberta, and Saskatchewan, but there's one in New Brunswick.

>I figure this is "homebrew" because at the very least,
>some additional hardware and possibly firmware would
>need to be developed by our club to meet custom requirements.

The system runs on a PC running Linux. There is a custom interface board involved, but it's already been designed. You also need a decent fast Internet connection.

Dave

2861. WTB: Dead Drake R7. Lightning damaged OK.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-17 00:00:00 UTC
From: BOB DUCKWORTH <bob@atl.org>
Message-ID: <37E1DD49.84F@atl.org>
Source record: 66911
Cross-posted to: rec.radio.swap,rec.radio.amateur,boatanchors,rec.radio.equipment,rec.radio.amateur.homebrew

Hi to all-

I have an R7 that is a little better than a parts radio
but is missing a couple of majot components.

I am looking for a dead R7. Rusty, water damaged, lighning
damaged (if bandswitch is OK) or ...

I need the complete bandswitch assembly.
The PTO buffer/Audio board
The 5, -5, 10, 35V regulator board.
Some of the little pushbuttons.
A meter.

Please write and let me know what you have.

You needn't worry about embarrasment.
I won't poke public fun at you or your
radio. Private maybe :-)

-bob

2862. Re: DDS Chip

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-17 00:00:00 UTC
From: artky1k@northlandlink.com
Message-ID: <37e2343a.3439390@news.tds.net>
Source record: 66912

On Thu, 16 Sep 1999 16:22:24 -0400, in rec.radio.amateur.homebrew you wrote:

>
>
>> Does anyone make DDS chips or am I stuck with the AD super chip?
>>
>AD makes a number of DDS chips from simple to complex.

Thanks Paul,

At present, I am UNAWARE of any 'simple' DDS type chips by AD. I have found and studied the AD 9850, 9851, 9830 and 9832.

All take very major efforts to even program a single output frequency>>:

All go way past my basic needs, which is a SIMPLE local oscillator to run between 285kc and 325kc.

I don't need multiple input registers, amplitude control, or psk/qpsk generating capability.

At this point, a PLL is more practical, atleast for my ap--but I'd really like to use a DDS if possible-it has the capability to generate test signals for receiver alignment and that's a BIG PLUS.

The 32 bit input word combined with 4 other inputs that must be toggled to load data is a problem for me as I cannot program pic's.

Any other info is appreciated.

Art

2863. Re: Coax adjustable in length, how??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-17 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <37E235EB.F3CFD266@erols.com>
Source record: 66913

franspin@my-deja.com wrote:
>
> I am looking for constructional details of a coax line which can be
> adjusted in length by sliding in/out.

What you are looking for is called a "transmission line stretcher". I've seen and used them for VHF and UHF freqs.

2864. Re: DDS Chip

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-17 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7rud80$u64$1@nnrp1.deja.com>
Source record: 66914

In article <37e2343a.3439390@news.tds.net>,
artky1k@northlandlink.com wrote:

> At present, I am UNAWARE of any 'simple' DDS type chips by AD. I have
> found and studied the AD 9850, 9851, 9830 and 9832.
>
> All take very major efforts to even program a single output
> frequency>>:
>
> All go way past my basic needs, which is a SIMPLE local oscillator to
> run between 285kc and 325kc.
>
> I don't need multiple input registers, amplitude control, or psk/qpsk
> generating capability...

Those *are* the simple chips.

Have a look at the AD7008, which is just about as brain-damaged
as DDS chips can get. See if you can find one of the old (and
long obsolete) parallel input chips. I use a Qualcomm Q2220
in a DDS VFO and program whatever spot frequency I want by
installing diodes in a little control board...

Sorry, but if you're going to play with the technology you need
the tools, and DDS chips assume that you will use a microcontroller
to program them.
--
Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte
Satellite: VA3SFL on UO-22, KO-25

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2865. Diplexer design sources?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-17 00:00:00 UTC
From: Emarit Ranu <ranu.1@osu.edu>
Message-ID: <37E251C8.16271A0B@osu.edu>
Source record: 66915

.
Can anyone point me to some literature discussing diplexer design?

The topic seems rather elusive. I want to design a diplexer with
a nearly constant input impendence over a wide bandwidth so it
won't be as easy as slapping an HPF and LPF in series.

Thanks.

--
-Emarit Ranu ranu.1@osu.edu
ElectroScience Laboratory, Who is John Galt?
The Ohio State University The moving cursor writes,
_._ __. _____ _._. __._ and having written, blinks on.

2866. Re: DDS Chip

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-17 00:00:00 UTC
From: ae517@FreeNet.Carleton.CA
Message-ID: <7rtn05$o9h@freenet-news.carleton.ca>
Source record: 66916

K Sorter (artky1k@northlandlink.com) writes:
>
> The 32 bit input word combined with 4 other inputs that must be
> toggled to load data is a problem for me as I cannot program pic's.
>
> Any other info is appreciated.

Fortunately, you don't have to be able to program a PIC to control
the AD DDS chip(s), you only have to be able to burn a PIC.

There seems to be a lot of PIC code available for your application
at: http://www.waterw.com/~njqrp/ham-pic/projects.htm

I'd like to see a similar project for VHF and UHF using a DDS
to provide the reference for a PLL, as described in QST by Rhode.
I bought a copy of Easy PIC'n, but I'm still at the very start
of the learning curve.

73 de Russ, va3rr/aa8lu
--
73 de va3rr/aa8lu
http://www.qsl.net/va3rr

2867. Re: Diplexer design sources?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-17 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <37E25EA3.1EC83BFB@mwci.net>
Source record: 66917

Emarit Ranu wrote:

> .
> Can anyone point me to some literature discussing diplexer design?
>
> The topic seems rather elusive. I want to design a diplexer with
> a nearly constant input impendence over a wide bandwidth so it
> won't be as easy as slapping an HPF and LPF in series.

The July/August issue of QEX magazine has an article on constant impedance diplexers, written by myself. I will email a copy in PDF format, if you or anyone else wants it.

Bill W0IYH

2868. Re: GDO help please

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-17 00:00:00 UTC
From: bob hobnail <bobhobnail@freecall-uk.co.uk>
Message-ID: <37e27914.0@news2.cluster1.telinco.net>
Source record: 66918

Hi all,
I forgot to say its a 2 NPN transistor oscillator,
in the GDO, at the moment.
I think its a bistable multivibraitor, oscillator circuit.
I want to replace it with a FET oscillator circuit,
and just need a good, stable, reliable and fairly simple,
to build oscillator circuit / schematic.
I have been told that a Franklin oscillator circuit
is the best one use for a GDO

2869. tube ft 3-2 information

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-17 00:00:00 UTC
From: iz7ath@usa.NET
Message-ID: <19990917192025.1056.qmail@www0k.netaddress.usa.net>
Source record: 66919

hello
anybody can give me info about a tube (BROWN BOVERI FT 3-2)(the number
051/090 on the dissipator wath means ?) (but i'm not sure about first
letter,it seems to be "F");
it seems to be a power triode and was used in a microwave-furnace for
industrial use ; if you can help me, i can send you a photo .
TAL

_____
Get free email and a permanent address at http://www.netaddress.com/?N=1

2870. anyone know what the tempco of glass encapsulated caps is?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-17 00:00:00 UTC
From: Nick Caruso <nick.caruso@software.com>
Message-ID: <37E29372.83F40FAF@software.com>
Source record: 66920
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.components

I've got a bunch of surplus glass-encapsulated capacitors -- the kind that look like diodes, but ... aren't. (a grab bag special).

They seem to mostly have values in the pF range.

Anyone know what tempco they're likely to have? They *seem* very stable when I heat and cool them while hooked to my capacitance meter (reads down to 10pF or so). But then so do silver micas...

thanks and best regards,
nick caruso
kb1dej

2871. Power Supply questions...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-17 00:00:00 UTC
From: weingart@irricana.cs.ualberta.ca
Message-ID: <7ru613osr1@scapa.cs.ualberta.ca>
Source record: 66921

Hello all.

I'm not half-bad with digital things, but for some reason, PS stuff is just a little beyond my reach. However, I need a PS that can supply in 10A DC, at a range of voltages (from ~2v to ~30v). So far I've been combing a variety of web sites, to find a schematic or two that can do supply this sort of thing. I've found a couple, main application notes for voltage/current limiters. However, I'm at a loss as to the specs that certain parts within these schematics need. For example, what sort of transformer and rectifier bridge/diodes should I be looking at? Also, where could I find these things? The locals are not much help, other than saying that "oh, you'd need a 10A rated transformer, CT, with a rough 35v output (from 110v input)". However, they don't have transformers such as this, and looking at some catalogs (very old ones), these things are HUGE. Am I deluding myself that 10A over 2v-30v is not "that much"?

Also, if anybody can say where I can get LM395, LM101A, LM308 type of things, that would be mondo cool too. Also, if these devices are not available anymore (for a reasonable price/quantity ratio...), are there suggestions for replacements?

(Oh, linear thingmajig, not switching...)

--Toby.

2872. WTB: Aug '99 issue of QST magazine

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-17 00:00:00 UTC
From: srh@iname.killspam.com
Message-ID: <srh-1709991647170001@user-2iveh4d.dialup.mindspring.com>
Source record: 66922

...or photocopy of article beginning page 37, "A PIC 16F84-Based CW Decoder". (I can't seem to find any way to purchase back issues from ARRL at their web site.) De-spam my e-mail address and drop me a line. TIA...

/steve holmes
--
Stephen R. Holmes | srh@iname.killspam.com
TNS, Inc. | (remove the middle part of the domain name
Reston, VA USA | to form my actual e-mail address)

2873. HF MOBILE IMAGES SOUGHT

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-17 00:00:00 UTC
From: K2BJ <webmaster@k2bj.com>
Message-ID: <7ruf7c$a8@dfw-ixnews6.ix.netcom.com>
Source record: 66923

Looking for shots of nice HF mobile installations to showcase on my site devoted to HF/M. See archive of past features as well...

Visit:

http://www.k2bj.com and look for the "Mobile of the Month" link!

'73
Brian

--
==========
Visit http://www.k2bj.com

2874. Re: DDS Chip

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-17 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7ruh9pmeu1@news1.fast.net>
Source record: 66924

-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

K Sorter <artky1k@northlandlink.com> wrote in message
news:37e2343a.3439390@news.tds.net...
> On Thu, 16 Sep 1999 16:22:24 -0400, in rec.radio.amateur.homebrew
you
> wrote:
>
> >
> >
> >> Does anyone make DDS chips or am I stuck with the AD super chip?
> >>
> >AD makes a number of DDS chips from simple to complex.
>
>
> Thanks Paul,
>
> At present, I am UNAWARE of any 'simple' DDS type chips by AD. I
have
> found and studied the AD 9850, 9851, 9830 and 9832.

Those ARE simple DDS chips ...

> All take very major efforts to even program a single output
> frequency>>:

Writing some bits to a register is "major effort" ???
What do you expect, voice commands?

> All go way past my basic needs, which is a SIMPLE local oscillator
to
> run between 285kc and 325kc.

Have you considered a PLL, followed by a divider? Build the VCO
to cover 2.850 MHz to 3.250 MHz and divide by 10. I believe that
Motorola may still make some parallel programmed PLL chips, though
most of the newer ones are programmed by a serial bit stream from a
uController.

- --
Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI

Fellow, Radio Club of America
Senior Member, IEEE
Member, ARRL
Join NCI - Hams for the 21st Century!
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http://www.nocode.org

-----BEGIN PGP SIGNATURE-----
Version: PGP for Personal Privacy 5.5.3

iQA/AwUBN+LIAJe+N6+q84HiEQKz9gCg7EzJcyQd2S/ET/EsO0NjN4tbg4wAoLm8
/3gkx8j6Jvs60xZarTTx0ypq
=csNQ
-----END PGP SIGNATURE-----

2875. FA: New Roller inductor going cheap

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-17 00:00:00 UTC
From: Bill Clarke <w2blc@bigfoot.com>
Message-ID: <7rugvukrj1@oak.prod.itd.earthlink.net>
Source record: 66925
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

The high bid is way below what you would pay at a famous surplus store for the same thing. Take a look - there is no reserve on this item. It is going!
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=163616973

Bill W2BLC

2876. WTB: Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-17 00:00:00 UTC
From: BlueStrat <bluestat@erols.com>
Message-ID: <37E2D960.71855BB4@erols.com>
Source record: 66926

Looking for the following NOS (preferably in
original boxes) tubes.

6V6GT, 6L6GC, 5AR4, 5Y3GT, 5R4, 5V4, 6K6GT, 6CA7/EL34, 6BQ5/EL84, 7189A,
7027,
7591A, 7581A, 12AX7A , 5751, 12AY7/6072, 7025, 12AT7, 7199, 5881, 6550,
7868, KT-66,77,88.

Also, octal socket extenders/savers.

Please list brand, price, qty available, and whether in
original box.

Thanks,
Mike
703-430-8713
bluestat@erols.com

2877. Re: Diplexer design sources?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-17 00:00:00 UTC
From: rick@area.com
Message-ID: <7runp0$q5d$1@vax.area.com>
Source record: 66927

In article <37E251C8.16271A0B@osu.edu>, Emarit Ranu <ranu.1@osu.edu> wrote:
>.
> Can anyone point me to some literature discussing diplexer design?
>
> The topic seems rather elusive. I want to design a diplexer with
> a nearly constant input impendence over a wide bandwidth so it
> won't be as easy as slapping an HPF and LPF in series.
>
> Thanks.
>

Actually it is as easy as that, if you use singly terminated
Butterworth filters. Simply parallel the unterminated ports of
the low pass and high pass filters and you're done. The two
filters must be duals of each other. This was written up in
Trans. IEEE on Circuit Theory around 1956.

Rick Karlquist N6RK
>--
> -Emarit Ranu ranu.1@osu.edu
> ElectroScience Laboratory, Who is John Galt?
> The Ohio State University The moving cursor writes,
> _._ __. _____ _._. __._ and having written, blinks on.

2878. Re: Coax adjustable in length, how??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-17 00:00:00 UTC
From: Dale Parfitt <parinc@bellsouth.net>
Message-ID: <37E30442.DDA30052@bellsouth.net>
Source record: 66928

franspin@my-deja.com wrote:

> I am looking for constructional details of a coax line which can be
> adjusted in length by sliding in/out. It is less destructive in
> experiments than cutting cable to the required length.
> I have heard about it. Searched the net but can not find any
> reference,
> since I do not know the propper English name for it.
>
> How can help me?
>
> Thanks,
>
> Frans Pinkse, PA2F
>
> Sent via Deja.com http://www.deja.com/
> Share what you know. Learn what you don't.

Hi Frans,
General radio made a lot of these in the '60's. I see them at hamfests
and on the newsgroups fairly often for sale.

Dale W4OP

2879. varactor gamma and linear tuning?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-17 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@bellsouth.net>
Message-ID: <WZDE3.5785$Lt.42480@news4.mia>
Source record: 66929
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad,sci.electronics.design

Hi all,

Can someone please enlighten me a little regarding varactor gamma and linear tuning?

If you have an LC tuned VCO with a varactor, then the frequency is proportional to the reciprocal of the square root of the
capacitance.
F ~ 1/sqrt(C)

So if it is desired to have equal frequency change with equal voltage change on the varactor, then what should be the gamma for a
single varactor? And for back to back varactors?

Thanks,
Bert Douglas

2880. WTB: ATAS-100 Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-18 00:00:00 UTC
From: miamibaker@aol.com
Message-ID: <19990918101613.01720.00001985@ng-fx1.aol.com>
Source record: 66835

Am looking for an ATAS-100 antenna in good shape. Please respond to miamibaker@aol.com.

Thanks.
Max

2881. WTD:Alinco DR1200 control board

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-18 00:00:00 UTC
From: kb2zlz@yahoo.com
Message-ID: <7s0b9l$t8s$3@node17.cwnet.frontiernet.net>
Source record: 66836

I'm looking for an Alinco DR1200 control board (front panel assembly)

If anyone has a dead DR1200 with a good control board please e-mail
me at kb2zlz@yahoo.com

Thanks.

2882. Why narrow FM instead of AM on VHF?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-18 00:00:00 UTC
From: jhoyos@hoth.gcn.ou.EDU
Message-ID: <19990918153723718.AAA209.233@DEP_FISICA.ucaldas.edu.co>
Source record: 66837

The modulation index for narrowband FM is much less than Pi / 2.

Mischa Scwartz in his book Information Transmission, Modulation, and Noise, 3rd edition, says: "The noise and interference reduction advantages of FM over AM, mentioned previously, become significant,however, only for large modulation index (greater than Pi / 2)."

So, accepting Schwartz is right, why do they use narrow FM instead AM ?

Thanks in advance.

Jorge Hoyos.

2883. Re: Why narrow FM instead of AM on VHF?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-18 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <37E402A1.8458FAD8@bellsouth.net>
Source record: 66838

jhoyos@hoth.gcn.ou.EDU wrote:
> The modulation index for narrowband FM is much less than Pi / 2.
>
> Mischa Scwartz in his book Information Transmission, Modulation,
> and Noise, 3rd edition, says: "The noise and interference reduction
> advantages of FM over AM, mentioned previously, become
> significant,however, only for large modulation index (greater than Pi
> / 2)."
>
> So, accepting Schwartz is right, why do they use narrow FM
> instead AM ?

Power consumption and weight, probably. Narrow FM can be modulated with a voltage amplifier and a variable-reactance device. (today, usually a varactor diode - in the late 1940s, a single receiving-style tube) Efficient 100% modulation AM requires an audio power amplifier with power output equal to half the DC input to the final RF amplifier. And, a heavy modulation transformer or choke. Grid modulation can substantially reduce the audio power required, at the expense of lower efficiency of the RF amplifier. (so you may not save much if any DC power overall)

In some amateur stations, RF susceptability of broadcast receivers was also an issue. Some very cheap radios were being sold at the time, (early 1950s) and they were quite susceptable to pickup of VHF RF. (some things never change<grin>) If the VHF transmitter was running AM, the modulation would be fully intelligible and the set owner would know who to complain to/about. If FM was used, the pickup might not be noticed at all - and if it was noticed, it would probably appear to be unmodulated. The set owner might never know what was causing it.

Also, doesn't that statement only apply to random thermal noise? I would think lightning static and many man-made noises would still be less of a problem with narrow FM.
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

2884. Re: varactor gamma and linear tuning?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-18 00:00:00 UTC
From: Jim_Thompson <Jim-T@analog_innovations.com>
Message-ID: <DcfjN4tdd57TVGlDJaHzNAk=ixAm@4ax.com>
Source record: 66839
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad,sci.electronics.design

On Sat, 18 Sep 1999 16:43:09 GMT, david.copperhead@usa.net (David
Copperhead) wrote:

|I've used an eprom and an DAC to comsensate for the non-linearity.
|
|On Fri, 17 Sep 1999 22:47:23 -0500, "Bert Douglas" <bertdNOSPAM@bellsouth.net>
|wrote:
|
|>Hi all,
|>
|>Can someone please enlighten me a little regarding varactor gamma and linear tuning?
|>
|>If you have an LC tuned VCO with a varactor, then the frequency is proportional to the
reciprocal of the square root of the
|>capacitance.
|>F ~ 1/sqrt(C)
|>
|>So if it is desired to have equal frequency change with equal voltage change on the
varactor, then what should be the gamma for a
|>single varactor? And for back to back varactors?
|>
|>Thanks,
|>Bert Douglas
|>
|>

Try:

http://www.alphaind.com/advscripts/AppPartNumDataSheet_2.asp?Sect=Discrete+Semiconductors&
Param=Subsection&word=IBA&Data='Varactors'

for hyper-abrupt varactors that give pretty linear tuning.

(If replying by E-mail please observe method of anti-spam.)

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
Jim-T@analog_innovations.com Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

For proper E-mail replys SWAP "-" and "_".

2885. FS: QST BACK ISSUES $1.00

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-18 00:00:00 UTC
From: Andrew <xandrew@tropicom.net>
Message-ID: <37E3D16F.62E6AEED@tropicom.net>
Source record: 66840
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.space

I am clearing out the ham shack of all my QST magazines once again. If anyone is interested, I am selling
1992-1998 at $1.00 ea. (you pay shipping costs however you want them shipped). If you
are interested in over 12 issues or the entire collection, make me an offer. I am willing to ship anywhere on
this planet so long as you are willing to pay the shipping costs.

Here are the issues that I have:

QST

1992 Jan - April $1.00 ea.
1993 Jan - Feb & April - Dec $1.00 ea.
1994 Jan - Oct & Dec $1.00 ea.
1995 Jan - Dec $1.00 ea.
1996 Jan - Dec $1.00 ea.
1997 Jan - Dec $1.00 ea.
1998 Jan - Dec $1.00 ea. (May issue is missing page 73)
1999 Jan - Current $2.50 ea.

All the issues are in perfect condition with no ripped pages or covers. Sorry I don't have anymore, but the last
time I did this in 1993, I sold all my 1989 through my 1992 issues less a few months still available.
If you would like to check my references, please feel free to do so. I am on Ebay and my user ID is: Andrew45
http://cgi2.ebay.com/aw-cgi/eBayISAPI.dll?ViewFeedback&userid=andrew45
--
********** DO NOT AUTOREPLY **********

TO REPLY REMOVE THE TWO 'X' FROM MY EMAIL
ADDRESS. ANTI SPAM MEASURES IN EFFECT

XANDREW@XTROPICOM.NET

****

2886. Re: Why narrow FM instead of AM on VHF?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-18 00:00:00 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <Kt3jN25nlqJfsM+AapxbTmBuZBKT@4ax.com>
Source record: 66841

On 18 Sep 99 15:24:26 GMT, jhoyos@hoth.gcn.ou.EDU wrote:

>The modulation index for narrowband FM is much less than Pi / 2.
>
>Mischa Scwartz in his book Information Transmission, Modulation,
>and Noise, 3rd edition, says: "The noise and interference reduction
>advantages of FM over AM, mentioned previously, become
>significant,however, only for large modulation index (greater than Pi
>/ 2)."
>
>So, accepting Schwartz is right, why do they use narrow FM
>instead AM ?

One contributing factor is that in mobile communication, the signal variations are huge and fast, especially at higher frequencies. On 1.3 GHz, you might have more than 100 signal dropouts each second at highway speed. The problem with AM is that the audio amplitude is proportional to IF amplitude, thus a very effective a.g.c. is needed to keep the IF amplifier output level (AM detector input level) constant.

Now that the RF signal variation is nearly as fast as the lowest frequencies in speech, it would be very hard to keep the a.g.c. voltage and the audio band separated. Using sufficiently fast a.g.c. would also smooth out the lowest audio frequencies.

In the 70's, there was a lot of hype about SSB with a (3-4 kHz) pilot tone for mobile communication, but I have not heard anything since about it. Apparently the fast amplitude variation killed also these systems.

In FM, you can run the signal through the limiter and the audio level is then only proportional to the frequency deviation, not the RF signal level.

Paul OH3LWR

2887. ISO any Homebrew receivers, working or not

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-18 00:00:00 UTC
From: jvr@pclink.com
Message-ID: <37e3eb77.1555257@news.protocom.com>
Source record: 66842

Hi,

I love rescuing and restoring homebrew receivers of all types. Do you have one you wish to part with? I may be interested in it, working or not.

Contact me by email please.

Thanks,

Bob

2888. Re: varactor gamma and linear tuning?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-18 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <GNVyOnAmz943EwUY@jmwa.demon.co.uk>
Source record: 66843
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad,sci.electronics.design

<7s0aht$5bs$1@nnrp1.deja.com>, py1ll@my-deja.com inimitably wrote:
> So if it is desired to have equal frequency change with equal voltage
>change on the varactor, then what should be the gamma for a
>> single varactor? And for back to back varactors?
>>
It depends on the type of junction in the varactor - normal, abrupt or
hyperabrupt. For abrupt junctions, C is inversely proportional to the
square root of the bias voltage, so the frequency is proportional to the
fourth root of the voltage.
--
Regards, John Woodgate, Elector of Rayleigh, Grand Four-cusped Astroid of the
First Order of Magnitude. OOO - Own Opinions Only. Phone +44 (0)1268 747839
Fax +44 (0)1268 777124. http://www.jmwa.demon.co.uk
PLEASE DO NOT E-MAIL COPIES OF NEWSGROUP POSTS TO ME

2889. Re: Looking for CK722 projects/Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-18 00:00:00 UTC
From: Lynn Coffelt <lynnc@sos.net>
Message-ID: <37E3F4F2.217D1704@sos.net>
Source record: 66844

Jack!
Great idea for a web site! When I talk to contemporaries about the CK722, the usual response is a blank stare. One did remember, but was a fan of some others- - - 2N106 (or 107?).
How much did they retail for when first introduced? I wanted one to experiment with, I think maybe 1958 or 1959, and the price was something like $18. More than my hobby allowance!
Several months after first inquiry (was it "Tucson Radio Supply"?) the price came below $10.
That single unit-- usually twisted into the circuit, to avoid soldering heat-- and on higher class experiments "fehnstock" (spell checker can't help here) clipped into the circuit, was a microphone amplifier, a radio, and a code oscillator. Somewhere around June of 1960 it's gain went to zero. (I guess all the "holes" got plugged or something).
Lynn, W7LTQ

2890. Re: Why narrow FM instead of AM on VHF?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-18 00:00:00 UTC
From: Dave Shrader <dshrader@earthlink.net>
Message-ID: <37E40603.87E522BE@earthlink.net>
Source record: 66845

jhoyos@hoth.gcn.ou.EDU wrote:

> The modulation index for narrowband FM is much less than Pi / 2.

Is it?? Pi / 2 = ~ 1.57 to 1 <use radians not degrees>

M.I. for typical 2 meter is much greater than 1.57 to 1. Consider the
following:

Assume a bandwidth of 5 kHz in your 2 meter FM rig.
Assume your repeater uses a tone of 100 Hz for access, finally assume
your tone encoder is set for 10% 'modulation level'.

Your 100 Hz tone at 10% will cause a 500 Hz deviation in the output.
(deviation ratio of 10%)

However the Modulation Index is the bandwidth (5 kHz divided by the
frequency of the modulating signal e.g. 100 Hz, or 50 to 1).

Modulation index is described mathematically by a Bessel function...
complicated math.

I think your error was in assuming that pi / 2 had units of degrees
instead of radians.

>
>
> Mischa Scwartz in his book Information Transmission, Modulation,
> and Noise, 3rd edition, says: "The noise and interference reduction
> advantages of FM over AM, mentioned previously, become
> significant,however, only for large modulation index (greater than Pi
> / 2)."
>
> So, accepting Schwartz is right, why do they use narrow FM
> instead AM ?
>
> Thanks in advance.
>
> Jorge Hoyos.

2891. Re: varactor gamma and linear tuning?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-18 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@bellsouth.net>
Message-ID: <fOWE3.11206$eJ2.105506@news1.mia>
Source record: 66846
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad,sci.electronics.design

Thanks very much for the pointer. Very helpful. I spent an hour browsing the Alpha web site last night, and did not find this
info.

Bert

Jim_Thompson wrote in message ...
>On Sat, 18 Sep 1999 16:43:09 GMT, david.copperhead@usa.net (David
>Copperhead) wrote:
>
>http://www.alphaind.com/advscripts/AppPartNumDataSheet_2.asp?Sect=Discrete+Semiconductors&Param=Subsection&word=IBA&Data='Varactors
'
>
>for hyper-abrupt varactors that give pretty linear tuning.
>
>(If replying by E-mail please observe method of anti-spam.)
>
> ...Jim Thompson
>--
>| James E.Thompson, P.E. | mens |
>| Analog Innovations, Inc. | et |
>| Analog/Mixed-Signal ASIC's and Discrete Systems | manus |
>| Phoenix, Arizona Voice:(480)460-2350 | |
>| Jim-T@analog_innovations.com Fax:(480)460-2142 | Brass Rat |
>| http://www.analog-innovations.com | 1962 |
>
> For proper E-mail replys SWAP "-" and "_".

2892. Rerun: varactor gamma and linear tuning?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-18 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@bellsouth.net>
Message-ID: <gOWE3.11207$eJ2.105506@news1.mia>
Source record: 66847
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad,sci.electronics.design

Hi all,

Thanks for all the answers on how to compensate for non-linear varactors.

But I need to get real linear voltage to frequency tuning.

I am doing FM on the same varactor. The PLL loop frequency is lower than the modulation frequency. So without linear tuning, I
have the change the gain on the modulation source for each different frequency. Also with widely different VCO constants at
different ends of the band, some compromises are required with the PLL loop filter.

So I am still seeking answers. Thanks for any help.

Q1 - Varactors are available with constant gamma, with specified gamma of 0.5, 1.0, 1.5, 2.5, etc. What gamma do I want? Can a
constant gamma varactor give me linear tuning?

Q2 - What exactly is meant when it says in the data sheet that the gamma of a varactor is 0.5? It seems to me that the gamma is
really minus 0.5? Capacitance always decreases with increasing voltage. Or does gamma mean something different than usual when
related to a varactor?

Q3 - Can I use some kind of compensation network to get linear tuning from an arbitrary varactor? I am thinking of other capacitors
in series and parallel with the varactor.

2893. Re: Looking for CK722 projects/Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-18 00:00:00 UTC
From: "Michael St. Angelo" <mstangelo@worldnet.att.net>
Message-ID: <7s1d53$42$1@bgtnsc01.worldnet.att.net>
Source record: 66848

Lynn, Jack,

I do remember the GE 2N107 and it's npn cpunterpart, the 2N170.
I bought mine in the early 1960's from theLafayette store in Jamaica,
Queens.
The price was very reasonable.

I have a 1966 Lafayette catalog, and I see the price of the transistors
were 55 and 75 cents. They are classified entertainment grade
an are cheaper than a Texas Instruments 2n2222 at $3.97
or a "Minuteman Series" DTL SN337A flip flop at $70.00.

I also built a one transistor crystal radio using fahnestock clips.

Lafayette later moved to Syosset, Long Island.

I still have the transistors in the origional boxes.

Mike St. Angelo N2MS

Lynn Coffelt wrote in message <37E3F4F2.217D1704@sos.net>...
>Jack!
> Great idea for a web site! When I talk to contemporaries about the
>CK722, the usual response is a blank stare. One did remember, but was a
>fan of some others- - - 2N106 (or 107?).
>>

2894. Re: Looking for CK722 projects/Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-18 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37E44973.B37C2528@teleport.com>
Source record: 66849

By the time I began playing with such things (somewhere around 1957), two transistor types were available, the CK722 and CK721. The former was $1.00 and the latter $3.00. This was in Juneau, Alaska, where prices were considerably higher than "outside". (It wasn't the "lower 48" yet because Alaska was a territory at that time.)

Roy Lewallen, W7EL
ex-WL7CIB, KL7CIB

Lynn Coffelt wrote:
>
> Jack!
> Great idea for a web site! When I talk to contemporaries about the
> CK722, the usual response is a blank stare. One did remember, but was a
> fan of some others- - - 2N106 (or 107?).
> How much did they retail for when first introduced? I wanted one to
> experiment with, I think maybe 1958 or 1959, and the price was something
> like $18. More than my hobby allowance!
> Several months after first inquiry (was it "Tucson Radio Supply"?) the
> price came below $10.
> That single unit-- usually twisted into the circuit, to avoid soldering
> heat-- and on higher class experiments "fehnstock" (spell checker can't
> help here) clipped into the circuit, was a microphone amplifier, a
> radio, and a code oscillator. Somewhere around June of 1960 it's gain
> went to zero. (I guess all the "holes" got plugged or something).
> Lynn, W7LTQ

2895. Re: Coax adjustable in length, how??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-18 00:00:00 UTC
From: Woody White <woody.white@att.net>
Message-ID: <37E30EBE.9D929CCB@att.net>
Source record: 66930

I havent (exactly) tried this, but here goes....

Check hobby/craft stores for thin wall hard drawn brass tubing. It is available in sizes from about 1/16" to nearly 1" in diameter, graduated in size to telescope into one another with a tight clearance. They usually come in 1 or 3 foot lengths. I have used this stuff in fabricating connectors for hardline using flex coax type Ns. The inner conductor / outer couductor diameter ratio will determine the impedance. Solder an inner conductor to a chasis connector (like "N"), and the outer (shield) to the connector shell. Keep 'em concentric. This brass is tougher to solder than copper, but with proper cleaning, an active flux and proper heat it works. If needed some spacers could be easily made (washer-like) using teflon, polystyrene, or possibly plexiglas. These may limit travel.

Make 2 of these, somewhat longer than 1/2 the max length required. For one of the two, use tubing of 1 telescoping (smaller) diameter for both inner and outer. Now, on both the inner and outer tubing (of the smaller diameters), make a number short (1/8"?) axial cuts along the diameter. This will disturb the tubing enough to produce a slight interference fit. It will help to make the inner a bit longer than the outer (shield) to facilitate assembly.

Carefully telescope the tubing(s). If the fit is too loose, use needle nose pliers to slightly twist each of the small tabs formed by the cus on the end.

Voila!.... Good Luck, Woody
---

franspin@my-deja.com wrote:
>
> I am looking for constructional details of a coax line which can be
> adjusted in length by sliding in/out. It is less destructive in
> experiments than cutting cable to the required length.
> I have heard about it. Searched the net but can not find any reference,
> since I do not know the propper English name for it.
>
> How can help me?
>
> Thanks,
>
> Frans Pinkse, PA2F

>
> Sent via Deja.com http://www.deja.com/
> Share what you know. Learn what you don't.

--

---------- de Woody, WB4QXE ----------

Ham Homebrew/ATV Circuits -*- Scanning Electron
Microscope Images

http://www.geocities.com/capecanaveral/3722

2896. Re: WTB: Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-18 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <7s07id$3ef$1@nnrp1.deja.com>
Source record: 66931

In article <37E2D960.71855BB4@erols.com>,
BlueStrat <bluestat@erols.com> wrote:
> Looking for the following NOS (preferably in
> original boxes) tubes.
>
> 6V6GT, 6L6GC, 5AR4, 5Y3GT, 5R4, 5V4, 6K6GT, 6CA7/EL34, 6BQ5/EL84,
7189A,
> 7027,
> 7591A, 7581A, 12AX7A , 5751, 12AY7/6072, 7025, 12AT7, 7199, 5881,
6550,
> 7868, KT-66,77,88.
>
> Also, octal socket extenders/savers.
>
> Please list brand, price, qty available, and whether in
> original box.
>
> Thanks,
> Mike
> 703-430-8713
> bluestat@erols.com
>
>

Dear Mike,

ALL these tubes can be found at http://www.tubeworld.com/tubes.html

Good luck.

--
Greetings,

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2897. Re: varactor gamma and linear tuning?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-18 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <7s0aht$5bs$1@nnrp1.deja.com>
Source record: 66932
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad,sci.electronics.design

In article <WZDE3.5785$Lt.42480@news4.mia>,
"Bert Douglas" <bertdNOSPAM@bellsouth.net> wrote:
> Hi all,
>
> Can someone please enlighten me a little regarding varactor gamma and
linear tuning?
>
> If you have an LC tuned VCO with a varactor, then the frequency is
proportional to the reciprocal of the square root of the
> capacitance.
> F ~ 1/sqrt(C)
>
> So if it is desired to have equal frequency change with equal voltage
change on the varactor, then what should be the gamma for a
> single varactor? And for back to back varactors?
>
> Thanks,
> Bert Douglas
>
>

You are right, Bert.
Varactor tuning is normally linear only for little voltage variation
around certain DC value. Besides that F formula above, the capacitance
value is not linear with V, being a dacaying exponential curve. The
results cannot be linear.
This is sometimes a rather serious problem when designing wideband PLL
synthesizers because it is difficult to preview what will happen when
big frequency shifts are desired.
--
Greetings,

Luiz - PY1LL

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2898. Re: DDS Chip

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-18 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <37E337FE.1DDD736A@corecomm.net>
Source record: 66933

K Sorter wrote:
> All go way past my basic needs, which is a SIMPLE local oscillator to
> run between 285kc and 325kc.

That sounds very like the range for USCG DGPS signals. Are you sure you
want the LO frequency there, or are those the frequencies you want to
receive? Or both (i.e. direct conversion)?

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+

2899. Re: anyone know what the tempco of glass encapsulated caps is?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-18 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37E372BF.AE2B210C@teleport.com>
Source record: 66934
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.components

These are multilayer ceramic capacitors, which can be made from a variety of ceramic materials, differing greatly in temperature characteristics. If they're even reasonably stable, they're probably either C0G (NPO) or X7R, or similar. The latter is "temperature stable", and there are many varieties with more-or-less similar stabilities. X7R has a specified maximum change of +/-15% over the range of -55 to +125C. I'd expect to see several percent change from heating with a soldering iron or cooling with spray cold. NPOs are more stable. They also come in more than one variety, but one of the more common, C0G, has a tempco of no more than +/-30 ppm/degree C. You shouldn't be able to move one of these even one percent with the same heating/cooling regimen.

Another common type of ceramic is "high-K", which is very temperature unstable. One of the most common varieties is Z5U, which can change -56 to +22% over the range +10 to +85C. By your description of your tests, this is not what you have.

Roy Lewallen, W7EL

Nick Caruso wrote:
>
> I've got a bunch of surplus glass-encapsulated capacitors -- the kind that look
> like diodes, but ... aren't. (a grab bag special).
>
> They seem to mostly have values in the pF range.
>
> Anyone know what tempco they're likely to have? They *seem* very stable when
> I heat and cool them while hooked to my capacitance meter (reads down to 10pF or
> so). But then so do silver micas...
>
> thanks and best regards,
> nick caruso
> kb1dej

2900. Re: Coax adjustable in length, how??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-19 00:00:00 UTC
From: yvon roy <soj@sympatico.ca>
Message-ID: <37E4691F.DB01B88D@sympatico.ca>
Source record: 66850

It is called a line stretcher; I have use one in the past built by General Radio and there was also another one built by Narda I believe. There was one for sale a while ago on" Ford
inventory surplus" Web site.

franspin@my-deja.com wrote:

> I am looking for constructional details of a coax line which can be
> adjusted in length by sliding in/out. It is less destructive in
> experiments than cutting cable to the required length.
> I have heard about it. Searched the net but can not find any reference,
> since I do not know the propper English name for it.
>
> How can help me?
>
> Thanks,
>
> Frans Pinkse, PA2F
>
> Sent via Deja.com http://www.deja.com/
> Share what you know. Learn what you don't.

2901. Re: Looking for CK722 projects/Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-19 00:00:00 UTC
From: wardwardj@aol.com
Message-ID: <19990918225045.01533.00001596@ng-fl1.aol.com>
Source record: 66851

Hi guys,
the original CK722 was quoted at $12 originally (end of 1952) but quickly dropped to $7.60 by Mar '53. Continued to fall in price, until it hit .99 cents by end of 1955. At least that's what the ads suggest.

jack

2902. Re: Rerun: varactor gamma and linear tuning?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-19 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <7s2mtulob1@nnrp1.deja.com>
Source record: 66852
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad,sci.electronics.design

In article <gOWE3.11207$eJ2.105506@news1.mia>,
"Bert Douglas" <bertdNOSPAM@bellsouth.net> wrote:
> Hi all,
>
> Thanks for all the answers on how to compensate for non-linear
varactors.
>
> But I need to get real linear voltage to frequency tuning.
>
> I am doing FM on the same varactor. The PLL loop frequency is lower
than the modulation frequency. So without linear tuning, I
> have the change the gain on the modulation source for each different
frequency. Also with widely different VCO constants at
> different ends of the band, some compromises are required with the PLL
loop filter.
>
> So I am still seeking answers. Thanks for any help.
>
> Q1 - Varactors are available with constant gamma, with specified
gamma of 0.5, 1.0, 1.5, 2.5, etc. What gamma do I want? Can a
> constant gamma varactor give me linear tuning?
>
> Q2 - What exactly is meant when it says in the data sheet that the
gamma of a varactor is 0.5? It seems to me that the gamma is
> really minus 0.5? Capacitance always decreases with increasing
voltage. Or does gamma mean something different than usual when
> related to a varactor?
>
> Q3 - Can I use some kind of compensation network to get linear tuning
from an arbitrary varactor? I am thinking of other capacitors
> in series and parallel with the varactor.
>
>

When the loop frequency is lower than the modulation frequency, you can
use a special technique called "2 point modulation", that is, the low
frequencies modulation components (lower than loop freq.) are injected
in the reference path and the higher ones in the varactor path.
If you have a large gain (df/dV) on the varactor, things become linear
because the voltage swing for modulation is low.
But there are many other ways to get a perfect linear FM without these
problems.
--

Greetings,

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2903. Re: Why narrow FM instead of AM on VHF?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-19 00:00:00 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <2ovkN+GL+ckXptcaRsAhQzGlDHBd@4ax.com>
Source record: 66853

On Sat, 18 Sep 1999 17:37:07 -0400, Dave Shrader
<dshrader@earthlink.net> wrote:

>M.I. for typical 2 meter is much greater than 1.57 to 1. Consider the
>following:

Modulation index for FM is usually defined as deviation in relation to
highest baseband frequency, e.g. with 3.3 kHz audio and 5 kHz
deviation (which would be typical for 25 kHz channel spacing), brings
the modulation index pretty close to pi/2. With deviations suitable
for 12.5 kHz channel spacing (which is the recommendation for 2 m in
Europe) the modulation index would be much less.

Paul OH3LWR

2904. FA: VHF, HF tubes. Great prices...! All NOS...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-19 00:00:00 UTC
From: ea <tsh@arrakis.es>
Message-ID: <37e4a7dd@news.arrakis.es>
Source record: 66854

2C39BA Siemens, 4X150A Eimac, 6CW4 Sylvania, E810F Mullard, 5749 GE, 6AM6 Trigon, 6AU6WC GE, 6AU8 GE, E180F Mullard

http://cgi3.ebay.com/aw-cgi/eBayISAPI.dll?ViewListedItems&userid=dedalo

Thanks...!

2905. Re: varactor gamma and linear tuning?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-19 00:00:00 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <hZzkNxDxYi7DvPaKu6J9kHrZXIYK@4ax.com>
Source record: 66855
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad,sci.electronics.design

On Fri, 17 Sep 1999 22:47:23 -0500, "Bert Douglas"
<bertdNOSPAM@bellsouth.net> wrote:

>Can someone please enlighten me a little regarding varactor gamma and linear tuning?
>
>If you have an LC tuned VCO with a varactor, then the frequency is proportional to the
>reciprocal of the square root of the capacitance. F ~ 1/sqrt(C)

A long time ago (unfortunately I do not remember the year), there was
a short article in Wireless World about a VCO with linear tunning
voltage sensivity for low distortion PLL detection of FM signals
around the 10.7 MHz IF frequency. It exploited the nonlinear Vbe/Ic
relation of common emitter bipolar transistors and the varactor used
happened to have the opposite characteristics as the bipolar
transistor. The tunning _voltage_ was scaled down to about 0.4 V ..
0.6 V and it was used to drive the base directly (without any series
resistors on the base). With a normal collector resistor, the varactor
tunning voltage was taken from the collector of the transistor.

I do not remember how the temperature compensation was done, since the
Vbe/Ic curve is very temperature sensitive. Apparently the temperature
stability was not a large issue, since the VCO was inside a feedback
loop anyway.

Paul OH3LWR

2906. Re: Schematic CAD software?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-19 00:00:00 UTC
From: edolsen@juno.com
Message-ID: <37E4BD29.209D@juno.com>
Source record: 66856

Also, Ivex has a free ware version of WinDraft and WinBoard
for downloading at http://www.ivex.com/

Both are very good and easy to use, WinDraft does Schmatics,
and WinBoard does PCB layout.

The 100 pin versions are free, and the 350 pin versions
can be had from NTE for $99.

douglas dwyer wrote:
>
> In article <7rg8ph$k5n$1@news1.fast.net>, "Carl R. Stevenson"
> <wa6vse@fast.net> writes
> >You might also check out the freeware version of Eagle from CadSoft at
> >
> >http://www.cadsoftusa.com/
>
> I have both Design Works Lite and the Eagle freeware version.
> If you only want to draw a schematic DWL is quick and intuitive the
> components you need are almost all available from the generic list.
> Creating special components is fairly easy.
> Just started using Eagle and so far looks very good.
> --
> douglas dwyer

2907. Re: Why narrow FM instead of AM on VHF?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-19 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <37E4BDEE.7856567A@mwci.net>
Source record: 66857

Paul Keinanen wrote:

> On Sat, 18 Sep 1999 17:37:07 -0400, Dave Shrader
> <dshrader@earthlink.net> wrote:
>
> >M.I. for typical 2 meter is much greater than 1.57 to 1. Consider the
> >following:
>
> Modulation index for FM is usually defined as deviation in relation to
> _highest_ baseband frequency, e.g. with 3.3 kHz audio and 5 kHz
> deviation (which would be typical for 25 kHz channel spacing), brings
> the modulation index pretty close to pi/2.

In my references this is called the deviation ratio.

If the max deviation is 5 kHz RMS (7 kHz peak) and if speech is restricted
to 5 kHz then

deviation ratio = max deviation / "MAX" modulation freq.

DR = 7 kHz / 5 kHz = 1.4

Modulation index is:

MI = max deviation / "ANY" modulation freq, for example

MI = 7 kHZ / 0.5 kHz = 14

Bill W0IYH

2908. Re: Why narrow FM instead of AM on VHF?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-19 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7s2mftdnq1@news1.fast.net>
Source record: 66858

```
-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

Paul Keinanen <keinanen@sci.fi> wrote in message
news:Kt3jN25nlqJfsM+AapxbTmBuZBKT@4ax.com...
> On 18 Sep 99 15:24:26 GMT, jhoyos@hoth.gcn.ou.EDU wrote:
>
> >The modulation index for narrowband FM is much less than Pi / 2.
> >
> >Mischa Scwartz in his book Information Transmission, Modulation,
> >and Noise, 3rd edition, says: "The noise and interference reduction

> >advantages of FM over AM, mentioned previously, become
> >significant,however, only for large modulation index (greater than
Pi
> >/ 2)."
> >
> >So, accepting Schwartz is right, why do they use narrow FM
> >instead AM ?
>
>
> One contributing factor is that in mobile communication, the signal
> variations are huge and fast, especially at higher frequencies. On
1.3
> GHz, you might have more than 100 signal dropouts each second at
> highway speed. The problem with AM is that the audio amplitude is
> proportional to IF amplitude, thus a very effective a.g.c. is needed
> to keep the IF amplifier output level (AM detector input level)
> constant.
>
> Now that the RF signal variation is nearly as fast as the lowest
> frequencies in speech, it would be very hard to keep the a.g.c.
> voltage and the audio band separated. Using sufficiently fast a.g.c.
> would also smooth out the lowest audio frequencies.
>
> In the 70's, there was a lot of hype about SSB with a (3-4 kHz)
pilot
> tone for mobile communication, but I have not heard anything since
> about it. Apparently the fast amplitude variation killed also these
> systems.

Paul,

The patent I referred you to previously (US 4,726,069) directly
addresses and solves the problems of "fast fading" as you describe
```

them above. However, the "pilot" is not at 304 kHz, it's mid-band
and actually the carrier, reinserted at a controlled level.

> In FM, you can run the signal through the limiter and the audio
level
> is then only proportional to the frequency deviation, not the RF
> signal level.

True, but it takes much more bandwidth (and power) than necessary
with the SSB-like system. (you have to have enough link margin to
keep the deepest fades from causing the signal ato drop out of
limiting).

- --
Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI
Fellow, Radio Club of America
Senior Member, IEEE
Member, ARRL
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2909. Re: Why narrow FM instead of AM on VHF?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-19 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7s2nndnek1@news1.fast.net>
Source record: 66859

-----BEGIN PGP SIGNED MESSAGE-----
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Dave Shrader <dshrader@earthlink.net> wrote in message
news:37E40603.87E522BE@earthlink.net...
>
>
> jhoyos@hoth.gcn.ou.EDU wrote:
>
> > The modulation index for narrowband FM is much less than Pi / 2.
>
> Is it?? Pi / 2 = ~ 1.57 to 1 <use radians not degrees>
>
> M.I. for typical 2 meter is much greater than 1.57 to 1. Consider
the
> following:
>
> Assume a bandwidth of 5 kHz in your 2 meter FM rig.
> Assume your repeater uses a tone of 100 Hz for access, finally
assume
> your tone encoder is set for 10% 'modulation level'.
>
> Your 100 Hz tone at 10% will cause a 500 Hz deviation in the output.
> (deviation ratio of 10%)
>
> However the Modulation Index is the bandwidth (5 kHz divided by the
> frequency of the modulating signal e.g. 100 Hz, or 50 to 1).

Errrrr .... you've got it a bit wrong here, Dave ...

**** excerpted from the ARRL handbook ****
The ratio between the frequency deviation, in Hertz, and the
modulating
frequency, also in Hertz, is called the modulation index where:

Im = D/Fm = P

and

Im = modulation index
D = peak deviation (1/2 difference between maximum and minimum
frequency excursions)
Fm = modulation frequency in hertz
P= phase deviation in radians (a radian = 180°/p or approximately
57.3°).

For example, the maximum frequency deviation in an FM transmitter is
3000 Hz either side of the carrier frequency. The modulation index
when
the modulation frequency is 1000 Hz is 3000/1000 = 3.0. At the same
deviation with 3000 Hz modulation, the index would be 1; at 100 Hz it
would be 30 and so on.
****

In your example of a CTCSS tone, a 500 Hz deviation with a 100 Hz
tone gives a modulation index of 5 (for that deviation with that
modulating
frequency), not 50. A 5 kHz deviation with a 3 kHz modulating tone
would give a modulation index of 5/3, or ~1.666 ... with a 1 kHz
modulating tone, that same 5 kHz devation would give a mod index of
5/1, of 5.0 ... etc.

**** excerpted from the ARRL handbook ****
Given a constant input level to the modulator, in PM the modulation
index
is constant regardless of the modulating frequency. In FM it varies
with
the modulating frequency,
****

In other words, with a fixed peak deviation and variable audio
frequency
(like speech), the modulation index varies all over the place.

- --
Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI
Fellow, Radio Club of America
Senior Member, IEEE
Member, ARRL
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2910. WTB "DEAD" HF console amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-19 00:00:00 UTC
From: Matt Erickson <kk5dr@hotmail.com>
Message-ID: <37E4EBE0.E4B6F162@hotmail.com>
Source record: 66860

I'm still looking for my winter project amp, a Henry, or BTI console would be perfect. NON-FUNCTIONING, I can't afford a working unit. I wouldn't get the enjoyment of rebuilding it either.

2911. English notation

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-19 00:00:00 UTC
From: rware@voyager.net
Message-ID: <37e50aff$0$40989@news.net-link.net>
Source record: 66861

I am reading a Brittish electronics magizine and see the notation 4k7
for a resistor. Could someone tell me what this value is? 4.7k Maybe?

Thanks
kc8iwt

2912. FS: Zenith SSAVI cable TV descrambler for $25

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-19 00:00:00 UTC
From: pondco@aol.com
Message-ID: <19990919123106.01539.00002455@ng-bh1.aol.com>
Source record: 66862

bidding starts at $25.00 for working unit!
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=166525439

This is a Zenith SSAVI-II descrambler in working order....Sale has just started.

2913. Re: English notation

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-19 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <37E55A9F.DD55A3CA@bellsouth.net>
Source record: 66863

Raymond Ware wrote:
> I am reading a Brittish electronics magizine and see the notation 4k7
> for a resistor. Could someone tell me what this value is? 4.7k Maybe?

Yes.

They often use the "k" or "M" instead of a decimal point, also using the letter "R" when no 1000 or 1000000 multiplier is intended. So:

560R = 560 ohms
1K = 1000 ohms
6K8 = 6800 ohms (6.8K)
22K = 22000 ohms (22K)
1M5 = 1500000 ohms (1.5M)

I swear I've also seen something like 0R68 (0.68 ohm) but can't find an example right now. They also do the same thing with capacitors - 4u7 for 4.7uF, etc. They also seem fond of the nanofarad (10E-9F, or 1000pF, often written 1n0) which always throws me...

"PSU", "ATU", "PME", and "RAE" threw me for awhile too...
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

2914. Re: IMD improvements for 4CX250

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-19 00:00:00 UTC
From: davearea51@aol.com
Message-ID: <19990919140254.01877.00001968@ng-ci1.aol.com>
Source record: 66864

The absolute best thing you can do for about any screened tube, especially the 4CX250, is REGULATE THE SCREEN VOLTAGE. I use the Plumbers Special on 2-meters and regulate the screen at 360 vdc with a zener stack. Gas regulator tubes like the VR-150 are NOT stiff enough for good IM performance. The tubes gain is HIGHLY dependant on screen voltage.

Dave - W6LEV

2915. Re: English notation

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-19 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <7ghtzRAdmR53Ew4i@ifwtech.demon.co.uk>
Source record: 66865

Raymond Ware wrote:
>I am reading a Brittish electronics magizine and see the notation 4k7
>for a resistor. Could someone tell me what this value is? 4.7k Maybe?

Yes - exactly that.

For several years, most European component manufacturers have been putting the "K", "M", "p" etc in place of that bitty little decimal point, which rubs off components and looks like a fly-speck on schematics.

The full list for "47" resistors is:

0R47, R47 = 0.47 ohms
4R7 = 4.7 ohms
47R = 47 ohms
470R = 470 ohms
4K7 = 4.7K
47K = 47K
470K = 470K
4M7 = 4.7M
etc

You also see the same on capacitors:

0p47 = 0.47pF
4p7 = 4.7pF
47p = 47pF
470p, 0n47, n47 = 470pF, 0.47nF
4n7 = 4.7nF, 4700pF
47n = 47nF, 47000pF, 0.047uF
470n, 0u47, u47 = 470nF, 470000pF, 0.47uF
4u7 = 4.7uF
etc

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

2916. xtal filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-19 00:00:00 UTC
From: alforo <alforo@megisnet.com>
Message-ID: <jTbF3.480$qX1.63331@news.corecomm.net>
Source record: 66866

Does anybody have specs on the KVG model XF-9NB crystal filter and also the model YF-9OH 9 megahertz crystal filter?

Thanks. Al, w6wqc

2917. uA723 temperature drift

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-19 00:00:00 UTC
From: la8ak@online.no
Message-ID: <37e55ecc.175258886@news.online.no>
Source record: 66867

Got a psu from a friend, it uses uA723IC with 1 in driver and 4x 2N3055 in output stage. He claimed it was rated 14V 40A (for at least 30 seconds). But I found it was kneeling for 22-25A, and even worse.... loading it with 10A for 10 minutes the voltage rises from 14 to 15V.
So I decided to look further on his construction. There was no current limit, and few of the recommended guidelines had been followed.

I hooked up a new voltage regulator using MC1723CP in dead-bug technique with thermal compound between IC and PCB groundplane. Running with/without testload with only regulator and driver the reference voltage drifted from 7.2V to 7.9V over the first 5-10 minutes. Motorola claims 1723C to have maximum 7.5V, but I believe having experienced earlier that this is not true.

Is 1723 believed to unreliable, or will a conventional zener diode easily improve this bad temperature drift? I connected a 4.7k resistor between reference in/out with 4.7uF bead tantalum bypass. A 1000uF capacitor with separate rectifier is used for regulator supply, and a 60000uF capacitor is used for the main supply. Rather heavy wires are used throughout the construction

73 Jan-Martin

2918. Bakelite or plastic rod - Hallicrafters S-38

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-19 00:00:00 UTC
From: Dennis Breeden <d.breeden@wcom.com>
Message-ID: <37E5691C.6081B116@wcom.com>
Source record: 66868
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.marketplace

I have an old Hallicrafter S-38 receiver. One of the Bakelite rods broke for tuning it and epoxing it did not work. I am looking for a source for a replacement, bakelite is not require, but low rf immune is. Thanks in advance.

Dennis WB3KUM/9

d.breeden@wcom.com

2919. Re: xtal filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-19 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19990919185842.04675.00000217@ngol07.aol.com>
Source record: 66869

In article <jTbF3.480$qX1.63331@news.corecomm.net>, "alforo"
<alforo@megisnet.com> writes:

>Does anybody have specs on the KVG model XF-9NB crystal filter and also the
>model YF-9OH 9 megahertz crystal filter?
>

Hello Al,

The published specs on the KVG XF-9NB filter are as follows:

KVG XF9-NB:
Center frequency: 9.000 MHz
# of crystals: 8
6 dB bandwidth: 0.5 kHz
60 dB bandwidth: 1.1 kHz
Passband ripple: <0.5 dB
Insertion loss: <6.5 dB
Terminating impedance: 500 ohms
Ripple capacitors: 30 pF
6:60 dB shape factor: 2.2
Stopband ultimate attenuation: <90 dB

For comparison, here are the specs of the more common XF-9M:

KVG XF9-M:
Center frequency: 9.000 MHz
# of crystals: 4
6 dB bandwidth: 0.5 kHz
60 dB bandwidth: 2.2 kHz
Passband ripple: <1.0 dB
Insertion loss: <5.0 dB
Terminating impedance: 500 ohms
Ripple capacitors: 30 pF
6:60 dB shape factor: 4.4
Stopband ultimate attenuation: <90 dB

The XF9-NB was reviewed in QST for December, 1975 (the last issue in the old,
smaller format.) Results of lab tests verified the claimed specs. They also
measured an XF-9M for comparison. Here are the attenuation/bandwidth specs of
both filters:

Attenuation XF9-NB XF-9M
3dB 400 Hz
6dB 520 Hz 550 Hz
10dB 610 Hz
20dB 730 Hz 960 Hz

30dB 810 Hz
40dB 900 Hz
50dB 1020 Hz
60dB 1110 Hz 2100 Hz
80dB 3700 Hz

If you have any XF-9NBs or XF-9Ms that you want to sell, please let me know!

Unfortunately, I have no information on the YF9-OH filter.

What plans do you have for these filters?

73 de Jim, N2EY

2920. Re: English notation

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-19 00:00:00 UTC
From: Butch Magee <butchkay@netdoor.com>
Message-ID: <37E57ABC.336DC274@netdoor.com>
Source record: 66870

Aha! Damn tricky Britts are at it again I see! OK, look here you red coated devils,...you will never take over America with that tricky 4k7 gag. Ya hear me, Never. We're on to you mannn! Ignore them Raymond. It's a trick.

Butch KF5DE

Raymond Ware wrote:

> I am reading a Brittish electronics magizine and see the notation 4k7
> for a resistor. Could someone tell me what this value is? 4.7k Maybe?
>
> Thanks
> kc8iwt

2921. Re: Looking for CK722 projects/Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-19 00:00:00 UTC
From: Lynn Coffelt <lynnc@sos.net>
Message-ID: <37E591CE.8F1FBF59@sos.net>
Source record: 66871

Ops!
My $18 CK722 was either earlier in time than I remember, OR I
exaggerated a little, OR memory is slipping slightly. On the other hand,
perhaps "Tucson Radio Supply" took me for a tourist. Several, including
Roy, W7EL got 99 cent CK722's about the same time.
I thought I remembered Roy's name from a QSO in the late 40's or
early 50's, but couldn't find a QSL card from him anywhere.
While looking through the cards, one stood out from W7MPQ, Richard
(Dick) Griffith from Tucson, Sept. 28 1959. It was his 141st QSO with a
transistorized transmitter running 30 milliwatts input. 2N588 and
2N502---- Sorry, not CK722
Lynn, W7LTQ, ex F7CT, AF7LTQ, AJ1DQ, AJ2BO

2922. Re: uA723 temperature drift

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-20 00:00:00 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <37E69298.585B19F9@dialpoint.net>
Source record: 66785

The 723 circuits have been around for years and seem to work very well. Astron (one of the more popular supplys) has used that type of circuit with 2n3771 (think that is the number) for years and seems not to have had any problems. I have a 50 amp version and can not see any voltage change like that. Also have used many variations the uese the 723 regulator and had no problems with the voltage changing.

I think that 40 amps from the four 3055s are a bit too much. Most comercial designs only rate that combination for around 25 to 30 amps.

J M Noeding wrote:
>
> Got a psu from a friend, it uses uA723IC with 1 in driver and 4x
> 2N3055 in output stage. He claimed it was rated 14V 40A (for at least
> 30 seconds). But I found it was kneeling for 22-25A, and even
> worse.... loading it with 10A for 10 minutes the voltage rises from 14
> to 15V.
> So I decided to look further on his construction. There was no current
> limit, and few of the recommended guidelines had been followed.
>
> I hooked up a new voltage regulator using MC1723CP in dead-bug
> technique with thermal compound between IC and PCB groundplane.
> Running with/without testload with only regulator and driver the
> reference voltage drifted from 7.2V to 7.9V over the first 5-10
> minutes. Motorola claims 1723C to have maximum 7.5V, but I believe
> having experienced earlier that this is not true.
>
> Is 1723 believed to unreliable, or will a conventional zener diode
> easily improve this bad temperature drift? I connected a 4.7k resistor
> between reference in/out with 4.7uF bead tantalum bypass. A 1000uF
> capacitor with separate rectifier is used for regulator supply, and a
> 60000uF capacitor is used for the main supply. Rather heavy wires are
> used throughout the construction
>
> 73 Jan-Martin

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http://www.newsfeeds.com The Largest Usenet Servers in the World!
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2923. Wanted: Small Round Illuminated 1Ma. meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-20 00:00:00 UTC
From: DavidC <b4e@earthlink.net>
Message-ID: <7s69lk$r04$1@ash.prod.itd.earthlink.net>
Source record: 66786
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

I am in need of a small illuminated 1Ma. meter that mounts in a round hole. (plus 4 mtg screws). It is going in a homebrew solid state HF Ham amp.

Anyone have one in new or as-new condition they'd be willing to part with for a few bucks?

Thanks! & 73, DavidC K1YP

2924. Converting $20 Electro Mavin GPS unit's uP to NMEA output

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-20 00:00:00 UTC
From: Mark Kempisty <NOPEmkempisty@pavcal.com>
Message-ID: <7s6a5e$no6$1@mitl.MITL.Research.Panasonic.COM>
Source record: 66787

Has anyone looked at modifying the Hitachi H8 micorprocessor on the Electro Mavin $20 GPS kit? It seems to me if we could get this thing to spit out NMEA strings instead of its probably propriatary format, the receiver would be compatible with APRS, mapping programs and just about anything else that uses NMEA GPS input.

My logic for this is that the uP is already converting the GPS engine data (for which we have excellent documentation) into what was used for the display unit. (The manual also alludes to waypoint navigation.) So we have 50% of the work done for us.

-- Mark N3GNW

2925. Re: varactor gamma and linear tuning?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-20 00:00:00 UTC
From: Edward Lisle <edward@biols.susx.ac.uk>
Message-ID: <37E6AF34.F7D299F6@biols.susx.ac.uk>
Source record: 66788
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad,sci.electronics.design

Bert Douglas wrote:
>
> Hi all,
>
> Can someone please enlighten me a little regarding varactor gamma and linear tuning?
>
> If you have an LC tuned VCO with a varactor, then the frequency is proportional to the reciprocal of the square root of the
> capacitance.
> F ~ 1/sqrt(C)
>
> So if it is desired to have equal frequency change with equal voltage change on the varactor, then what should be the gamma for a
> single varactor? And for back to back varactors?
>
> Thanks,
> Bert Douglas

Well Bert, the linear-tuning LC VCO is something of a 'holy grail'. FWIW, here's my two pence worth.

Gamma

According to my old Motorola data book, the effective capacitance of a varicap is given by the formula:

Ct = Cp + C0 / ((1 + Vr/phi)^gamma)

Where Cp = package capacitance
C0 = junction capacitance at zero volts
Vr = reverse bias in volts
phi = contact potential (approx 0.6V)

The consequence of this is firstly, that almost no diodes have a high enough gamma to give any chance of linear tuning, and even with ones that have, one is
screwed by the fixed circuit capacitance that is always effectively in parallel
with the diode.

Solutions

I have wasted some of the best years of my life in designing single-VCO FM broadcast transmitters for certain UK manufacturers who shall remain nameless.

Possible strategies for tackling the constant modulation sensitivity problem, in order of complexity, are:

(i) Connect a fixed capacitor in series with the varicap, of value around one half of the diode capacitance at lowest tuning volts. This will restrict the total capacitance swing somewhat, but make the F/V characteristic much more linear.

(ii) Add a fixed-bias modulation varicap to the VCO circuit and proportion the modulation voltage between the tuning varicap and this one to give near-constant sensitivity. This works because as the VCO is tuned higher, the fixed-bias diode represents a greater proportion of the total tuning capacitance, offsetting the drop in F/V slope as tuning volts increase.

(iii) Vary modulation drive as a function of frequency using, for example, an Eprom addressed by channel number driving a CMOS multiplying DAC. Each VCO will need to be individually calibrated and a matching eprom blown.

(iv) Abandon this design approach entirely (!)

On the matter of the PLL tending to 'chase' the modulation at low frequencies, the two-point modulation technique is a very effective solution.

Hope this helps

Edward.

2926. QSL Maker

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-20 00:00:00 UTC
From: nw7us@hfradio.removethispart.org
Message-ID: <OyyF3.110$1C.3282@sea-read.news.verio.net>
Source record: 66789
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hello,

WB8RCR has recently posted a new version of his program, 'QSL Maker' - check it out at http://hfradio.org/wb8rcr/

This is a Windows 95 program, It will not work under Win 3.1. The program has also been used on Windows 98 and Windows NT Workstation 4.0.

- When you first bring up the program, you are shown a dummy QSL design.

- Simply enter your call and address and you have a useable, if somewhat dull, QSL.

- Your call, name and address are remembered for future launches.

- You can adjust the position, color, and font for all the elements of the card.

- You can use a Windows bitmap as a background for your card.

- Once you have the design you like, you can save it for future use. In fact, you can save any number of designs for special purposes, events, etc.

- There are 2, free-form lines for your QRP-L #, FISTS #, 10-10 #, grid square, awards, etc.

- The info block can be removed for those who would like to write this information on the back.

- Dockable toolbars, put them where you want.

- There is a full-blown installation program, and complete deinstall.

- There is extensive help.

- If you use custom colors, they are remembered across launches.

Again, this is software by WB8RCR. Come check it out.

73!

--

: World-Wide Communications via Amateur Radio : 122.93W : 47.67N :
: 10x56526 : CW/SSB - DX hunter : Brinnon, WA : Code Warrior #60 :
: visit http://hfradio.org/ -- Propagation, Maps, DX, Free Sites :

2927. molded plug fab (materials?)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-20 00:00:00 UTC
From: emery@cray.com
Message-ID: <7s6dio$l5l$1@murrow.corp.sgi.com>
Source record: 66790

I would like to make some "molded plugs" for this and that
project. Specifically, having failed to track down a source of the
3.5mm/2.5mm stereo molded plug for an ICOM T-8A, and having had problems
with a two plug arrangement, I would like to figure out how to make
them myself.

1) What sort of plastic would one suggest?
2) Is there a better material for the mold than plaster?

Scott Emery

2928. Re: uA723 temperature drift

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-20 00:00:00 UTC
From: jvr@pclink.com
Message-ID: <37e6bd44.2237986@news.protocom.com>
Source record: 66791

If you want a regulator that will keep the output voltage constant as current draw increases, and compensate for the drop across series pass transistors, try a 4 terminal regulator. These are much more expensive than a 3 term regulator, but really work well. The type I use is an NTE 953 and costs about $9.

On Mon, 20 Sep 1999 16:01:28 -0400, Ralph Mowery <rmowery@dialpoint.net> wrote:

>The 723 circuits have been around for years and seem to work very well.
>Astron (one of the more popular supplys) has used that type of circuit
>with 2n3771 (think that is the number) for years and seems not to have
>had any problems. I have a 50 amp version and can not see any voltage
>change like that. Also have used many variations the uese the 723
>regulator and had no problems with the voltage changing.
>
>I think that 40 amps from the four 3055s are a bit too much. Most
>comercial designs only rate that combination for around 25 to 30 amps.
>
>
>J M Noeding wrote:
>>
>> Got a psu from a friend, it uses uA723IC with 1 in driver and 4x
>> 2N3055 in output stage. He claimed it was rated 14V 40A (for at least
>> 30 seconds). But I found it was kneeling for 22-25A, and even
>> worse.... loading it with 10A for 10 minutes the voltage rises from 14
>> to 15V.
>> So I decided to look further on his construction. There was no current
>> limit, and few of the recommended guidelines had been followed.
>>
>> I hooked up a new voltage regulator using MC1723CP in dead-bug
>> technique with thermal compound between IC and PCB groundplane.
>> Running with/without testload with only regulator and driver the
>> reference voltage drifted from 7.2V to 7.9V over the first 5-10
>> minutes. Motorola claims 1723C to have maximum 7.5V, but I believe
>> having experienced earlier that this is not true.
>>
>> Is 1723 believed to unreliable, or will a conventional zener diode
>> easily improve this bad temperature drift? I connected a 4.7k resistor
>> between reference in/out with 4.7uF bead tantalum bypass. A 1000uF
>> capacitor with separate rectifier is used for regulator supply, and a
>> 60000uF capacitor is used for the main supply. Rather heavy wires are
>> used throughout the construction
>>
>> 73 Jan-Martin

>
>
> ----------== Posted via Newsfeeds.Com, Uncensored Usenet News ==----------
> http://www.newsfeeds.com The Largest Usenet Servers in the World!
>------== Over 73,000 Newsgroups - Including Dedicated Binaries Servers ==-----

2929. Re: molded plug fab (materials?)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-20 00:00:00 UTC
From: Woody White <woody.white@att.net>
Message-ID: <37E6CB78.ED1846C7@att.net>
Source record: 66792

Scott,

Years back, I 'brewed a dual phone plug for my IC2AT.
Perhaps they are similar.... Had or located individual
plugs, no duals though. I made a jig for spacing by
drilling two holes in a piece of wood. Wired the plugs to a
cable and inserted into wood jig. Then, using tape and thin
sheet stock (card stock or plastic) made a "form" around the
plugs... Carefully plugged possible leaks around the bottom
with a tiny bit of RTV using toothpick. After the RTV
cured, filled the form with epoxy. Still works fine.
Woody

Scott Emery wrote:
>
> I would like to make some "molded plugs" for this and that
> project. Specifically, having failed to track down a source of the
> 3.5mm/2.5mm stereo molded plug for an ICOM T-8A, and having had problems
> with a two plug arrangement, I would like to figure out how to make
> them myself.
>
> 1) What sort of plastic would one suggest?
> 2) Is there a better material for the mold than plaster?
>
> Scott Emery

--

---------- de Woody, WB4QXE ----------

Ham Homebrew/ATV Circuits -*- Scanning Electron
Microscope Images

http://www.geocities.com/capecanaveral/3722

2930. Re: varactor gamma and linear tuning?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-20 00:00:00 UTC
From: rick@area.com
Message-ID: <7s6ph0onl1@vax.area.com>
Source record: 66793
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad,sci.electronics.design

I have not seen so much obfuscation involving a simple question
on usenet in quite a while.

If you are tuning an LC oscillator, a gamma of 2 gives linear
tuning. Many vendors make diodes that will do this. Some
even exceed a gamma of 2. Some vendors sell "frequency linear
tuning" varactors.

If you are tuning a VCXO, a gamma of 1 gives linear tuning.
Again, many diodes will do this.

Rick Karlquist N6RK
rick@area.com

2931. Re: Why narrow FM instead of AM on VHF?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-20 00:00:00 UTC
From: "Richard B. Joerger" <joergers@verio.com>
Message-ID: <37E6FF85.6AF8D901@verio.com>
Source record: 66794

Back in the middle 60's hams used AM on 2M
(Heath "Lunchboxs"). Taxis, police, fire used FM
on 60 & 30KHz (kcps) spacing, mostly for the
capture effect and quiet operation. The FCC
needing more channels, forced a change to 15KHz
spacing which caused a lot of radios to be obsoleted
to ham use.

Suddenly we had access to cheap VHF radios with
higi Tx power. Repeaters caught on, the Japanese
started building radios (Regency HR2....) and Ham
radio got a real shot in the arm.

Rich, wb4ehg

jhoyos@hoth.gcn.ou.EDU wrote:

> The modulation index for narrowband FM is much less than Pi / 2.
>
> Mischa Scwartz in his book Information Transmission, Modulation,
> and Noise, 3rd edition, says: "The noise and interference reduction
> advantages of FM over AM, mentioned previously, become
> significant,however, only for large modulation index (greater than Pi
> / 2)."
>
> So, accepting Schwartz is right, why do they use narrow FM
> instead AM ?
>
> Thanks in advance.
>
> Jorge Hoyos.

2932. Re: DDS Chip

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-20 00:00:00 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <7s4rfv$38e$1@nnrp1.deja.com>
Source record: 66872

In article <7rud80$u64$1@nnrp1.deja.com>,
marsgal42@hotmail.com wrote:
> In article <37e2343a.3439390@news.tds.net>,
> artky1k@northlandlink.com wrote:
>
> > At present, I am UNAWARE of any 'simple' DDS type chips by AD. I
have
> > found and studied the AD 9850, 9851, 9830 and 9832.
> >
> > All take very major efforts to even program a single output
> > frequency>>:
> >
> > All go way past my basic needs, which is a SIMPLE local oscillator
to
> > run between 285kc and 325kc.
> >
> > I don't need multiple input registers, amplitude control, or
psk/qpsk
> > generating capability...
>
> Those *are* the simple chips.
>
> Have a look at the AD7008, which is just about as brain-damaged
> as DDS chips can get. See if you can find one of the old (and
> long obsolete) parallel input chips. I use a Qualcomm Q2220
> in a DDS VFO and program whatever spot frequency I want by
> installing diodes in a little control board...
>
> Sorry, but if you're going to play with the technology you need
> the tools, and DDS chips assume that you will use a microcontroller
> to program them.

I have some C source code on my web pages (see my sig.) for programming
the 9850 via the PC printer port.

73, Leon

Leon Heller, G1HSM
Tel (Mobile): 079 9098 1221 (Work): 01327 357824
Email: leon_heller@hotmail.com
Web: http://www.geocities.com/SiliconValley/Code/1835

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2933. FS Millen Coil Forms.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-20 00:00:00 UTC
From: Larry Asp <larry.asp@sympatico.ca>
Message-ID: <37E59A1D.2C7D@sympatico.ca>
Source record: 66873
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

A pair of Millen coil forms. Used, part # is 74001. This forms are mounted on an octal socket, and have an aluminum casing mounted to the socket base. The coil form inside is about 3/8" wide, plastic and about 2 1/2" long. There is a screw type ferrite core slug in the middle of the form. $10.00 for the pair plus postage.

2934. Re: Power Supply questions...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-20 00:00:00 UTC
From: rice@ironbark.bendigo.latrobe.edu.au
Message-ID: <rice-ya02408000R2009991517430001@news.latrobe.edu.au>
Source record: 66874

In article <7ru613osr1@scapa.cs.ualberta.ca>, weingart@cs.ualberta.ca wrote:

> ..... I need a PS that can supply
> in 10A DC, at a range of voltages (from ~2v to ~30v).

> ..... The locals are not much help, other than
> saying that "oh, you'd need a 10A rated transformer, CT, with a rough 35v
> output (from 110v input)". However, they don't have transformers such as
> this, and looking at some catalogs (very old ones), these things are HUGE.
> Am I deluding myself that 10A over 2v-30v is not "that much"?

> (Oh, linear thingmajig, not switching...)

Unless you switch transformer secondary tappings, you will be stuck with a huge transformer *AND* a huge hot heatsink. If you switch secondary tappings, you can reduce the size of the heatsink considerably, though you are stuck with the big transformer. If you can refine your load requirements, you may be able to trim the transformer size down a lot.

On the other hand, switchmode power supplies are a lot more efficient & with a bit of effort, can be filtered enough to make them useable around radio stuff.

Regards, Phil Rice
Radio: VK3BHR, 3CCC

and in my spare time...
Lecturer in Information Technology
Bendigo Campus, La Trobe University.
Phone 03 5444 7342
Fax 03 5444 7998
http://www.bendigo.latrobe.edu.au/mte/staff/rice.htm
http://ironbark.bendigo.latrobe.edu.au/staff/rice/rice.home.html
email rice@ironbark.bendigo.latrobe.edu.au
or p.rice@bendigo.latrobe.edu.au
or p.rice@latrobe.edu.au
or any one of a thousand other aliases

2935. Re: English notation

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-20 00:00:00 UTC
From: Mike Willis <M.J.Willis@rl.ac.uk>
Message-ID: <37E5E58A.D84B373D@rl.ac.uk>
Source record: 66875

Doug Smith wrote:

>
> "PSU", "ATU", "PME", and "RAE" threw me for awhile too...

I was amazed on visiting Dayton how little English jargon the North Americans understood. The "PSU" above might explain why there was some confusion when I asked about one. There must be many other examples. I am surprised at the non-use of 4K7. We might need to take more care in projects over here. I hope kilograms, meters and seconds are given the same value, or we might be in for some nasty surprises.

I had no trouble understanding what was said to me, though the rules and regulations regarding when you can turn right at a red light defeated me. I did wonder why a shop was selling a "liter" of coke, until I saw one and discovered what it meant. Why does the same shop sell coke by the Liter and Petrol (Gas) by the gallon ?

The North Americans also had some trouble with English pronunciation, but on the whole it was OK.

2936. Re: uA723 temperature drift

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-20 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <zdt$8SAuuc53EwqC@ifwtech.demon.co.uk>
Source record: 66876

J M Noeding wrote:
>Got a psu from a friend, it uses uA723IC with 1 in driver and 4x
>2N3055 in output stage. He claimed it was rated 14V 40A (for at least
>30 seconds). But I found it was kneeling for 22-25A, and even
>worse.... loading it with 10A for 10 minutes the voltage rises from 14
>to 15V.
>So I decided to look further on his construction. There was no current
>limit, and few of the recommended guidelines had been followed.
>
>I hooked up a new voltage regulator using MC1723CP in dead-bug
>technique with thermal compound between IC and PCB groundplane.
>Running with/without testload with only regulator and driver the
>reference voltage drifted from 7.2V to 7.9V over the first 5-10
>minutes. Motorola claims 1723C to have maximum 7.5V, but I believe
>having experienced earlier that this is not true.
>
>Is 1723 believed to unreliable, or will a conventional zener diode
>easily improve this bad temperature drift? I connected a 4.7k resistor
>between reference in/out with 4.7uF bead tantalum bypass. A 1000uF
>capacitor with separate rectifier is used for regulator supply, and a
>60000uF capacitor is used for the main supply. Rather heavy wires are
>used throughout the construction

If there is a temperature problem with the 723, it is probably being made worse by demanding a lot of current from it, causing on-chip heating. 2N3055s have very poor beta at high currents - how about using a more modern power Darlington device as a driver?

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

2937. Re: Ham-Homebrew Digest V99 #238

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-20 00:00:00 UTC
From: luke@trio.COM.AU
Message-ID: <4.0.1.19990920113121.00e819f0@192.168.0.99>
Source record: 66877

At 04:31 AM 9/17/99 -0700, you wrote:

>> I am currently facing an interesting problem with
>>out current fox-hunting setup (t-hunting, radio sport, whatever).
>>Our team uses a fairly elaborate automated system called
>>Rotor Hunter. You can get a brief of this system at
>>http://www.qsl.net/~vk3zpf/vk3zpfp1.htm
>>
>>This system uses a laptop and ADC to sample RSSI
>>voltage and postion and plot the result in polar format.
>.........
>are you motorized? In Denmark they use to drive around in cars for
>160m DF, while most other countries use 80m CW or 2m FM and it is
>important to use lightweight equipment

Yes, we are motorised. We also have ARDF which is foot
based, but our Friday night hunts are motorised. On Friday
night, we had 8 hunts and drove 140km. Light-weight
equipment is not needed, except for our runners who
get out of the car and sniff the fox on foot when we
can't drive up to it.

>>We use an ICOM 738 (I think) as the HF receiver.
>
>not particularly lightweight ....

As I said, it doesn't have to be! :) We use two laptops,
a downconverter, the HF radio, and numerous other
bits of electronics, benchs, lights, motors, cogs and
chains to spin a 5 element yagi. Not really something
you go running on foot with! Keep in mind it takes
about 45 minutes to set up properly!

>>The
>>S-meter output is picked off (before any dampening),
>>and is amplified by a DC amplifier. This voltage is then
>>sampled by the ADC. The problem is the lack of
>>S-meter output on SSB. On FM it is quite useable,
>>but SSB is hopeless! You need heaps of signal to
>>get a small S-meter movement.

>no, S-meter or AGC derived reading on cw/ssb is often useless, why not
>install an IC and use RSSI for FM as well as SSB/CW, I have good
>experience using MC3356P in my FT-902 on all modes - 70dB range is far
>more than needed, but AD8307 is even miuch better. Another problem is
>that you don't need large range because then you cannot read small

>signal variations, perhaps a provision for 20dB range would help for
>fine adjustment of DF-antenna.

This is the usual systems problem of good dynamic range means
less sensitivty! We do have 70dB of attenuation available at the
IF level. If I use the AD8307 with its 25mV per dB, I would
require a DC amplifier after the AD8307 to give me a gain of
10 to bring the full scale voltage up to 5v since our ADC works
from 0 to 5v input.

Regards,
Luke

Luke Enriquez (VK3EM) Trio Communications 2000 Pty. Ltd.
Electronics Design Engineer. 41 Aster Ave.
B.Eng (Comms) Hon. Carrum Downs, Victoria. 3201
03-9775-0505 (BH) Australia
0414-679-432 (Mob) http://www.trio.com.au

2938. Re: English notation

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-20 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37E6102A.7F6ABAD7@teleport.com>
Source record: 66878

I'm glad you survived your encounter with the Irrational Colonials. I hope you'll come again and further your education.

Just one tip: Don't ask for spotted dick. You won't like what you get. ;)

To answer your question, I suppose the shop sells items with the strange combination of units for the same reason that the odometers in English cars read in miles but gas is sold by the liter (litre). (My information is a bit out of date -- it's been about 3 years since I was last there. Maybe it's all fixed now.) If you want consistency, you need to go north of here a bit. The Canadians metrified (metricated?) in a very structured way some years ago and did an admirable job of it. It should serve as a model for the rest of us. But alas, politics being what they are, it looks like a long time yet before the U.S. will finally see the light. In the meantime, I'll continue solving problems the old way -- convert to metric, solve, convert back.

Americans generally don't understand nearly as much of other cultures and slang as others do about us. One reason for this is our distance from everyone else, but another is that American magazines, movies, books, television shows, and so forth are a lot more common in other parts of the world than those things are here. And that's largely because of this country's size and population. But I hope you found that most people you met were eager to learn, as I am.

Roy Lewallen, W7EL

Mike Willis wrote:
>
> Doug Smith wrote:
>
> >
> > "PSU", "ATU", "PME", and "RAE" threw me for awhile too...
>
> I was amazed on visiting Dayton how little English jargon the North
> Americans understood. The "PSU" above might explain why there was some
> confusion when I asked about one. There must be many other examples. I am
> surprised at the non-use of 4K7. We might need to take more care in projects
> over here. I hope kilograms, meters and seconds are given the same value, or
> we might be in for some nasty surprises.
>
> I had no trouble understanding what was said to me, though the rules and
> regulations regarding when you can turn right at a red light defeated me. I
> did wonder why a shop was selling a "liter" of coke, until I saw one and
> discovered what it meant. Why does the same shop sell coke by the Liter and

> Petrol (Gas) by the gallon ?
>
> The North Americans also had some trouble with English pronunciation, but on
> the whole it was OK.

2939. Switching power supply for tube linear? HELP!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-20 00:00:00 UTC
From: John Strupat <john.strupat@sympatico.ca>
Message-ID: <37E628CA.D9785148@sympatico.ca>
Source record: 66879

Hi,

I'm looking at some ferrite core sets that are spec'd at 1KW thruput.

Does anyone have any reference material or thoughts on problems with a
2000V DC power supply?

John VE3PCN

2940. Re: Power Supply questions...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-20 00:00:00 UTC
From: JW <jdwalton@home.com>
Message-ID: <37E65A8F.35D8FFDC@home.com>
Source record: 66880

Use a variac on the front end - this way you can control the rectified and filtered voltage going into the sense and error amp, which could be an adjustable series regulator like the LM317. The power dissipated by the regulator is thus minimized. Of course, you have two knobs to twiddle - the Vadjust on the LM317 and the Variac.

I use a power darlington to handle the current, but only because I had one lying around -

Not begin a power supply designer I was toying with the idea of varying the duty cycle on an SMPS to control a voltage. However, where do I derive my error signal to feedback for regulation? I suppose that if I set the pulse width digitally I could use an adc to feedback an error signal, I'll have to put a PIC in there to make sure that the thing doesn't turn into a high power oscillator!

Also, for low current situations, it would appear that one needs a pretty large inductor - or you have to load the SMPS all the time.

Phil Rice wrote:

> In article <7ru613osr1@scapa.cs.ualberta.ca>, weingart@cs.ualberta.ca wrote:
>
> > ..... I need a PS that can supply
> > in 10A DC, at a range of voltages (from ~2v to ~30v).
>
> > ..... The locals are not much help, other than
> > saying that "oh, you'd need a 10A rated transformer, CT, with a rough 35v
> > output (from 110v input)". However, they don't have transformers such as
> > this, and looking at some catalogs (very old ones), these things are HUGE.
> > Am I deluding myself that 10A over 2v-30v is not "that much"?
>
>
> > (Oh, linear thingmajig, not switching...)
>
> Unless you switch transformer secondary tappings, you will be stuck with a
> huge transformer *AND* a huge hot heatsink. If you switch secondary
> tappings, you can reduce the size of the heatsink considerably, though you
> are stuck with the big transformer. If you can refine your load
> requirements, you may be able to trim the transformer size down a lot.
>
> On the other hand, switchmode power supplies are a lot more efficient &
> with a bit of effort, can be filtered enough to make them useable around
> radio stuff.
>
> Regards, Phil Rice
> Radio: VK3BHR, 3CCC

>
> and in my spare time...
> Lecturer in Information Technology
> Bendigo Campus, La Trobe University.
> Phone 03 5444 7342
> Fax 03 5444 7998
> http://www.bendigo.latrobe.edu.au/mte/staff/rice.htm
> http://ironbark.bendigo.latrobe.edu.au/staff/rice/rice.home.html
> email rice@ironbark.bendigo.latrobe.edu.au
> or p.rice@bendigo.latrobe.edu.au
> or p.rice@latrobe.edu.au
> or any one of a thousand other aliases

2941. Re: Switching power supply for tube linear? HELP!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-20 00:00:00 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <BjsF3.522$sK1.1060@news.rdc1.il.home.com>
Source record: 66881

> I'm looking at some ferrite core sets that are spec'd at 1KW thruput.

Wrong way around. You need to look at what the saturation flux density is,
and that comes from amps and turns. (1G=1A1T)

You can move a lot of watts through a little material, if you switch fast.

> Does anyone have any reference material or thoughts on problems with a
> 2000V DC power supply?

It's an ambitious project, but not out of the question.

2942. Re: varactor gamma and linear tuning?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-20 00:00:00 UTC
From: douglas dwyer <doug@ddwyer.demon.co.uk>
Message-ID: <MwA46DADph53EweH@ddwyer.demon.co.uk>
Source record: 66882
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad,sci.electronics.design

In article <WZDE3.5785$Lt.42480@news4.mia>, Bert Douglas
<bertdNOSPAM@bellsouth.net> writes
>Hi all,
>
>Can someone please enlighten me a little regarding varactor gamma and linear
>tuning?
>
>If you have an LC tuned VCO with a varactor, then the frequency is proportional
>to the reciprocal of the square root of the
>capacitance.
>F ~ 1/sqrt(C)
>
>So if it is desired to have equal frequency change with equal voltage change on
>the varactor, then what should be the gamma for a
>single varactor? And for back to back varactors?
>
>Thanks,
>Bert Douglas
>
>
alt least 3 approaches to be used.
You do not say what the tuning ratio will be by the way is it 2:1 or
1.1:1 for instance.
If the range is relatively small you can regard a narrow part of the
curve as linear.
The professional solution for a large range is to store a look up table
to modify your modulation drive dependent on where you are on the curve.
Generally the highest junction gradient will give most linear result but
it may be possible to arrange a network of l and c incorporating the
varicap that tunes out stray capacitance at the high frequency end
therefore at maximum frequency the (equivilent series) network
approaches parallel resonance ie zero capacitance.
You always have the possibility of deriving your local oscillator from
mixing a higher frequency vco down to the required LO frequerncy and
applying modulation to the (fixed) oscillator.
--
douglas dwyer

2943. Re: Switching power supply for tube linear? HELP!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-20 00:00:00 UTC
From: Ray Dahlby <rdahlby@istar.ca>
Message-ID: <U4tF3.3345$LJ6.133302@cac1.rdr.news.psi.ca>
Source record: 66883

Hi John,

I've had some experience designing DC/DC converters, and the trouble with HV output is leakage inductance in the secondary. This is caused by the relatively large number of turns needed to get the high voltage. Also, you get problems with high secondary inductance and interwinding capacitance creating ringing. This can place an upper limit on the switching frequency you plan to use. The partial solution is to use a large core and put insulating tape between the winding layers.If you have a split secondary, wind the two halves on different parts of the bobbin, preferrably separated by a using a split bobbin. Bring out the HV ends on "flying leads"; don't bring them back to the lead frame of the bobbin. A better solution would be to "bunch" the secondary windings together, somewhat like an RF choke is wound. You would need to find or make a special bobbin to do this. Good luck!

Ray, VE7ITG

2944. URL

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-20 00:00:00 UTC
From: nw7us@hfradio.removethispart.org
Message-ID: <8KvF3.90$1C.3196@sea-read.news.verio.net>
Source record: 66884
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Howdy,

You are invited to my non-commercial, sometimes boring, hopefully useful, and always-undergoing-updates website. The URL is http://hfradio.org and features DX information, including QSL Route/Manager Lookups and Callbook Lookups; Propagation Center including the eAlert service (allows you to sign up an email address to the automated email propagation reports); Equidistant Azimuth Map software (allows you to create maps of any QTH); Swap and Shop; Bookstore (I've hand-picked over a thousand book titles on radio, etc.); Free website space for YOU to create your own Ham or SWL site, and there's more. Easy to navigate. Open for suggestions.

If you feel up to it, after looking around the site, drop me a note (you'll find my address on the site) and share your thoughts.

73!

--

: World-Wide Communications via Amateur Radio : 122.93W : 47.67N :
: 10x56526 : CW/SSB - DX hunter : Brinnon, WA : Code Warrior #60 :
: visit http://hfradio.org/ :

2945. Re: ATV Rpt / Microtune / Rude - too bad

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-21 00:00:00 UTC
From: pmarkham@newsguy.com
Message-ID: <8E47CC270pmarkhamnewsguycom@208.134.253.119>
Source record: 66795

woody.white@att.net (Woody White) wrote in <37E6B07E.860AA188@att.net>:

>Hi guys... FWIW
>
>Had to pass this along.... In need of reworking our ATV
>repeater, I located a new product that was perfect!
>
>http://www.microtune.com/products/development_support/desref/kit.htm
>
>Considering this product was aimed at the consumer market
>
>

Thanks for the pointer, Woody. It does makes interesting reading and indicates a possible avenue for the integration of tv tuners into future consumer equipment designs.

I suggest you start at:

http://www.microtune.com/index.html

That page has the "Newsflash" box that leads to the "kit". 'Splain to one and all how come you determined it was a "consumer" product and why the price surprised you when, if you read carefully, you would have read the following at:

http://www.microtune.com/news/092099c.htm

Price and Availability
The NTSC Designer's Reference Kit, order number MT2000-RD-NTSC, is available now and priced at $1895; the PAL version of the Kit, order number MT2000-RD-PAL, is also available now and priced at $1995. The Microtune PC Convergence Reference Design, order number MT2000-PCTV-NTSC is available now and is priced at $2495.

Nowhere in their promotion did I find anything that even suggested the kit was aimed at the consumer market. All I read indicated it was a designer kit for OEM engineers. I know my amateur and professional qualifications do not count, and I would not have been surprised at his response. I would not have taken offense and posted my indignation before reading, completely the introductory web pages.

He knew, immediately, that you were of no consequence to his business and you were wasting his time. You sounded like an amateur to a business that caters to professionals. Been there and done that, on both sides of the phone. I might have given him a C for bedside manners, but then again I haven't an idea how many calls he got from other people that didn't read

before they called. I do not know how much of his time was wasted explaining what was written in plain English. It does get exasperating and expensive fielding inappropriate calls while other calls from qualified buyers are on hold. ;-)

Pete/wa4hei

2946. Re: Coax adjustable in length, how??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-21 00:00:00 UTC
From: franspin@my-deja.com
Message-ID: <7s82inban1@nnrp1.deja.com>
Source record: 66796

To all,

I wish to thank all of you for your reply to my question.
With all the suggestions about the construction I think I can fabricate
one on my own.

Thanks,

73's

Frans Pinkse, pa2fap

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2947. Re: Converting $20 Electro Mavin GPS unit's uP to NMEA output

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-21 00:00:00 UTC
From: Les Nagy <lnagy@netaccess.on.ca>
Message-ID: <37E6EB19.264C69E6@netaccess.on.ca>
Source record: 66797

I would guess, an educated guess, that the CPU on the board is either a one time programmable, or a masked rom programmed chip. This precludes using the chip included on the board itself for this purpose. It might be possible to replace the CPU with another programmed with the correct code. It might even be possible to read the program on the included CPU to cut down on the programming time, but I have no experience with this CPU.

Therefore it might be possible to reuse the board and even some of the programming, but not the chip itself unless it is flash programable.

Mark Kempisty wrote:
>
> Has anyone looked at modifying the Hitachi H8 micorprocessor on the Electro
> Mavin $20 GPS kit? It seems to me if we could get this thing to spit out
> NMEA strings instead of its probably propriatary format, the receiver would
> be compatible with APRS, mapping programs and just about anything else that
> uses NMEA GPS input.
>
> My logic for this is that the uP is already converting the GPS engine data
> (for which we have excellent documentation) into what was used for the
> display unit. (The manual also alludes to waypoint navigation.) So we have
> 50% of the work done for us.
>
> -- Mark N3GNW

--
++
Les Nagy: President | mailto:lnagy@netaccess.on.ca
|
Aldebaran Technological | Phone: (905) 388-1011
Services Inc. | Fax: (905) 388-9028
http://www.nas.net/~lnagy

2948. Super star

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-21 00:00:00 UTC
From: Mark M <MarkM@kvca.com.au>
Message-ID: <l7DF3.18464$1E2.140159@ozemail.com.au>
Source record: 66798

Can anyone help me I wish to get the best out of my SUPER STAR 3001. I am looking for the power settings as well any Mods. Please help.

2949. Re: Why narrow FM instead of AM on VHF?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-21 00:00:00 UTC
From: davem@groucho.cs.ubc.ca
Message-ID: <7s7c3g$fgd@groucho.cs.ubc.ca>
Source record: 66799

"Richard B. Joerger" <joergers@verio.com> writes:

>Suddenly we had access to cheap VHF radios with
>higi Tx power. Repeaters caught on, the Japanese
>started building radios (Regency HR2....) and Ham
>radio got a real shot in the arm.

Aren't the high TX power and FM related to each other? With FM, you
can generate the modulated signal in low-level stages, then amplify
it to the necessary output power use efficient class C amplification.

With AM, you either have to modulate in the high-power stage (requiring
a high-power linear audio amplifier), or you modulate in a low-level
stage and then you need a high-power linear RF amplifier, which is
inefficient.

Dave

2950. First DJ/radio program I've found with a compressor, true auto mixing, and knows the beat.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-21 00:00:00 UTC
From: DJ Rail <dj_rail@yahoo.com>
Message-ID: <cPKF3.85$Ff3.6980@nsw.nnrp.telstra.net>
Source record: 66800

Hey fellow DJs and audioheads...

I can't believe I found what I have been looking for so long!!!! ....

A decent DJ program that does everything you really need and with style.

I'm sick of DJ programs that promise the earth but are too impractical to even consider. Well, now I've found one that truly does what it claims.....

OtsJuke DJ fully handles volume with a built-in AGC, compressor and limiter!

Plus it actually does decent mixes using auto-detected points. It's got this program which you run on ya MP3s and it calculates it all for ya while ya sip a coffee. Buggered if I could be stuffed putting them all in myself anyway.

And there's no 2 second latency issues. Volume, pitch and a tempo shifter all respond instanty. And tis got a 20 band GraphicsEQ in it too, and unlike most it responds instantly!!!!

if anyone figures out how it works out the beat in the song let me know. I thought that was impossible.

I think the best thing is the clear interface it so simple - it's just too easy. with all this extra time saved I guess i'll have a chance to become a bit more creative in my work.

It says on the web page it only got release on the 9/9/99. Must of been a product of all those supposed malfunctions, actually going well! All the good karma made this cool DJ/radio program.

Anyway if ya interested go to http://www.otsjuke.com

The demos pretty quick to download.

Chow,
DJ Rail

2951. Re: Why narrow FM instead of AM on VHF?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-21 00:00:00 UTC
From: Roland Burgan <rburgan@up.net>
Message-ID: <37E77F3C.79CAD55D@up.net>
Source record: 66801

Two primary reasons were capture effect, and
noise limiting.

Dave Martindale wrote:

> "Richard B. Joerger" <joergers@verio.com> writes:
>
> >Suddenly we had access to cheap VHF radios with
> >higi Tx power. Repeaters caught on, the Japanese
> >started building radios (Regency HR2....) and Ham
> >radio got a real shot in the arm.
>
> Aren't the high TX power and FM related to each other? With FM, you
> can generate the modulated signal in low-level stages, then amplify
> it to the necessary output power use efficient class C amplification.
>
> With AM, you either have to modulate in the high-power stage (requiring
> a high-power linear audio amplifier), or you modulate in a low-level
> stage and then you need a high-power linear RF amplifier, which is
> inefficient.
>
> Dave

2952. Re: Converting $20 Electro Mavin GPS unit's uP to NMEA output

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-21 00:00:00 UTC
From: Mark Kempisty <NOPEmkempisty@pavcal.com>
Message-ID: <7s8336acu1@mitl.MITL.Research.Panasonic.COM>
Source record: 66802

Its probably OTP as it has a sticker with version and partnumber info attached to the top. (Lord knows I've programmed enough ROMs at my last job and have done the same thing.) However, I too have not worked with H8 and have only scratched the surface in researching this chip. I'll post when I find out some more.

I'm betting we will not be able to get any info from the company that originally created these boards as they sold them out in bancrupcy. So that means disassembling and reverse engineering the code to get the sections we need. Not an easy job. We could start from scratch as we really don't need a lot but we need to find an H8 assembler or compiler on the cheap side.

-- Mark N3GNW

Les Nagy <lnagy@netaccess.on.ca> wrote in message
news:37E6EB19.264C69E6@netaccess.on.ca...
> I would guess, an educated guess, that the CPU on the board is either a
> one time programmable, or a masked rom programmed chip. This precludes
> using the chip included on the board itself for this purpose. It might
> be possible to replace the CPU with another programmed with the correct
> code. It might even be possible to read the program on the included CPU
> to cut down on the programming time, but I have no experience with this
> CPU.
>
> Therefore it might be possible to reuse the board and even some of the
> programming, but not the chip itself unless it is flash programable.
>

2953. Re: Diplexer design sources?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-21 00:00:00 UTC
From: "Charles H. Reichert" <reichert@cig.mot.com>
Message-ID: <37E796C3.B34EB7C4@cig.mot.com>
Source record: 66803

See diplexer circuit at;

http://www.imaxx.net/~kd9jq

design equations provided.

Chuck KD9JQ

PS...Hi Bill!

"William E. Sabin" wrote:
>
> Emarit Ranu wrote:
>
> > .
> > Can anyone point me to some literature discussing diplexer design?
> >
> > The topic seems rather elusive. I want to design a diplexer with
> > a nearly constant input impendence over a wide bandwidth so it
> > won't be as easy as slapping an HPF and LPF in series.
>
> The July/August issue of QEX magazine has an article on constant impedance
> diplexers, written by myself. I will email a copy in PDF format, if you or
> anyone else wants it.
>
> Bill W0IYH

2954. Need 3x7x12 chassis

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-21 00:00:00 UTC
From: kx4r@atl.mindspring.com
Message-ID: <7s88vj$q6k$1@nntp1.atl.mindspring.net>
Source record: 66804

Howdy!
I need an aluminum chassis 3"x7"x12" for a homebrew
6l6/807 transmitter I'm building. Can anyone help me
out ? Please reply with price to kx4r@mindspring.com

Tnx and 73, Greg KX4R

2955. Re: ATV Rpt / Microtune / Rude - too bad

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-21 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <37E7ABC0.FD0506E1@midwestmicro-tek.com>
Source record: 66805

Pete, you are correct..... and you are incorrect.

It is frustating some times to have to tell 3 or 4 people a day that we don't do that or we can't help you. In my role as technical assistance I often get calls from people who can't find what they want and aren't going to find it here either (if you've looked at the web site you know we don't have it so go away). We also get a lot of calls asking for PCs or repair on PCs since the name of our company is very similar to a PC supplier out of Ohio. We always tell them that "that ain't us but here's the number you can call". We're always polite (well... except to that guy in Texas but jeez what an idiot). and try to help even though we know we aren't going to see dime one. After telling a fellow (4th in one day) that we didn't do PCs he then ask me what we did do, I replied that we build embbeded control systems, he said hmmmmm..... then we chatted for a few minutes, I gave him the number of the PC place and we said our good byes. A week later I get a call from a guy who says he's the friend of the fellow that called me earlier about getting his PC repaired and wanted a catalog. He's now a regular customer of ours.

Here's some thing that happed to me. About 6 years ago I helped a profesor up at the local campus with an imagining system. I was having all kinds of trouble with hard to use and poorly documented software. I called the company and was informed that since the system was so old (5 years) they couldn't support it but would gladly sell me a new system (at twice the cost of the old system). The money was not in the budget so I had to do it the hard way. A few weeks later I ran into a brick wall and out of desperation I called the company back. The sales engineer remembered me and replied to my question that "if you don't want to buy, your wasting my time", and like Woody's sales guy he then hung up on me. Well I finaly wrote my own software. Took me a couple of months and a lot of cussing but I did it. And every time I cussed I directed my words at said company and sales engineer. Five years later I get a custom order from a company wanting to do about the same thing that my profesor friend wanted to do. Even though I new the rude companys equipment very well I found another vender who had about the same stuff but with nicer people. It took me about an extra two weeks to come up to speed with the new venders equipment but to me it was worth it. Next year my firm will be spending six figures buying equipment from the nice guys.

You could say that the point here is to be polite because you "just never know" but the real point is that it doesn't cost any thing to be polite. Is an extra minute on the phone really going to cost you a multi-million dollar account? Personaly I'd rather send someone away dissapointed then mad.

My $00.02

Rick

pmarkham wrote:

> woody.white@att.net (Woody White) wrote in <37E6B07E.860AA188@att.net>:
>
> >Hi guys... FWIW
> >
> >Had to pass this along.... In need of reworking our ATV
> >repeater, I located a new product that was perfect!
> >
> >http://www.microtune.com/products/development_support/desref/kit.htm
> >
> >Considering this product was aimed at the consumer market
> >
> >
>
> Thanks for the pointer, Woody. It does makes interesting reading and
> indicates a possible avenue for the integration of tv tuners into future
> consumer equipment designs.
>
> I suggest you start at:
>
> http://www.microtune.com/index.html
>
> That page has the "Newsflash" box that leads to the "kit". 'Splain
> to one and all how come you determined it was a "consumer" product and why
> the price surprised you when, if you read carefully, you would have read
> the following at:
>
> http://www.microtune.com/news/092099c.htm
>
> Price and Availability
> The NTSC Designer's Reference Kit, order number MT2000-RD-NTSC, is
> available now and priced at $1895; the PAL version of the Kit, order number
> MT2000-RD-PAL, is also available now and priced at $1995. The Microtune PC
> Convergence Reference Design, order number MT2000-PCTV-NTSC is available
> now and is priced at $2495.
>
> Nowhere in their promotion did I find anything that even suggested the kit
> was aimed at the consumer market. All I read indicated it was a designer
> kit for OEM engineers. I know my amateur and professional qualifications do
> not count, and I would not have been surprised at his response. I would not
> have taken offense and posted my indignation before reading, completely the
> introductory web pages.
>
> He knew, immediately, that you were of no consequence to his business and
> you were wasting his time. You sounded like an amateur to a business that
> caters to professionals. Been there and done that, on both sides of the
> phone. I might have given him a C for bedside manners, but then again I
> haven't an idea how many calls he got from other people that didn't read
> before they called. I do not know how much of his time was wasted
> explaining what was written in plain English. It does get exasperating and

> expensive fielding inappropriate calls while other calls from qualified
> buyers are on hold. ;-)
>
> Pete/wa4hei

2956. Re: molded plug fab (materials?)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-21 00:00:00 UTC
From: JW <jdwalton@home.com>
Message-ID: <37E7DD2C.5D1096D0@home.com>
Source record: 66806

You can make virtually anything like this from fiberglas and epoxy resin - can't even tell that there were holes in my daysailer!

Scott Emery wrote:

> I would like to make some "molded plugs" for this and that
> project. Specifically, having failed to track down a source of the
> 3.5mm/2.5mm stereo molded plug for an ICOM T-8A, and having had problems
> with a two plug arrangement, I would like to figure out how to make
> them myself.
>
> 1) What sort of plastic would one suggest?
> 2) Is there a better material for the mold than plaster?
>
> Scott Emery

2957. I need help with a KPC-3

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-21 00:00:00 UTC
From: MD Miller <mdmiller@nospam.sybercom.net>
Message-ID: <uEOF3.3371$xA5.7639787@firenze.visi.net>
Source record: 66807
Cross-posted to: alt.ham-radio.packet,alt.radio.amateur.club.taparc,rec.radio.amateur.antenna,rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

I inherited a Kantronics KPC 3 from my father in law, and I cant find anything that goes with it.

I need to get
1. Copy of a manual and instructions
2. I need to know where to get the software for it
3. What type of AC adapter goes on this unit
4. How to wire up the cabling to a PC
Any and all help would be greatly appreciated
Thanks

2958. Re: Converting $20 Electro Mavin GPS unit's uP to NMEA output

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-21 00:00:00 UTC
From: mas@ucla.edu
Message-ID: <37e7aea9.4249450@nntp.we.mediaone.net>
Source record: 66808

On Tue, 21 Sep 1999 02:18:59 GMT, Les Nagy <lnagy@netaccess.on.ca>
wrote:
>I would guess, an educated guess, that the CPU on the board is either a
>one time programmable, or a masked rom programmed chip.

Under the sticker on that CPU it says:
H8S/2246
7L1 I
472246FA20
Japan

From Hitachi's site it appears to be a CPU with an internal 128K byte
mask programmable ROM. It might be possible to run it in a mode
with an external ROM.

See
http://semiconductor.hitachi.com/h8/?adjump=frontpage_products-section

The key to finding things on this chip seems to be to
look for H8S/2246 in the titles.

The hardware manual might be:
http://semiconductor.hitachi.com/products/pdf/h82th002d2.pdf
(beware this is a 3.4 MB PDF file).

>This precludes
>using the chip included on the board itself for this purpose. It might
>be possible to replace the CPU with another programmed with the correct
>code. It might even be possible to read the program on the included CPU
>to cut down on the programming time, but I have no experience with this
>CPU.
>
>Therefore it might be possible to reuse the board and even some of the
>programming, but not the chip itself unless it is flash programable.
>
>Mark Kempisty wrote:
>>
>> Has anyone looked at modifying the Hitachi H8 micorprocessor on the Electro
>> Mavin $20 GPS kit? It seems to me if we could get this thing to spit out
>> NMEA strings instead of its probably propriatary format, the receiver would
>> be compatible with APRS, mapping programs and just about anything else that
>> uses NMEA GPS input.
>>
>> My logic for this is that the uP is already converting the GPS engine data
>> (for which we have excellent documentation) into what was used for the
>> display unit. (The manual also alludes to waypoint navigation.) So we have

>> 50% of the work done for us.
>>
>> -- Mark N3GNW

2959. Re: Looking for CK722 projects/Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-21 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <37E7B9BC.76A@pop.valley.net>
Source record: 66809

Lynn Coffelt wrote:
>
> Jack!
> Great idea for a web site! When I talk to contemporaries about the
> CK722, the usual response is a blank stare. One did remember, but was a
> fan of some others- - - 2N106 (or 107?).
> How much did they retail for when first introduced? I wanted one to
> experiment with, I think maybe 1958 or 1959, and the price was something
> like $18. More than my hobby allowance!

Hello--

If you cracked a blown, blue-cased CK722 open, inside you'd find an
even smaller transistor-- one of Raytheon's rejects intended for
hearing-aid service!

I can recall saving several weeks' worth of newspaper-route earnings
to buy transistors, and especially the Philco MADT hobbyist specials.
These offered good RF performance but featured low collector current
ratings and thus made excellent fuses<g>.

73,
Brad AA1IP

2960. Re: Need 3x7x12 chassis

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-21 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <37E7B8BF.724D3813@midwestmicro-tek.com>
Source record: 66810

I also now have a neat chassis that is stamped "Johnson bakeware,
Minnapolis Minn." on it.

Greg Carter wrote:

> Howdy!
> I need an aluminum chassis 3"x7"x12" for a homebrew
> 6l6/807 transmitter I'm building. Can anyone help me
> out ? Please reply with price to kx4r@mindspring.com
>
> Tnx and 73, Greg KX4R

2961. Re: Need 3x7x12 chassis

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-21 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <37E7B80F.97944AD7@midwestmicro-tek.com>
Source record: 66811

I just built a transmitter using a 12BY7/1625 combination. I used a cake pan for my chassis. I had to trim it up a bit but with a pair of tin snips and a pop rivet gun I got it looking pretty good and it only cost me 50 cents (got it at the Goodwill).

Greg Carter wrote:

> Howdy!
> I need an aluminum chassis 3"x7"x12" for a homebrew
> 6l6/807 transmitter I'm building. Can anyone help me
> out ? Please reply with price to kx4r@mindspring.com
>
> Tnx and 73, Greg KX4R

2962. Help With CCTV Camera?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-21 00:00:00 UTC
From: DavidC <b4e@earthlink.net>
Message-ID: <7s8h30$4cl$1@holly.prod.itd.earthlink.net>
Source record: 66812
Cross-posted to: alt.ham-radio.atv,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I have a Panasonic CCD CCTV camera model WV-BL202.
The Panasonic label says Output Video 1Vp-p 75 ohms.

It has a Cosmicar Television Lens 16mm 1:1.4 with F-stops
16, 11, 8, 5.6, 4, 2.8, 2 and 1.4.

It runs on 12vdc, has a BNC connector for "Gen Lock", a
switch to turn AGC on and off, and another that has "Auto Iris"
above it and DC Video" below (though curiously this switch moves
left to right so it is unclear what it is selecting).

There is a second BNC for "Video", and a ALC control on one
side and a square four pin connector on the other (unlabeled).
On top is a 1 1/2" x 1/4" metal strip held in place by a screw.
There is a label next to it reading "OFF ON G/L 75 Ohms".

So, what do I have, please? Sounds like a monochrome
camera with a very wide angle lens. But after that what do I
need to know about using this for ATV, SSTV or as an Internet
cam camera on the tower or as a security monitoring camera?
What sort of interface would be required, etc?

Thanks for information, or referrals to a source of information.

73, DavidC K1YP

2963. Re: Switching power supply for tube linear? HELP!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-21 00:00:00 UTC
From: Harry Brown <hbrown@voicenet.com>
Message-ID: <qEPF3.1201$i82.156747@news3.voicenet.com>
Source record: 66813

The Feb. 1991 issue of QEX has an article on a switching power supply providing 2000 volts out at 1.5 amp. Pretty complete electrically with complete schematic, parts list and theory of operation. There was an errata sheet in the Aug. 91 issue. QST advertizes a CD ROM of all QEX issues up to Dec. 1998.

The PS weight is 8 pounds, ripple of less than 2 volts and load regulation less than 100 volts.

Hope this helps.

73, Harry, W3IIT
==========

Dave VanHorn <dvanhorn@cedar.net> wrote in message
news:BjsF3.522$sK1.1060@news.rdc1.il.home.com...
>
> > I'm looking at some ferrite core sets that are spec'd at 1KW thruput.
>
> Wrong way around. You need to look at what the saturation flux density is,
> and that comes from amps and turns. (1G=1A1T)
>
> You can move a lot of watts through a little material, if you switch fast.
>
> > Does anyone have any reference material or thoughts on problems with a
> > 2000V DC power supply?
>
> It's an ambitious project, but not out of the question.
>
>
>
>

2964. Re: Switching power supply for tube linear? HELP!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-21 00:00:00 UTC
From: Harry Brown <hbrown@voicenet.com>
Message-ID: <JEPF3.1202$i82.156741@news3.voicenet.com>
Source record: 66814

The Feb. 1991 issue of QEX has an article on a switching power supply providing 2000 volts out at 1.5 amp. Pretty complete electrically with complete schematic, parts list and theory of operation. There was an errata sheet in the Aug. 91 issue. QST advertizes a CD ROM of all QEX issues up to Dec. 1998.

The PS weight is 8 pounds, ripple of less than 2 volts and load regulation less than 100 volts.

Hope this helps.

73, Harry, W3IIT
==========

Dave VanHorn <dvanhorn@cedar.net> wrote in message
news:BjsF3.522$sK1.1060@news.rdc1.il.home.com...
>
> > I'm looking at some ferrite core sets that are spec'd at 1KW thruput.
>
> Wrong way around. You need to look at what the saturation flux density is,
> and that comes from amps and turns. (1G=1A1T)
>
> You can move a lot of watts through a little material, if you switch fast.
>
> > Does anyone have any reference material or thoughts on problems with a
> > 2000V DC power supply?
>
> It's an ambitious project, but not out of the question.
>
>
>
>

2965. Re: ATV Rpt / Microtune / Rude - too bad

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-21 00:00:00 UTC
From: pmarkham@newsguy.com
Message-ID: <8E4888032pmarkhamnewsguycom@208.134.253.145>
Source record: 66815

rhaub@midwestmicro-tek.com (Rick Haub) wrote in
<37E7ABC0.FD0506E1@midwestmicro-tek.com>:

>Newsgroups: rec.radio.amateur.homebrew
>Subject: Re: ATV Rpt / Microtune / Rude - too bad
>
>Pete, you are correct..... and you are incorrect.
>

Hi Rick,

You are correct by suggesting that a little more politeness may have been due, that's why I considered giving the lad a C for bedside manners, as the story was told. Without being a witness to the actual conversation I would not pass judgement. Human nature has a mean streak that will, often, call for summary execution for a perceived slight that does not exist. I have bent over backwards for customers but was unable to provide the "magic" they sought with no guarantees given or implied from the beginning, at no cost to them. For that and other non productive help, I was labelled lower than whale feces, many times. No matter how hard you try, within the context of rational behaviour, you cannot be all things, to all people, all the time.

With a vast difference in knowledge concerning technical matters
it almost impossible to communicate. Ignorance begets fear and almost any irrational reaction is possible as a consequence. I have witnessed it innumerable times in "over the counter" business and local politics.

Unconditional "satisfaction guaranteed or your money back" has further corrupted a basic tenet of life; the acceptance of individual responsibility for the consequences of individual action or inaction. The search for the free lunch is part of our nature, and those that stand in our way are seldom the recipients of good will ;-)

Sounds more like philosophy than homebrew!!!!

73,
Pete/wa4hei

--
Eschew obfuscation.

2966. Diagram for HF Tube lineair amp.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-21 00:00:00 UTC
From: Peter en Helma Kerklaan <helma.kerklaan@icu.nl>
Message-ID: <7s8jrj$1dg9$1@beast.euro.net>
Source record: 66816

Hi,

I am looking for a diagram to build a HF lineair amplifier, I prefere to use a one tube solution that delivers me the legal limit for Holland which is 400 watt.

If you know a suitable diagram somewhere on the web or in the literature, please send me a message.

73, de Peter / PA5KE

2967. Re: molded plug fab (materials?)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-21 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <37E7D38A.875F36D2@midwestmicro-tek.com>
Source record: 66817

Nuts and Volts did a thing on this about a year ago or so, I just moved and all my back issues are still in boxes but as I recall the article took you from taking a cast of the original (not plaster, some kind of rubber/flexible plastic) and then pooring a new cast. Don't remember the issue but if I run across it I'll let you know.

Rick

Scott Emery wrote:

> I would like to make some "molded plugs" for this and that
> project. Specifically, having failed to track down a source of the
> 3.5mm/2.5mm stereo molded plug for an ICOM T-8A, and having had problems
> with a two plug arrangement, I would like to figure out how to make
> them myself.
>
> 1) What sort of plastic would one suggest?
> 2) Is there a better material for the mold than plaster?
>
> Scott Emery

2968. Re: ATV Rpt / Microtune / Rude - too bad

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-21 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <37E7D43C.F882173A@midwestmicro-tek.com>
Source record: 66818

pmarkham wrote:

> rhaub@midwestmicro-tek.com (Rick Haub) wrote in
> <37E7ABC0.FD0506E1@midwestmicro-tek.com>:
>
> >Newsgroups: rec.radio.amateur.homebrew
> >Subject: Re: ATV Rpt / Microtune / Rude - too bad
> >
> >Pete, you are correct..... and you are incorrect.
> >
>
> Hi Rick,
>
> You are correct by suggesting that a little more politeness may have been
> due, that's why I considered giving the lad a C for bedside manners, as the
> story was told. Without being a witness to the actual conversation I would
> not pass judgement. Human nature has a mean streak that will, often, call
> for summary execution for a perceived slight that does not exist. I have
> bent over backwards for customers but was unable to provide the "magic"
> they sought with no guarantees given or implied from the beginning, at no
> cost to them. For that and other non productive help, I was labelled lower
> than whale feces, many times. No matter how hard you try, within the
> context of rational behaviour, you cannot be all things, to all people, all
> the time.
>
> With a vast difference in knowledge concerning technical matters
> it almost impossible to communicate. Ignorance begets fear and almost any
> irrational reaction is possible as a consequence. I have witnessed it
> innumerable times in "over the counter" business and local politics.
>
> Unconditional "satisfaction guaranteed or your money back" has further
> corrupted a basic tenet of life; the acceptance of individual
> responsibility for the consequences of individual action or inaction. The
> search for the free lunch is part of our nature, and those that stand in
> our way are seldom the recipients of good will ;-)
>
> Sounds more like philosophy than homebrew!!!!

And as you know off topic posts *never* happen on this new group :-)

Rick

>
>
> 73,

> Pete/wa4hei
>
> --
> Eschew obfuscation.

2969. Re: Need 3x7x12 chassis

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-21 00:00:00 UTC
From: Mike Silva <mjsilva@jps.net>
Message-ID: <_tRF3.203$BD2.50693@news.wenet.net>
Source record: 66819

If you want store-bought, I like Mouser:

http://www.mouser.com/catalog/cat_599/339.pdf

BTW, what circuit are you using? Why, if I may ask, are you using a 6L6 oscillator? I only ask because there are better (i.e. lower crystal current) oscillator tubes around, such as the 6AG7, 6CL6, 12BY7, etc.

I'll butt out now <g>

73,
Mike, KK6GM

Greg Carter wrote in message <7s88vj$q6k$1@nntp1.atl.mindspring.net>...
>Howdy!
>I need an aluminum chassis 3"x7"x12" for a homebrew
>6l6/807 transmitter I'm building. Can anyone help me
>out ? Please reply with price to kx4r@mindspring.com
>
>Tnx and 73, Greg KX4R
>

2970. Re: Converting $20 Electro Mavin GPS unit's uP to NMEA output

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-21 00:00:00 UTC
From: Les Nagy <lnagy@netaccess.on.ca>
Message-ID: <37E7F24A.E42DB629@netaccess.on.ca>
Source record: 66820

You are right. I did not think of the possibility of a mode which would disable the internal ROM and use only external memory. This mode does exist, and as there is a blank IC pad area on the board it might be relatively easy to leave everything alone except a new program and and additional IC. Thanks for the idea.

mas wrote:

> From Hitachi's site it appears to be a CPU with an internal 128K byte
> mask programmable ROM. It might be possible to run it in a mode
> with an external ROM.
>
> See
> http://semiconductor.hitachi.com/h8/?adjump=frontpage_products-section
>
> The key to finding things on this chip seems to be to
> look for H8S/2246 in the titles.
>
> The hardware manual might be:
> http://semiconductor.hitachi.com/products/pdf/h82th002d2.pdf
> (beware this is a 3.4 MB PDF file).

--
++
Les Nagy: President | mailto:lnagy@netaccess.on.ca
|
Aldebaran Technological | Phone: (905) 388-1011
Services Inc. | Fax: (905) 388-9028
http://www.nas.net/~lnagy

2971. EI9GQ Homebrew radio page.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-21 00:00:00 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <0JSF3.86$AL3.153@news.indigo.ie>
Source record: 66821
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Recent update to EI9GQ Homebrew radio page.
http://www.qsl.net/ei9gq

'A simple way to make your own printed circuit boards'
http://www.qsl.net/ei9gq/pcb.html

73, Ed. EI9GQ

--

Remove X to reply.

My e-mail address is:

nospam AT oceanfree.net

2972. Re: Converting $20 Electro Mavin GPS unit's uP to NMEA output

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-21 00:00:00 UTC
From: Mark Kempisty <NOPEmkempisty@pavcal.com>
Message-ID: <7s8veq$nm4$1@mitl.MITL.Research.Panasonic.COM>
Source record: 66822

A propriatary processor I have used previously had internal ROM that could be shut down at reset so external ROM could be used. I'll review the H/w doc and see what it says. This thing would make a great APRS tracker.

I will also try to scan the standard output from the board. The only information that I have from Electro Mavin is that it did not match the manual. But it could be NMEA though my gut tells me it isn't. If somebody beats me to this, I promise to not get upset ;-).

-- Mark N3GNW

mas <mas@ucla.edu> wrote in message news:37e7aea9.4249450@nntp.we.mediaone.net...
> On Tue, 21 Sep 1999 02:18:59 GMT, Les Nagy <lnagy@netaccess.on.ca>
> wrote:
> >I would guess, an educated guess, that the CPU on the board is either a
> >one time programmable, or a masked rom programmed chip.
>
> Under the sticker on that CPU it says:
> H8S/2246
> 7L1 I
> 472246FA20
> Japan
>
> From Hitachi's site it appears to be a CPU with an internal 128K byte
> mask programmable ROM. It might be possible to run it in a mode
> with an external ROM.

2973. Re: Converting $20 Electro Mavin GPS unit's uP to NMEA output

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-21 00:00:00 UTC
From: Mark Kempisty <NOPEmkempisty@pavcal.com>
Message-ID: <7s90ge$o4n$1@mitl.MITL.Research.Panasonic.COM>
Source record: 66823

I just reviewed the PDF H/W manual and we can definitely disable the internal ROM and run the thing completely from an external ROM. The H8S/2246 has 128K of internal PROM. My guess is that the manufacturer was going to switch to H8S/2245 (ROM) when they had high confidence in the firmware to get the cost reduction the ROM based chip offers.

There appears to be GNU based tools including a C compiler for the H8 that can run under Linux.. Unfortunately I did not save the URL but will look for it tomorrow.

This is looking good.

-- Mark N3GNW

2974. Re: ATV Rpt / Microtune / Rude - too bad

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-21 00:00:00 UTC
From: Woody White <woody.white@att.net>
Message-ID: <37E80FDB.31289DA5@att.net>
Source record: 66824

Pete,

A "C" in manners???? I am more respectful of tele-marketers interrupting my dinner!!!!!

Apparently you did not read everything carefully (either?). I did miss the price note. Had I seen that, I would have immediately written them off as unreasonable. I could buy cable head-end equipment cheaper than that experimental board. Also..My link was intentionally not to press releases, but to the deivce about which I was refering.

OTOH, for example...
Quote:

Jim Fontaine, executive vice president of sales and marketing at Microtune, Plano,
Texas, speculates that this compact, low-power receiver also will enable a type of
wireless web appliance which pulls digitally
broadcasted Internet data streams off
of subchannels embedded in the new broadband digital TV signals. Microtune's
co-founder and chief technical officer, John Norsworthy, envisions a personal
digital assistant (PDA) or palmtop that is equipped to receive and filter these "push"
transmissions, providing users with messaging, news, financial, or general
information. Developments such as this are only now commercially feasible with the
cost, power, and space savings that an integrated tuner offers.

There are a number of other releases describing the circuit as being more cost effective than discreet component tuners. Would that lead one to think the development circuit alone would cost more than 3-4 "palmtops"? Don't think so...

The parts will never fly for that application priced such as they are. The "kit" not withstanding.
An example of more reasonably development boards can be seen at Analog devices. They are not cheap, but not unreasonable. Certainly the "kit" is not aimed at comsumers, but their application of the device covers that

area - per their statements. Again, one would expect a
device to be applied to comsumer technology would carry
consumer-like pricing.

I would think that getting such calls is a fact of life.
Furthermore, as ham homebrewers, technology that is
researched independently is often introduced into commercial
products. It is not *always* a dead end. It is a risky
assumption that whoever calls and dosen't immediately order
10,000 pieces is of no consequence.

Regards, Woody
---

pmarkham wrote:
>
> woody.white@att.net (Woody White) wrote in <37E6B07E.860AA188@att.net>:
>
> >Hi guys... FWIW
> >
> >Had to pass this along.... In need of reworking our ATV
> >repeater, I located a new product that was perfect!
> >
> >http://www.microtune.com/products/development_support/desref/kit.htm
> >
> >Considering this product was aimed at the consumer market
> >
> >
>
> Thanks for the pointer, Woody. It does makes interesting reading and
> indicates a possible avenue for the integration of tv tuners into future
> consumer equipment designs.
>
> I suggest you start at:
>
> http://www.microtune.com/index.html
>
> That page has the "Newsflash" box that leads to the "kit". 'Splain
> to one and all how come you determined it was a "consumer" product and why
> the price surprised you when, if you read carefully, you would have read
> the following at:
>
> http://www.microtune.com/news/092099c.htm
>
> Price and Availability
> The NTSC Designer's Reference Kit, order number MT2000-RD-NTSC, is
> available now and priced at $1895; the PAL version of the Kit, order number
> MT2000-RD-PAL, is also available now and priced at $1995. The Microtune PC
> Convergence Reference Design, order number MT2000-PCTV-NTSC is available
> now and is priced at $2495.
>

> Nowhere in their promotion did I find anything that even suggested the kit
> was aimed at the consumer market. All I read indicated it was a designer
> kit for OEM engineers. I know my amateur and professional qualifications do
> not count, and I would not have been surprised at his response. I would not
> have taken offense and posted my indignation before reading, completely the
> introductory web pages.
>
> He knew, immediately, that you were of no consequence to his business and
> you were wasting his time. You sounded like an amateur to a business that
> caters to professionals. Been there and done that, on both sides of the
> phone. I might have given him a C for bedside manners, but then again I
> haven't an idea how many calls he got from other people that didn't read
> before they called. I do not know how much of his time was wasted
> explaining what was written in plain English. It does get exasperating and
> expensive fielding inappropriate calls while other calls from qualified
> buyers are on hold. ;-)
>
> Pete/wa4hei

--

---------- de Woody, WB4QXE ----------

Ham Homebrew/ATV Circuits -*- Scanning Electron
Microscope Images

http://www.geocities.com/capecanaveral/3722

2975. Re: ATV Rpt / Microtune / Rude - too bad

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-21 00:00:00 UTC
From: Tony Giroux <agiroux@cvn.net>
Message-ID: <37E80F68.F5A06D00@cvn.net>
Source record: 66825
Body handling: Binary attachment payload not displayed: agiroux.vcf

Sorry Pete --

I don't care how much product information is published,
or where it is published, or how many calls you get about it
each day -- NEVER be rude to the customer or the public.

Woody ir right. The guy was rude and I thank him for telling
the rest of us, commercial or amateur, about them.

Our company does do TV and video work (not broadcasting)
and we avoid the likes of Microtune. There are too many companies
willing to do business out there.

Tony -- KF3BX

pmarkham wrote:
>
> woody.white@att.net (Woody White) wrote in <37E6B07E.860AA188@att.net>:
>
> >Hi guys... FWIW
> >
> >Had to pass this along.... In need of reworking our ATV
> >repeater, I located a new product that was perfect!
> >
> >http://www.microtune.com/products/development_support/desref/kit.htm
> >
> >Considering this product was aimed at the consumer market
> >
> >
>
> Thanks for the pointer, Woody. It does makes interesting reading and
> indicates a possible avenue for the integration of tv tuners into future
> consumer equipment designs.
>
> I suggest you start at:
>
> http://www.microtune.com/index.html
>
> That page has the "Newsflash" box that leads to the "kit". 'Splain
> to one and all how come you determined it was a "consumer" product and why
> the price surprised you when, if you read carefully, you would have read
> the following at:
>
> http://www.microtune.com/news/092099c.htm
>

> Price and Availability
> The NTSC Designer's Reference Kit, order number MT2000-RD-NTSC, is
> available now and priced at $1895; the PAL version of the Kit, order number
> MT2000-RD-PAL, is also available now and priced at $1995. The Microtune PC
> Convergence Reference Design, order number MT2000-PCTV-NTSC is available
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>
> Nowhere in their promotion did I find anything that even suggested the kit
> was aimed at the consumer market. All I read indicated it was a designer
> kit for OEM engineers. I know my amateur and professional qualifications do
> not count, and I would not have been surprised at his response. I would not
> have taken offense and posted my indignation before reading, completely the
> introductory web pages.
>
> He knew, immediately, that you were of no consequence to his business and
> you were wasting his time. You sounded like an amateur to a business that
> caters to professionals. Been there and done that, on both sides of the
> phone. I might have given him a C for bedside manners, but then again I
> haven't an idea how many calls he got from other people that didn't read
> before they called. I do not know how much of his time was wasted
> explaining what was written in plain English. It does get exasperating and
> expensive fielding inappropriate calls while other calls from qualified
> buyers are on hold. ;-)
>
> Pete/wa4hei

[One or more binary attachments are retained only in the source text.]

2976. Re: Sex Photo from 12 to 16 years old! 78

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-21 00:00:00 UTC
From: kc8jbo <kc8jbo@email.msn.com>
Message-ID: <#1nyNpIB$GA.338@cpmsnbbsa05>
Source record: 66826
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

stlpor@ghg.com wrote in message <7ropap$m2u$3978@newsgate.elender.hu>...
>SEX PHOTO FROM 12 to 16 YEARS OLD!
>hvktnddjvzylzmylzotdzupkmulpryuzetgmqwmjivrvewwencxpzmg

GetbacKKK posts his porn to the internet again...

2977. Re: I need help with a KPC-3

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-21 00:00:00 UTC
From: Rick Ruhl <ricker@cssincorp.com>
Message-ID: <O6G0DwIB$GA.250@cpmsnbbsa02>
Source record: 66827
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Hello MD:

1. Manuals from Kantronics. http://www.kantronics.com for info
2. For Windows '95, Windows '98 and Windows NT, Pacterm '98,
http://www.cssincorp.com
3. You need a 12v, 300-500 ma power supply.
4. Cables are ready made from MFJ. http://www.mfjenterprises.com and some
info at Buck Rogers site, http://www.packetradio.com.

--
Rick Ruhl
President, Creative Services Software
http://www.cssincorp.com

MD Miller wrote in message ...
>I inherited a Kantronics KPC 3 from my father in law, and I cant find
>anything that goes with it.
>
>I need to get
>1. Copy of a manual and instructions
>2. I need to know where to get the software for it
>3. What type of AC adapter goes on this unit
>4. How to wire up the cabling to a PC
>Any and all help would be greatly appreciated
>Thanks
>
>

2978. Re: uA723 temperature drift

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-21 00:00:00 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <37E824A4.F8A673B9@dialpoint.net>
Source record: 66828

What does that have to do with a 723 ? The 723 regulator has lots more
than 3 terminals. More like 14 pins.

jvr@pclink.com wrote:
>
> If you want a regulator that will keep the output voltage constant as
> current draw increases, and compensate for the drop across series pass
> transistors, try a 4 terminal regulator. These are much more
> expensive than a 3 term regulator, but really work well. The type I
> use is an NTE 953 and costs about $9.
>
> On Mon, 20 Sep 1999 16:01:28 -0400, Ralph Mowery
> <rmowery@dialpoint.net> wrote:
>
> >The 723 circuits have been around for years and seem to work very well.
> >Astron (one of the more popular supplys) has used that type of circuit
> >with 2n3771 (think that is the number) for years and seems not to have
> >

----------== Posted via Newsfeeds.Com, Uncensored Usenet News ==----------
http://www.newsfeeds.com The Largest Usenet Servers in the World!
------== Over 73,000 Newsgroups - Including Dedicated Binaries Servers ==-----

2979. Re: Merit plate transformer specs?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-21 00:00:00 UTC
From: Lynn Coffelt <lynnc@sos.net>
Message-ID: <37E837A7.6913FCFC@sos.net>
Source record: 66829

Wow! Thanks, Jim! Exactly what I wanted. I think I have the parts for the style rectifier(s) and filter you mentioned. And I assume with a small bleeder load that would net almost 750watts ICAS. As a class C final on CW, it could probably handle a single 813 key down for a minute at a time, but don't you think it could handle a pair of 813s in AB1 in SSB linear service? Again, thanks for the help. It has been bugging me for weeks!
73, Lynn, W7LTQ

2980. Re: Helipots

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-21 00:00:00 UTC
From: Woody White <woody.white@att.net>
Message-ID: <37E83B80.AAC1EEA8@att.net>
Source record: 66830

If the pots have the typical "duo-dial" or similar counting
type... Loosen the setscrew and pull off the knob. This
will leave the rear portion of the knob assembly on the
panel. At this point, you should see the pot bushing nut.
It holds both the pot and the rear portion of the dial -
with the panel between. Loosen the nut... Voila! BTW,
look carefully at the setscrew. Sometimes it is a hex
allen, but often is a Bristo (sp?), which is more like a
spline.
Woody

JW wrote:
>
> I've picked up a piece of surplus instrumentation gear (seismographic)
> which has 2 Beckman 50K multi-turn Helipots. The knobs have what
> appears to be 1/32" allen screws - that's no problem since I have the
> right allen wrench. However, how does one remove a Helipot from a front
> panel?. Any advice would be appreciated.
>
> Jack
> exWA8PZL

--

---------- de Woody, WB4QXE ----------

Ham Homebrew/ATV Circuits -*- Scanning Electron
Microscope Images

http://www.geocities.com/capecanaveral/3722

2981. Re: Looking for CK722 projects/Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-21 00:00:00 UTC
From: Woody White <woody.white@att.net>
Message-ID: <37E83CA2.D4A647D6@att.net>
Source record: 66831

...Will never forget the distress I felt as a kid when my
well used CK722 "lost a leg" due to fatigue. had to save
for weeks and weeks to buy another...
Woody

---------- de Woody, WB4QXE ----------

Ham Homebrew/ATV Circuits -*- Scanning Electron
Microscope Images

http://www.geocities.com/capecanaveral/3722

2982. Re: Converting $20 Electro Mavin GPS unit's uP to NMEA output

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-21 00:00:00 UTC
From: The Ronneys <pronney@sprynet.com>
Message-ID: <7s9otg$6hc$1@nntp3.atl.mindspring.net>
Source record: 66832

Hi all...

Mark Kempisty wrote in message
<7s8veq$nm4$1@mitl.MITL.Research.Panasonic.COM>...
>I will also try to scan the standard output from the board. The only
>information that I have from Electro Mavin is that it did not match the
>manual. But it could be NMEA though my gut tells me it isn't. If somebody
>beats me to this, I promise to not get upset ;-).

The "programming manual" available on the Electro Mavin website details the output of the GPS receiver module, not the entire assembly. I have written a program to decode the receiver module's output that runs on a Z80 microprocessor. It seems that the various example programs use the mainboard's output, not the receiver module's output.. I judge this to be the case because the "standard" modifications I have seen all use the output of the mainboard's processor and that is the data format that doesn't match the document.

73's
Martin, WB6YMI

2983. Re: Looking for CK722 projects/Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-21 00:00:00 UTC
From: Eric Schumacher <wb6kcn@pacbell.net>
Message-ID: <37E8684A.C3C3AF25@pacbell.net>
Source record: 66833

Hi Group
My recolection as to price was $7.50 I believe CK721s were a bit higher. In the mid 60s I tried some of them in a modern properly biased amp circuit. I couldn't believe how noisy they were. I still have them along with a few GE 2N107s. I thought I died and went to heaven when a friend dropped out of school and went to work at Airborne Labortories in LINY. Suddenly we had a supply of silicon 2N697s. They would actually make useful power on 10 mtrs.
73 Eric WB6KCN

2984. Re: Looking for CK722 projects/Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-22 00:00:00 UTC
From: wardwardj@aol.com
Message-ID: <19990921203850.24836.00000415@ng-ft1.aol.com>
Source record: 66735

Yes, Brad there are small transistors inside the CK722 metal shell. You'll find photos and all the details on my CK722 webpage.

http://www.geocities.com/~ck722transistor

Thanks,
Jack

2985. Re: Merit plate transformer specs?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-22 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19990921212508.07224.00000163@ngol06.aol.com>
Source record: 66736

In article <37E03EB4.53775C54@sos.net>, Lynn Coffelt <lynnc@sos.net> writes:

>anybody with time to look in their files for an old "Merit Coil and
>Transformer" catalog to help me with the specs for a Merit P4062 plate
>transformer? My once complete stack of catalogs has been eroded by time.
>I acquired this transformer years ago for a planned linear amplifier. I
>think the plan was for 115vac in and enough out for a pair of 813's
>grounded grid. Well, the data plate's total technical data is "300ma".
>Fine! A little more would be helpful!
>Anybody with time and resources to help?

From the 1953 RESCO catalog:

Merit P-4062:

Primary: 115 VAC, 60 Hz
Secondary: 2900-0-2900 VAC (high tap) or 2385-0-2385 VAC (low tap), 300 mA.

This unit was designed for use with mercury vapor rectifiers (a pair of 866As, usually) and a 2 section choke input filter. The resulting DC output would be 2500 volts on the high tap and 2000 volts on the low tap, at full load. Works out to 750 watts on the high tap and 600 watts on the low. It will run cool if used with a single 813, but I wouldn't push a pair of them to full power using this iron in the supply.

1953 price was $48.

Hope this helps!

73 de Jim, N2EY

2986. Re: Helipots - disregard

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-22 00:00:00 UTC
From: JW <jdwalton@home.com>
Message-ID: <37E864AF.95C1A585@home.com>
Source record: 66737

Oops! It's a micro-torx - smaller than the 1.5mm. One finger now
punctured.

JW wrote:

> I've picked up a piece of surplus instrumentation gear (seismographic)
> which has 2 Beckman 50K multi-turn Helipots. The knobs have what
> appears to be 1/32" allen screws - that's no problem since I have the
> right allen wrench. However, how does one remove a Helipot from a front
> panel?. Any advice would be appreciated.
>
> Jack
> exWA8PZL

2987. Ideas for Ladder line separator/insulators

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-22 00:00:00 UTC
From: James Ek <JIM-EK@worldnet.att.net>
Message-ID: <7s9reecun1@bgtnsc02.worldnet.att.net>
Source record: 66738

I'm looking for some ideas.

I want to do some experimenting with 2 meter antennas and need quite a bit of ladder line. Since this is just a short term experiment and will not be permanent, I really don't want to be spending .15 to .20 a foot on commercial ladder line.

Consequently looking for a cheap insulator/separator ideas so I can make my own ladder line.

Thanks,
Jim

2988. Re: Sex Photo from 12 to 16 years old! 78

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-22 00:00:00 UTC
From: getback <getback@my-deja.com>
Message-ID: <7sb7tfmeg1@nnrp1.deja.com>
Source record: 66739
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <#1nyNpIB$GA.338@cpmsnbbsa05>,
"kc8jbo" <kc8jbo@email.msn.com> wrote:
> stlpor@ghg.com wrote in message
<7ropap$m2u$3978@newsgate.elender.hu>...
> >SEX PHOTO FROM 12 to 16 YEARS OLD!
> >hvktnddjvzylzmylzotdzupkmulpryuzetgmqwmjivrvewwencxpzmg
>
> GetbacKKK posts his porn to the internet again...
> If there is any "PORN" people on here , it is you "Slope Head". You
are always talking and posting about homosexuals and other
pornographic subjects. You must be involved with the "GAY MOVEMENT".

Getback
>

--
"NAH NAH NAH NAH---NAH-NAH-NAH-NAH
HEY-HEY
AND-GOOD-BYE

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

2989. Re: Converting $20 Electro Mavin GPS unit's uP to NMEA output

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-22 00:00:00 UTC
From: "Laszlo I. Morocz" <kf4pv@SPAMMENOTlmorocz.com>
Message-ID: <Y34G3.2093$WO4.3925@jump.innerx.net>
Source record: 66740

Where did you tap off the signal from receiver module?

73 de KF4PV/3, Laszlo

--
To reply, remove the text SPAMMENOT from the e-mail address.
The Ronneys wrote in message <7s9otg$6hc$1@nntp3.atl.mindspring.net>...
<snip>
>The "programming manual" available on the Electro Mavin website details the
>output of the GPS receiver module, not the entire assembly. I have written
>a program to decode the receiver module's output that runs on a Z80
>microprocessor. It seems that the various example programs use the
>mainboard's output, not the receiver module's output.. I judge this to be
>the case because the "standard" modifications I have seen all use the
output
>of the mainboard's processor and that is the data format that doesn't match
>the document.
>
>73's
>Martin, WB6YMI
>
>

2990. Looking For Parts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-22 00:00:00 UTC
From: Jeff James <jeff@eclipse.net>
Message-ID: <37E8D8ED.1595C821@eclipse.net>
Source record: 66741

Dedicated to Vintage Radio..
The Boatanchor Classifieds
http://www.dealamerica.com/deal/cgi-bin/ads/bcads.cgi
Thank You!

2991. Re: Ideas for Ladder line separator/insulators

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-22 00:00:00 UTC
From: ae517@FreeNet.Carleton.CA
Message-ID: <7sal7p$liu@freenet-news.carleton.ca>
Source record: 66742

"James Ek" (JIM-EK@worldnet.att.net) writes:
> I'm looking for some ideas.
>
> I want to do some experimenting with 2 meter antennas and need quite a bit
> of ladder line. Since this is just a short term experiment and will not be
> permanent, I really don't want to be spending .15 to .20 a foot on
> commercial ladder line.
>
> Consequently looking for a cheap insulator/separator ideas so I can make my
> own ladder line.

Traditionally, hardwood dowels boiled in paraffin wax were common; it's cheap
and effective.

You say you want to use it on 2 metres? The moonbouncers that use open line
for their arrays use teflon, placing the teflon spacers at current nodes every
half wave ~1M. It's works as well as hardline (except in freezing rain) and is
considerably cheaper.
--
73 de va3rr/aa8lu
http://www.qsl.net/va3rr

2992. Re: Converting $20 Electro Mavin GPS unit's uP to NMEA output

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-22 00:00:00 UTC
From: johnmel@kenco.uk.sun.com
Message-ID: <7saphe$88$1@new-usenet.uk.sun.com>
Source record: 66743

> Where did you tap off the signal from receiver module?

One of the mods from the web site shows how to take the TTL level output from the receiver and with a couple of cuts and jumpers run them through the level converter on the main board so that you can connect up to an RS-232 serial port.

The unmodified RS-232 output from the main board is used to drive the display module. That is the interface that there is no spec available for (that I know of).

I have written some Java code that decodes the receiver output. Next step is to get it running on a TINI (http://www.ibutton.com) web server so that it can be used as the reference for a network time server.

-- John Melton n6lyt/g0orx

```
((
(|~~|
`--'
JAVA
```

2993. Re: Sex Photo from 12 to 16 years old! 78

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-22 00:00:00 UTC
From: cal25skipper <skipper3@swbell.net>
Message-ID: <y_5G3.856$h97.63243@typhoon01.swbell.net>
Source record: 66744
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Cool! Where can we see it. I like porn. If you are a man, and the site of naked ladies bothers you, then you're not normal.

Brent Scott
N5CLK
Austin, TX

2994. Re: Converting $20 Electro Mavin GPS unit's uP to NMEA output

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-22 00:00:00 UTC
From: Mark Kempisty <NOPEmkempisty@pavcal.com>
Message-ID: <7sb0gg$g5l$1@mitl.MITL.Research.Panasonic.COM>
Source record: 66745

What example programs? Tim Laren's program uses the raw GPS engine data
which we have documentation for. I am curious to see what the data from the
main board processor (an H8) looks like. If its NMEA we're in good shape.

As I understand it, the board mods have been to bring the TTL data from the
GPS engine out through the RS-232 level converter and take the H8 out of the
loop.

-- Mark N3GNW

The Ronneys <pronney@sprynet.com> wrote in message
news:7s9otg$6hc$1@nntp3.atl.mindspring.net...
> Hi all...
>
> The "programming manual" available on the Electro Mavin website details
the
> output of the GPS receiver module, not the entire assembly. I have
written
> a program to decode the receiver module's output that runs on a Z80
> microprocessor. It seems that the various example programs use the
> mainboard's output, not the receiver module's output.. I judge this to be
> the case because the "standard" modifications I have seen all use the
output
> of the mainboard's processor and that is the data format that doesn't
match
> the document.
>
> 73's
> Martin, WB6YMI
>
>

2995. Re: Diagram for HF Tube lineair amp.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-22 00:00:00 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <Yb8G3.27$Ys4.39@news.indigo.ie>
Source record: 66746

> Hi,
>
> I am looking for a diagram to build a HF lineair amplifier, I prefere to
use
> a one tube solution that delivers me the legal limit for Holland which is
> 400 watt. <snip>

It's not exactly what you are looking for, but have a look at:
http://www.qsl.net/ei9gq/amp.html

It uses a Dutch QE08-200H tube. If you add a second tube, it will easily
run at more than 400W.

73, Ed. EI9GQ.

-

Remove X to reply.

My e-mail address is nospam 'AT' oceanfree.net

2996. Re: Help With CCTV Camera?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-22 00:00:00 UTC
From: Scott Cason <ga_dawgs@bellsouth.net>
Message-ID: <37E9157D.4462DD4@bellsouth.net>
Source record: 66747
Cross-posted to: alt.ham-radio.atv,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

> So, what do I have, please?

We'll take it one at a time:

> I have a Panasonic CCD CCTV camera model WV-BL202.
> The Panasonic label says Output Video 1Vp-p 75 ohms.

The video that floats around in TV stations is one volt peak to peak. What that means with a white video screen, the points to the bottom of sync to the top of the white video is one volt. 75 ohms is the Z of the video line. Just like CATV is 50 ohms.

> It has a Cosmicar Television Lens 16mm 1:1.4 with F-stops
> 16, 11, 8, 5.6, 4, 2.8, 2 and 1.4.

The F-Stops are simply a way to either close or open the iris according to ambient lighning on the subject you are shooting.

> It runs on 12vdc, has a BNC connector for "Gen Lock", a
> switch to turn AGC on and off, and another that has "Auto Iris"
> above it and DC Video" below (though curiously this switch moves
> left to right so it is unclear what it is selecting).

Gen Lock is something you don't need to worry about. That is how you lock different video sources together as in a TV studio. You will want the AGC and auto iris on. DC video is clamping. It keeps the DC level of the output video at a constant level. That is something you don't have to worry about either.

> There is a second BNC for "Video", and a ALC control on one
> side and a square four pin connector on the other (unlabeled).
> On top is a 1 1/2" x 1/4" metal strip held in place by a screw.
> There is a label next to it reading "OFF ON G/L 75 Ohms".

Video is the output of the camera. I'm assuming the ALC is a pot. I wouldn't worry about it either. The spuare pin connector sounds like an S-Video output, but since the camera is monochrome I don't see where it would use it. The label is referring to the switches on the side below it I'm assuming.

Sounds like you have a good camera for remote use. I have a similer camera that I am thinking about placing in my Jeep facing forward and feeding to an ATV transmitter. I have to get the transmitter, first.

Hope this information has helped.

Scott

>

>
> Thanks for information, or referrals to a source of information.
>
> 73, DavidC K1YP

2997. Re: Looking for CK722 projects/Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-22 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37E91C2D.607EAE10@teleport.com>
Source record: 66748

I'm sure we all did that at least once. I learned to make a little wood or plastic spacer with three tiny holes to slide against the case. When the lead inevitably broke, but flush with the spacer, you could remove the spacer and use the transistor for a while longer before the lead finally broke flush to the case.

Roy Lewallen, W7EL

Woody White wrote:
>
> ...Will never forget the distress I felt as a kid when my
> well used CK722 "lost a leg" due to fatigue. had to save
> for weeks and weeks to buy another...
> Woody
>
> ----------- de Woody, WB4QXE -----------
>
> Ham Homebrew/ATV Circuits -*- Scanning Electron
> Microscope Images
>
> http://www.geocities.com/capecanaveral/3722

2998. Re: Ideas for Ladder line separator/insulators

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-22 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37E91D4A.3BB7002D@teleport.com>
Source record: 66749

I'd be really, really careful about boiling anything in paraffin. The vapor is extremely flammable.

(For any lurkers who speak the Queen's English: We're referring here to a hard petroleum wax, not to the light oil you call paraffin and we call kerosene.)

Roy Lewallen, W7EL

Russ Renaud wrote:
>
> Traditionally, hardwood dowels boiled in paraffin wax were common; it's cheap
> and effective.
> . . .

2999. Re: Ideas for Ladder line separator/insulators

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-22 00:00:00 UTC
From: ae517@FreeNet.Carleton.CA
Message-ID: <7sb83g$cd2@freenet-news.carleton.ca>
Source record: 66750

Roy Lewallen (w7el@teleport.com) writes:
> I'd be really, really careful about boiling anything in paraffin. The
> vapor is extremely flammable.
>
> (For any lurkers who speak the Queen's English: We're referring here to
> a hard petroleum wax, not to the light oil you call paraffin and we call
> kerosene.)

Yes, now that you mention it, we have "paraffin lamps" here in Canada, but
we also have paraffin wax, go figure!

And yes, boil your dowels (and cast bullets, for that matter) outside!
Dangerous fumes, in both cases.
--
73 de va3rr/aa8lu
http://www.qsl.net/va3rr

3000. Re: Cheap repeater controller needed...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-22 00:00:00 UTC
From: Tony Baca <tbaca@hpbs1129.boi.hp.com>
Message-ID: <7sbg98ok1@hpbs1500.boi.hp.com>
Source record: 66751

Brian <brian_messman@yahoo.com> wrote:
: Building on a budget, need a small, inexpensive repeater controller to tie
: my mobiles together for some cheap repeater action...something under
: $100.00. Please post to email...thanx.
You should checkout:
http://www.cdi2.com/build_it/control.htm
and:
http://www.kuggie.com/rbtip/n0yox.html
and:
http://www.kuggie.com/rbtip/supplyindex.html

Good luck

3001. Re: Ideas for Ladder line separator/insulators

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-22 00:00:00 UTC
From: Barry McCarthy <barry@stubbleg0wbf.freeserve.co.uk>
Message-ID: <yEgiQHAk0U63EwzD@dabsol.co.uk>
Source record: 66752

In article <7s9reecun1@bgtnsc02.worldnet.att.net>, James Ek <JIM-
EK@worldnet.att.net> writes
>I'm looking for some ideas.
>
>I want to do some experimenting with 2 meter antennas and need quite a bit
>of ladder line. Since this is just a short term experiment and will not be
>permanent, I really don't want to be spending .15 to .20 a foot on
>commercial ladder line.
>
>Consequently looking for a cheap insulator/separator ideas so I can make my
>own ladder line.
>
>Thanks,
>Jim
>
>
>
I've just made some open wire feeder, using the plastic clip-on spines
used to clip sheets of paper together.
For the size of paper most used in the U.K. (A4), they are about 11,5
inches long. I'm sure that you can get the same im in 'letter' size.

Cut them into approx. 2.5 - 3 inch lengths, make a hole with a hot
bradawl about 1/2 inch in from each end, slide onto wire about 12 inches
apart and fix with adhesive.

Quick, cheap and simple.
--
Barry McCarthy
G0WBF

3002. FT-2600 CABLE DIAGRAM???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-22 00:00:00 UTC
From: Bill Crann <bcrann@nf.sympatico.ca>
Message-ID: <7sbjml$1st$1@nova.thezone.net>
Source record: 66753

Does anyone know how to make a cable to program a Yeasu FT-2600 with a PC.
Also are there any third party software programs that will work? Will a
VR-1 cable and software work? Thanks.

73's
Bill

3003. Re: Sex Photo from 12 to 16 years old! 78

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-22 00:00:00 UTC
From: kc8jbo <kc8jbo@email.msn.com>
Message-ID: <OWV2cdUB$GA.302@cpmsnbbsa03>
Source record: 66754
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

cal25skipper wrote in message ...
>Cool! Where can we see it. I like porn. If you are a man, and the site
of
>naked ladies bothers you, then you're not normal.
>
>Brent Scott
>N5CLK
>Austin, TX

I didn't imply that it bothered me, jackass. However, porno featuring 12-16 year olds is sick. If you like child pornography, that is your business, Grunt. I wouldn't admit it in such a public forum if I was you, since the FBI does look for kiddie pornphiles such as yourself.

3004. help! connect extention speaker to car speakers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-22 00:00:00 UTC
From: TJ <tjwood@va.tds.net>
Message-ID: <01bf6d09$659d3cc0$5c50aad0@tjwood>
Source record: 66755
Cross-posted to: alt.autos.ford,alt.ham-radio.marketplace,alt.radio.scanner,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner

OK all you electronic buffs, I need to connect my ham radio and/or cell phone extention speaker to one or more car stereo speakers, preferably the door speakers. How can I do this without blowing up something??

Thanks all, and if you will, please email response.
TJ

3005. J-Pole antenna feed point question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-22 00:00:00 UTC
From: Levent Sasmazel <levent@netlabs.net>
Message-ID: <37E961AB.450622A3@netlabs.net>
Source record: 66756

Hi All,

After a successful 2 meter J-Pole project I decided to build a 440
J-Pole and
having problems with the feed point. I am using the same technique which

i used for 2 meter but no success. when i start moving the feed point
from bottom to top SWR meter showing that my output power is changing. I

know this can happen because of the impedance change on the feed point.
I do not have lots of test equipment to find the feed point.
After unsuccessful 440 J-Pole try I try to build another design 440-450
Omnidirectional Antenna (73 Amateur Radio Today November 1994 page 22)
same problem.
Any sugessions ?

Thanks in advance

Levent

3006. Re: help! connect extention speaker to car speakers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-22 00:00:00 UTC
From: Frank Walton <mayor2@ptdprolog.net>
Message-ID: <37E9594D.FD3A791C@ptdprolog.net>
Source record: 66757
Cross-posted to: alt.autos.ford,alt.ham-radio.marketplace,alt.radio.scanner,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner

How to isn't as much of a problem as taking apart the doors
to get to the wiring will be. Why not just add a speaker
under the dash??

.....

Frank

3007. Re: Converting $20 Electro Mavin GPS unit's uP to NMEA output

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-22 00:00:00 UTC
From: "Laszlo I. Morocz" <kf4pv@SPAMMENOTlmorocz.com>
Message-ID: <r%cG3.2609$WO4.4296@jump.innerx.net>
Source record: 66758

OK John, that's where my tap comes from, too. Just wanted to verify that that's the GPS engine directly. I used Time Laren's mod (very nicely documented, BTW) to get the level-converted data. However, it does not match the programming manual exactly. Close enough that I was able to write my own driver/navigation program, but there are significant differences. For example, the 3 bytes in front of the validity code (pg 34) match nothing in the documentation. The first byte isn't even mentioned, while the 2nd varies between 0xBF and 0xB0 (depending on the number of satellites) and the 3rd byte ranges from 0x28 through 0x2A inclusive. The manual documents the 2nd & 3rd bytes as a control code with values of CACA (wonder if that's a hint?).The rest of the bytes are pretty much as advertised. So I was hoping that a different tap point would match the manual better, which is what Martin, WB6YMI, seemed to be implying.

On the other hand, I've managed to write a program that displays the various data, as well as range and bearing to waypoints. It's a very usable board, indeed, especially if you're willing/able to write your own software.

The biggest hurdle I've found to NMEA output has been the neanderthal attiutude of NMEA. Instead of encouraging people to use their standard by publishing it on the web, they want $65 a pop for it. The only NMEA-related things out there on the web for free are a couple of example string formats, nothing about the protocol dynamics at all. Guess they're taking Microsoft lessons from Bill.

As far as the H8 stuff goes, for me personally it's a lot more cost effective to just put the conversion routines into an Atmel AVR chip daughter board. We're looking at the difference between:

a. cobbling up some floating point code, a sine, cosine and arc-cosine routine and some glue;

b. learning a new processor, figuring out how to disable the internal ROM, adding an external ROM and possibly disassembling the existing code (just in case it's performing some kind of startup initialization that's vital to the operation of the GPS engine).

On the other hand, don't let me stop anyone else from trying it. I'd be very interested in the results if someone manages to get it working.

This is a great board, thanks to whoever it was that brought it to our attention.

73 de KF4PV/3, Laszlo

PS - A Radio Shack 2-position dual row barrier strip (274-656) happens to fit exactly in the empty area to the left of the DIN connector on the GPS

board. I attached it with Radio Shack Hi-Temp/Hi-Strength Supermount tape (64-2361) and then ran power and ground wires from the solder pins under CN1 (through the mounting hole behind CN1, parallel to the wires in Tim's mod and to the back of the barrier strip). Now I make power connections to the barrier strip. This is very much more robust than soldering power lines directly to the CN1 pins, and allows the swapping of different kinds of power connectors (cigarette lighter, wall wart, batteries, etc.) with just a screwdriver.

--
To reply, remove the text SPAMMENOT from the e-mail address.
John Melton - Sun UK - ENS wrote in message
<7saphe$88$1@new-usenet.uk.sun.com>...
>> Where did you tap off the signal from receiver module?
>
>One of the mods from the web site shows how to take the TTL level output from the receiver and with a couple of cuts and jumpers run them through the level converter on the main board so that you can connect up to an RS-232 serial port.
>
>The unmodified RS-232 output from the main board is used to drive the display module. That is the interface that there is no spec available for (that I know of).
>
>I have written some Java code that decodes the receiver output. Next step is to get it running on a TINI (http://www.ibutton.com) web server so that it can be used as the reference for a network time server.
>
>
>-- John Melton n6lyt/g0orx
>
> ((
> (|~~|
> `--'
> JAVA
>
>
>

3008. UHF FM using Single Chip (MC13175)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-22 00:00:00 UTC
From: Moses Clark <itek@sybercom.net>
Message-ID: <4_cG3.8$EG6.106012@firenze.visi.net>
Source record: 66759

Greetings,

I am thinking to build low power UHF radio using MC13175.
Has anyone had a chance to evaluate this chip.

Brian,

UHF FM/AM SINGLE CHIP TRANSMITTER USING THE MC13175(From MOTOROLA APP NOTE)

A Single chip, crystal controlled, AM or FM transmitter in the frequency
range of 260 to 470 MHz for the MC13175.
The power output is +10dbm.
The MC13175 uses Fo=8 x Fref.

3009. Re: FT-2600 CABLE DIAGRAM???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-22 00:00:00 UTC
From: Bill Crann <bcrann@nf.sympatico.ca>
Message-ID: <7sc1l8$6te$1@nova.thezone.net>
Source record: 66760

Sorry that should read will a FT-VX1R or FT-VX5R cable work??

Bill Crann <bcrann@nf.sympatico.ca> wrote in message
news:7sbjml$1st$1@nova.thezone.net...
> Does anyone know how to make a cable to program a Yeasu FT-2600 with a PC.
> Also are there any third party software programs that will work? Will a
> VR-1 cable and software work? Thanks.
>
> 73's
> Bill
>

3010. Re: Sex Photo from 12 to 16 years old! 78

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-22 00:00:00 UTC
From: Dan <n7wpd@xxmission.com>
Message-ID: <7sc2v4$l13$1@news.xmission.com>
Source record: 66761
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

If you've seen one naked female, you've seen them all!
Sure, there are fat ones and skinny ones, dark ones and white ones, but they all have the same basic equipment.

Sort of like eating the same dinner everyday for a month, you just get tired of it.

Let's fire up a radio or better yet, let's go dragracing!

73 Dan / N7WPD

www.xmission.com/~n7wpd
www.inconnect.com/~ed500

cal25skipper <skipper3@swbell.net> wrote in message news:y_5G3.856$h97.63243@typhoon01.swbell.net...
> Cool! Where can we see it. I like porn. If you are a man, and the site of
> naked ladies bothers you, then you're not normal.
>
> Brent Scott
> N5CLK
> Austin, TX
>
>
>

3011. Re: Looking for CK722 projects/Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-22 00:00:00 UTC
From: "Cestyll O. Dywod" <willi6@erols.com>
Message-ID: <37E99BC7.1E62@erols.com>
Source record: 66762

Brad Thompson wrote:
>
> Hello--
>
> If you cracked a blown, blue-cased CK722 open, inside you'd find an
> even smaller transistor-- one of Raytheon's rejects intended for
> hearing-aid service!

> 73,
> Brad AA1IP

That's interesting, A friend from Silicon Valley once told me that the 2N2222 is a similar animal. At the end of the production line, if a transistor doesn't qualify to be something important, it gets to be a 2N2222.

73, Dave K7HMP

3012. Re: Looking for CK722 projects/Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-22 00:00:00 UTC
From: "Cestyll O. Dywod" <willi6@erols.com>
Message-ID: <37E99C4A.5FCD@erols.com>
Source record: 66763

The 2N697 seemed to be pretty popular in MIL type equipment back then.
Also, the 2N404 could be found in massive quantities!

73, Dave K7HMP

Eric Schumacher wrote:
>
> Hi Group
> My recolection as to price was $7.50 I believe CK721s were a bit
> higher. In the mid 60s I tried some of them in a modern properly biased
> amp circuit. I couldn't believe how noisy they were. I still have them
> along with a few GE 2N107s. I thought I died and went to heaven when a
> friend dropped out of school and went to work at Airborne Labortories in
> LINY. Suddenly we had a supply of silicon 2N697s. They would actually
> make useful power on 10 mtrs.
> 73 Eric WB6KCN

3013. Re: Ideas for Ladder line separator/insulators

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-22 00:00:00 UTC
From: jvr@pclink.com
Message-ID: <37e96507.3490609@news.protocom.com>
Source record: 66764

I read somewhere about using electrical romex wire staples. Get the
plastic kind and remove the nails. You will have a spacing of about
3/4 inches.

>I'm looking for some ideas.
>
>I want to do some experimenting with 2 meter antennas and need quite a bit
>of ladder line. Since this is just a short term experiment and will not be
>permanent, I really don't want to be spending .15 to .20 a foot on
>commercial ladder line.
>
>Consequently looking for a cheap insulator/separator ideas so I can make my
>own ladder line.
>
>Thanks,
>Jim
>
>
>

3014. anyone seen a copy of this book? Looks quite interesting.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-22 00:00:00 UTC
From: Nick Caruso <nick.caruso@software.com>
Message-ID: <37E94EE5.2CA6CBF2@software.com>
Source record: 66765

comments? reviews?

> The Electronics of Radio
> by David B. Rutledge
> Our Price: $44.95
>
> Availability: This title usually ships within 2-3 days.
>
> Paperback - 475 pages Bk&Disk edition (August 1999)
> Cambridge Univ Pr (Short); ISBN: 0521646456 ; Dimensions
> (in inches): 0.96 x 10.02 x 7.04
> Other Editions: Hardcover
> [...]
> Book Description
> This innovative book provides a stimulating introduction
> to analog electronics by analyzing the design and
> construction of a radio transceiver.

3015. Helipots

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-22 00:00:00 UTC
From: JW <jdwalton@home.com>
Message-ID: <37E84C41.851B34C9@home.com>
Source record: 66834

I've picked up a piece of surplus instrumentation gear (seismographic) which has 2 Beckman 50K multi-turn Helipots. The knobs have what appears to be 1/32" allen screws - that's no problem since I have the right allen wrench. However, how does one remove a Helipot from a front panel?. Any advice would be appreciated.

Jack
exWA8PZL

3016. FA HR2600 PRESIDENT 10M TRANSCEIVER RADIO

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-23 00:00:00 UTC
From: Robert Parker <rparker@sprint.ca>
Message-ID: <qQzG3.4076$XC4.225830@newscontent-01.sprint.ca>
Source record: 66685

HR2600 PRESIDENT 10M TRANSCEIVER RADIO NO RES
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=167448059
Auction ends on the 26th of September.
A Great Radio in excellent condition.

3017. Re: I need help with a KPC-3

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-23 00:00:00 UTC
From: mcalhoun@ksu.edu
Message-ID: <7segap$fuf@unix2.cc.ksu.edu>
Source record: 66686
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

```
>....[snip]....
>3. You need a 12v, 300-500 ma power supply.

The manual says the KPC-3 runs on 6 to 25 volts at less than 40 ma;
if you turn off some of the LED's, it'll run on a 9-volt battery
at about 15 ma!

>....[snip]....

--Myron.
--
# Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
# PhD EE (Professor Emeritus) "Barbershop" tenor. CDL(PTX) W0PBV (785) 539-4448
# NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)
```

3018. Where can I buy a good 4 gang 250k pot??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-23 00:00:00 UTC
From: bierbier@my-deja.com
Message-ID: <7sc5phbsn1@nnrp1.deja.com>
Source record: 66766

I need to know if anybody has any idea where I can buy a 4 gang 250k pot. It is for an integrated amp I have and I am tired of spraying the pot HI HI. I will determine the wattage of it when I open the amp up and see how much space I have. Any help appreciated.

Thanks,

Gary

bierbier@netzero.net

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

3019. Re: UHF FM using Single Chip (MC13175)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-23 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7sdk16cnh1@nnrp1.deja.com>
Source record: 66767

In article <4_cG3.8$EG6.106012@firenze.visi.net>,
"Moses Clark" <itek@sybercom.net> wrote:

> I am thinking to build low power UHF radio using MC13175.
> Has anyone had a chance to evaluate this chip.

It's an interesting chip - why not build the radio yourself
and report back?
--
Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte
Satellite: VA3SFL on UO-22, KO-23, KO-25

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

3020. Re: Ideas for Ladder line separator/insulators

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-23 00:00:00 UTC
From: ctmiles@flash.net
Message-ID: <edzpN2aD+TlVGeqQzfReGjQPtVdY@4ax.com>
Source record: 66768

On Wed, 22 Sep 1999 01:02:49 -0500, "James Ek"
<JIM-EK@worldnet.att.net> wrote to :

Go to the dollar store or a garage sale and buy one of
those hard plastic cutting boards. Cut the ladders to length
and width desired then drill holes for pass through wiring.

Chuck
ctmiles@flash.net

>I'm looking for some ideas.
>
>I want to do some experimenting with 2 meter antennas and need quite a bit
>of ladder line. Since this is just a short term experiment and will not be
>permanent, I really don't want to be spending .15 to .20 a foot on
>commercial ladder line.
>
>Consequently looking for a cheap insulator/separator ideas so I can make my
>own ladder line.
>
>Thanks,
>Jim
>
>

3021. SSB Pixie? Club Project

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-23 00:00:00 UTC
From: Dr Mike Addlesee <maddlesee@uk.research.att.com>
Message-ID: <37ea0148.0@nnrp1.news.uk.psi.net>
Source record: 66769

The Cambridge & District Amateur Radio club are on the lookout for club project ideas. Ideally things that can be built in an evening and are low cost and low parts count.

Does anyone know of any simple QRP designs along the lines of the pixie2, but for SSB use.

--
Dr Mike Addlesee M0BLP
AT&T Laboratories Cambridge

3022. free rds software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-23 00:00:00 UTC
From: ultra <telefront@hotmail.com>
Message-ID: <7sd17u$2id$1@news.worldonline.nl>
Source record: 66770

Free radio data system encoder software
This software supports PI,DI,PS,PTY,RT,CT,TP,TA and M/S.
The PS feature is dynamic allowing up to 64 different names!!!!!

Download here:

http://www.fortunecity.com/tinpan/albarn/748/

enjoy

3023. Re: Sex Photo from 12 to 16 years old! 78

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-23 00:00:00 UTC
From: kc8jbo <kc8jbo@email.msn.com>
Message-ID: <O7Ed#9bB$GA.124@cpmsnbbsa02>
Source record: 66771
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Dan wrote in message <7sc2v4$l13$1@news.xmission.com>...
>If you've seen one naked female, you've seen them all!
>Sure, there are fat ones and skinny ones, dark ones and white ones, but they
>all have the same basic equipment.
>
>Sort of like eating the same dinner everyday for a month, you just get tired
>of it.
>
>Let's fire up a radio or better yet, let's go dragracing!
>
>73 Dan / N7WPD

Yeah, really. Grunt sent me a whiny e-mail detailing how he received his first license and subsequent upgrades....he posted a picture of his bucktoothed, herpes lipped XYL with the kiddie porn he likes and was given his licenses.

3024. Re: SSB Pixie? Club Project

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-23 00:00:00 UTC
From: milo17@aol.com
Message-ID: <19990923092308.29407.00000191@ng-cc1.aol.com>
Source record: 66772

Why not try the VE7GC "wee Willie" 80 m transceiver ? It is a DSB transceiver that looks easy enough. Info/schematic can be found at http://qrp.pops.net/qrp/willy.htm

Its going to be my next project. Good luck ! Mike N2JVT

3025. Decibel 'References'.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-23 00:00:00 UTC
From: Terry Sanford <tsanford@roadrunner.nf.net>
Message-ID: <37EA2835.3D53@roadrunner.nf.net>
Source record: 66773

I hope this is not too far off the subject but can anyone direct me to a handy reference for 'decibels'.

Decibels (dbs.) are of course one tenth of a 'Bel'; which are named after Sir Alexandr Graham etc. and are the logarithmic ratio of two powers. For example if you double the power (times 2) and you take the logarithm of the number two (2) you get 0.30102999 etc. Bel./ and that is 3.012 decibels.

This leads to the well known saying "doubling the power is 3 decibels". Oops, sorry 'PLUS' 3 decibels!

These days one hears such things as 113 db. can damage your hearing, OR; interior noise is 70 db.;
But in reference to what?

I recall the following;
1) dbm. in reference to ONE MILLIWATT; commonly used in analog telecommunications.
2) dbw. in reference to ONE WATT; sometimess used by radio amateurs?
3) dba. (decibel adjusted); a 'weighted' measurement sometimes used in reference to a a level somewhere down around -90dbm. to measure circuit noise levels.
4) receiver noise figure = 7db (say).
5) dbrnc. (decibel reference noise .....) recall this as an 'unweighted' circuit noise measurement with a 'floor' down around -93dbm.
6) dbs. in reference to 'aspl' (which I understand means audio sound pressure level at a certain distance from the transducer/speaker) with the heavy audio crowd.
7) Also can understand that a radio propogation path can "have a a LOSS of 110dbs." In other words a signal can start out at a level of, say, +30dbm due to transmitter power output, antenna gain and transmission line loss and arrive at the other end of the propogation path 110dbs. weaker. That is at a LEVEL of -80dbm.

So if someone says to me that's +12dbm I have no problem visualizing a signal etc. that is 16 times stronger than one milliwatt!

But if someone says they can get 110db from their car audio sound system (and presuming they mean +110db?) I'm wondering 110db in reference to what (Or watt? If you'll excuse the pun).

Anyone care to comment, or enlighten or direct to appropriate source.

3026. Re: Converting $20 Electro Mavin GPS unit's uP to NMEA output

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-23 00:00:00 UTC
From: The Ronneys <pronney@sprynet.com>
Message-ID: <7sdbn8evl1@nntp2.atl.mindspring.net>
Source record: 66774

Hi all.
Laszlo I. Morocz wrote in message ...
>Where did you tap off the signal from receiver module?

I got the data as it exits the receiver module itself. Here is the pinout for it:

J201 Connections
1
2
3
4
5 GND
6 Backup battery +
7 +5 VDC
8 GND
9 Data from RX (TTL level, not RS232)
10 Data to RX (TTL level, not RS232)
11
12
13
14

Other pins are also used but I don't know what they are.

It is not really necessary to implement bi-directional communication with the receiver module as it defaults on power up to sending the C3C3, C4C4,CACA and CBCB messages once a second. This info is sufficient. The other commands and responses don't seem to be required to me for "normal" operation.

The data that comes out from the receiver module exactly matches the "programming spec" PDF document on the Electro Mavin website, at least as far as I have looked.
Hope that's helpful

3027. Re: Decibel 'References'.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-23 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <37EA7A89.C0D35DAC@bellsouth.net>
Source record: 66775

Terry Sanford wrote:
> These days one hears such things as 113 db. can damage your hearing, OR;
> interior noise is 70 db.;
> But in reference to what?

Bels were originally developed as a measurement of sound intensity,
their application to radio signals came later. If I recall properly
(and this deserves double-checking) 0db was defined as the threshold of
audibility. (whose ears? I have no idea. Presumably it has since been
redefined in some other more reproducible terms.)
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

3028. Re: Converting $20 Electro Mavin GPS unit's uP to NMEA output

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-23 00:00:00 UTC
From: The Ronneys <pronney@sprynet.com>
Message-ID: <7sdd3admu1@nntp2.atl.mindspring.net>
Source record: 66776

Hi again.

As a further reply,,,,
Laszlo I. Morocz wrote in message ...
>OK John, that's where my tap comes from, too. Just wanted to verify that
>that's the GPS engine directly. I used Time Laren's mod (very nicely
>documented, BTW) to get the level-converted data. However, it does not
match
>the programming manual exactly. Close enough that I was able to write my
own
>driver/navigation program, but there are significant differences. For
>example, the 3 bytes in front of the validity code (pg 34) match nothing in
>the documentation. The first byte isn't even mentioned, while the 2nd
varies
>between 0xBF and 0xB0 (depending on the number of satellites) and the 3rd
>byte ranges from 0x28 through 0x2A inclusive. The manual documents the 2nd
&
>3rd bytes as a control code with values of CACA (wonder if that's a
>hint?).The rest of the bytes are pretty much as advertised. So I was hoping
>that a different tap point would match the manual better, which is what
>Martin, WB6YMI, seemed to be implying.

I get the C3C3, C4C4,CACA and CBCB messages as advertised. I really don't
think that you are tapping the same place that I am if you don't get them.
I picked up the data off the small SMT filter as it exits the receiver
module and before it reaches the mainboard's microprocessor. I haven't
implemented sending to the receiver module as I don't have the need for the
data in any of the other messages.

>The biggest hurdle I've found to NMEA output has been the neanderthal
>attiutude of NMEA. Instead of encouraging people to use their standard by
>publishing it on the web, they want $65 a pop for it. The only NMEA-related
>things out there on the web for free are a couple of example string
formats,
>nothing about the protocol dynamics at all. Guess they're taking Microsoft
>lessons from Bill.

I noticed the same thing but, for an organization developing a product,
$65.00 is virtually free. Go out and price, for example, the SCSI specs.
I'd view the $65.00 as a membership fee into the "club." I don't think they
are trying to hold back guys like us. Furthermore, I seems that only the
GGA, GSA,GSV NMEA sentences are required and these are 'findable' on the
web.

>a. cobbling up some floating point code, a sine, cosine and arc-cosine
>routine and some glue;

Why floating point and trig functions? What would you be calculating? My code uses 40 bit fixed point arithmetic to convert hex lat, longitude to decimal. Not good enough?

As for me, I'd ditch the mainboard processor and do the conversion in the target system, anyway. Can't the serial port be intercepted, converted then faked (as though it came in a serial port) to the target program?
Then you don't incurr the added serial line delay. (I won't go into my tirade again, you probably have read it on previous posts on the $20.00 GPS)

73's
Martin Ronney, WB6YMI

3029. Re: Decibel 'References'.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-23 00:00:00 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <GzrqN8KEP1K0cACtrhhPiv6dtx6D@4ax.com>
Source record: 66777

On Thu, 23 Sep 1999 10:46:37 -0230, Terry Sanford
<tsanford@roadrunner.nf.net> wrote:

>But if someone says they can get 110db from their car audio sound system
>(and presuming they mean +110db?) I'm wondering 110db in reference to
>what (Or watt? If you'll excuse the pun).

In audio, the 0 dB reference level is usually 20 ï¿½Pa sound pressure or
1 pW/mï¿½ sound intensity, which happens to be coincident (within a dB
or two) with the threshold of hearing for an average human around 1000
Hz. Thus, the normal atmospheric pressure (101.3 kPa) would correspond
to about 194 dB and 120 dB would be 1 W/mï¿½.

Paul

3030. WANT! Globe King 400 RF DECKS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-23 00:00:00 UTC
From: stevem <wb9tow@egr.msu.edu>
Message-ID: <37EA40E5.E9355EC3@egr.msu.edu>
Source record: 66778

Looking for Globe King 400 RF decks. ANY CONDITION!

Also consider GK 500 or 500A....Millen 812 rf decks, etc...
73 steve

3031. Re: Converting $20 Electro Mavin GPS unit's uP to NMEA output

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-23 00:00:00 UTC
From: johnmel@kenco.uk.sun.com
Message-ID: <7scl0h$g7v$1@new-usenet.uk.sun.com>
Source record: 66779

My analysis of the data stream from the receiver is:

1. a 'packet' of data is sent every second

2. the packet uses 0x10 as an escape character

3. the packet begins with 0x10 followed by 0xbf when there are no satellites being decoded and the data is being generated from the battery backed up information.

4. the packet begins with 0x10 followed by 0xb0 when 1 or more satellites are decoded.

5. the third byte is the length of the packet excluding the checksum byte and the trailer (0x10 0x03).

6. the length varies because if the data contains 0x10 it is escaped with with another 0x10 (which will happen at lease with every record that is sent when the time is 10 seconds after the minute because the date and time are in BCD).

7. the data (after removing escaped sequences, header, checksum and trailer should be 40 bytes and corresponds to the data in the CACA message described in the software document.

Note that if you pull the cable connecting the receiver to the main board, you will disconnect the 3.5v battery backup and the receiver will be reset to it's defaults with a lat/lon in Japan and a date/time of 00/01/01 00:00:00. It will then take a while to get a fix again.

So far, I have not tried to send a command to the device, and I have not looked at the other serial output which is for the display board.

-- John Melton n6lyt/g0orx

```
((
(|~~|
`--'
JAVA
```

3032. Re: Decibel 'References'.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-23 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <37EA665B.263@ix.netcom.com>
Source record: 66780

Terry Sanford wrote:
>
> I hope this is not too far off the subject but can anyone direct me to a
> handy reference for 'decibels'.
>
> Anyone care to comment, or enlighten or direct to appropriate source.

Terry see URL:
http://www.quietnoise.com/facts.htm
AND
http://calgary.shaw.wave.ca/~rboudrea/sound4.html
AND
http://carini.physics.indiana.edu/P105S98/Pressure-and-loudness.html
A Snip:

Auditory nerves can be permanently damaged from prolonged exposure at 90
dB

120 dB can cause pain and ringing in the ear

Sharp pain and extensive destruction of the auditory nerves occurs at
140 dB

At 150 - 160 dB massive destruction of the auditory nerves and
persistent ringing inthe ears will occur immediately
--
73 From Rod In San Diego

AC6V INDEX TO DX AND HAM RADIO
FEATURING 88 PAGES, 400 INDEXED TOPICS, AND 3000 LINKS
Over 455,000 visits on the counter
http://www.ac6v.com/ -- Home Page & Index
http://www.ac6v.com/pagedx.html -- DX Reference Pages

3033. TRF chip needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-23 00:00:00 UTC
From: artky1k@northlandlink.com
Message-ID: <37ea7110.25702595@news.tds.net>
Source record: 66781

Hi Everyone,

I need a source for a TRF receiver chip.

The numbers are ZN414, ZN416 or MK484. These are 3 terminal chips
that run on 1.8 volts @ low current and are usable from 30 khz through
1.8 Mhz.

I have no other information.

If anyone knows of a source for these chips or an equiv type, I'd
appreciate knowing too.

email response preferred-

Thanks,

Art

3034. Re: Help: Modifying comp.switching power supply to 12V 20A??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-23 00:00:00 UTC
From: Alan Ralph <G8xlh@tesco.net>
Message-ID: <7se8mdlcb1@epos.tesco.net>
Source record: 66782

Take a look at http://antennex.com/preview/archive3/powers.htm

regards
Alan

Gerard van Antwerpen wrote in message <37EA8AE4.9269E2E4@cuddon.co.nz>...
>I'm looking for any ideas on how to modify a standard computer power
>supply (switching) to a usefull 12V 20 Amp. unit. Must reasonably easy
>since there is already 12V on these things and they are grunty enough.
>
>Any body heard or seen any descriptions for this???
>Thanks
>Gerard ZL2GVA
>

3035. Re: Decibel 'References'.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-23 00:00:00 UTC
From: alforo <alforo@megisnet.com>
Message-ID: <oXyG3.2110$qX1.180633@news.corecomm.net>
Source record: 66783

Doug Smith wrote in message <37EA7A89.C0D35DAC@bellsouth.net>...
>Terry Sanford wrote:
>> These days one hears such things as 113 db. can damage your hearing, OR;
>> interior noise is 70 db.;
>> But in reference to what?
>
>Bels were originally developed as a measurement of sound intensity,
>their application to radio signals came later. If I recall properly
>(and this deserves double-checking) 0db was defined as the threshold of
>audibility. (whose ears? I have no idea. Presumably it has since been
>redefined in some other more reproducible terms.)
>--
>Doug Smith W9WI
>Pleasant View (Nashville), TN EM66
>http://personal.bellsouth.net/~w9wi
>

0 dB sound reference level does indeed correspond to the threshold of hearing exhibited by young people in the audio frequency range of 1,000 to 4,000 hertz. I do not know who made this determination or how it was made but I would not be surprised if Bell Labs had something to do with way back when. However, this is conjecture on my part.

0 dB has a more technical definition. It is the sound (air) pressure level of .0002 dyne/square centimeter. This is the same as a power of 10 to the minus 16th power and is expressed in watts per square centimeter.

At this same threshold of hearing, the molecular air displacement causing the sound at a frequency of 100 hertz is about 1/10,000,000 of an inch.

At 1,000 hertz, the molecular air displacement is about one tenth of the above.

While at a frequency of 3 to 4 kilohertz, the air displacement is about one tenth the diameter of an air molecule! Amazing

While interesting, sound level are not determined by air displacements but by sound pressure as explained above.

73, AL

3036. FS: Tubes, Books, & Microwave Components

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-23 00:00:00 UTC
From: MURRAY PASTERNACK <M.PASTERNACK@prodigy.net>
Message-ID: <7sefpv$21jo$1@newssvr03-int.news.prodigy.com>
Source record: 66784
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Please e-mail to m.pasternack@prodigy.net to receive a 10 page list of
tubes, books, & microwave components accumulated over the past 44 years.
Murray

3037. Help: Modifying comp.switching power supply to 12V 20A??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-24 00:00:00 UTC
From: Gerard van Antwerpen <design@cuddon.co.nz>
Message-ID: <37EA8AE4.9269E2E4@cuddon.co.nz>
Source record: 66687

I'm looking for any ideas on how to modify a standard computer power supply (switching) to a usefull 12V 20 Amp. unit. Must reasonably easy since there is already 12V on these things and they are grunty enough.

Any body heard or seen any descriptions for this???
Thanks
Gerard ZL2GVA

3038. Re: TRF chip needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-24 00:00:00 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <7sfd2clur1@nnrp1.deja.com>
Source record: 66688

In article <37ea7110.25702595@news.tds.net>,
artky1k@northlandlink.com wrote:
> Hi Everyone,
>
> I need a source for a TRF receiver chip.
>
> The numbers are ZN414, ZN416 or MK484. These are 3 terminal chips
> that run on 1.8 volts @ low current and are usable from 30 khz through
> 1.8 Mhz.
>
> I have no other information.
>
> If anyone knows of a source for these chips or an equiv type, I'd
> appreciate knowing too.
The ZN chips were made by Ferranti (UK), who were taken over by GPS,
who discontinued their production some years ago. I think I've seen
them on sale from surplus outlets from time to time.

73, Leon
--
Leon Heller, G1HSM
Tel (Mobile): 079 9098 1221 (Work): 01327 357824
Email: leon_heller@hotmail.com
Web: http://www.geocities.com/SiliconValley/Code/1835

Sent via Deja.com http://www.deja.com/
Before you buy.

3039. Re: Help: Modifying comp.switching power supply to 12V 20A??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-24 00:00:00 UTC
From: Murray Kelly <mkelly@powerup.com.au>
Message-ID: <37EAD684.3409@powerup.com.au>
Source record: 66689

Gerard van Antwerpen wrote:
>
> I'm looking for any ideas on how to modify a standard computer power
> supply (switching) to a usefull 12V 20 Amp. unit. Must reasonably easy
> since there is already 12V on these things and they are grunty enough.
>
> Any body heard or seen any descriptions for this???
> Thanks
> Gerard ZL2GVA

Several articles for doing just that have been in EA and Radio
& Communications earlier this year. Essentially they start off with
230 or greater SMPS and rewind the transformer for 14V instead of
5V.

I am collecting old power supplies! :-) At the very least you will
learn a lot.
--
****
* Murray Kelly vk4aok mkelly@powerup.com.au *
* 29 Molonga Ter. / Graceville/ QLD. 4075/ Australia *
* ph/fax Intl+ 61 7 3379 3307 *
****

3040. Ham Radio and SWL URL

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-24 00:00:00 UTC
From: nw7us@hfradio.removethispart.org
Message-ID: <%5IG3.412$1C.7998@sea-read.news.verio.net>
Source record: 66690
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Howdy,

New content is being added this week. Check out the SWL links, the DX news, or the Propagation Center.

I've moved the QSL and Callbook section off of the main page and onto a page dedicated to just this information. And I've added a lot more to this section.

So, come on by and check out my non-commercial SWLing/Ham Radio website. The URL is http://hfradio.org and features DX information, including QSL Route/Manager Lookups and Callbook Lookups; a Propagation Center including my eAlert service (allows you to sign up with your email address. Then the eAlert system will send you email propagation reports. I use this with my pager.); Equidistant Azimuth Map software (allows you to create maps of any QTH); Swap and Shop; Bookstore (I've hand-picked over a thousand book titles on radio, etc.); Free website space for YOU to create your own Ham or SWL site, and there's more. Easy to navigate. Open for suggestions.

If you feel up to it, after looking around the site, drop me a note (you'll find my address on the site) and share your thoughts.

73!

--

: World-Wide Communications via Amateur Radio : 122.93W : 47.67N :
: 10x56526 : CW/SSB - DX hunter : Brinnon, WA : Code Warrior #60 :
: visit http://hfradio.org/ :

3041. Wanted: dead 51J-4 mechanical filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-24 00:00:00 UTC
From: Bob <XYZ_p15218@flash.net>
Message-ID: <01bf0689$71808ec0$bf09d7d8@default>
Source record: 66691
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Hello,
I need one Collins 51J-4 mechanical filter for parts to fix my 1.4kHz filter...it has an open coil. If you have one laying around with at least one good coil (should be about 20 Ohms DC), I'll be glad to pay shipping costs. I think I can use any of the 51J-4 bandwidths to repair mine as they all have the same DC resistance and presumably the same coil bobbin.
Thanks & 73
Bob
KB8TL

--------------remove the XYZ_ from the e-mail address-------------
--------------remove the XYZ_ from the e-mail address-------------
------------------------REMOVE THE XYZ_------------------------
---------e-mail to XYZ_P15218@FLASH.NET remove the XYZ_
=================REMOVE THE XYZ_==============================

root@localhost
postmaster@localhost
admin@localhost
abuse@localhost
postmaster@127.0.0.1

3042. What does 3/4 of digit mean?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-24 00:00:00 UTC
From: jhoyos@hoth.gcn.ou.EDU
Message-ID: <19990924155628250.AAA853.171@DEP_FISICA.ucaldas.edu.co>
Source record: 66692

Hi listers:

For digital instruments, what's 3/4 of digit?

Thanks in advance.

Jorge Hoyos

3043. L.O.S.A Contribution Form

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-24 00:00:00 UTC
From: cjX@hth.com
Message-ID: <37ebaa26.63436665@news.sverige.net>
Source record: 66693
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

```
List Of Stamp Applications (L.O.S.A for short)
==============================================

If you have done something (big or small) with the BASIC Stamp
that you are willing to tell others please use the form below and
write a short description, nothing fancy is needed just a simple
explanation. If you have source code to share that's even better but
it's not necessary.

Then e-mail the form to:

cj@hth.com

With the following as the subject:

L.O.S.A Contribution

Or you could point your Web-browser to the following URL and fill in
the L.O.S.A form on the Web-page...

http://www.hth.com/losa.htm

The latest version of L.O.S.A is always available at the above
mentioned both in ASCII and in ZIP-file format for easy download.
An index of L.O.S.A is posted to the following mailing lists and
news groups, I will update it approx. once a month.

Mailing lists:

BASIC Stamp Mailing List

News groups:

comp.robotics.misc
comp.home.automation
sci.electronics
sci.electronics.misc
rec.radio.amateur.homebrew

FTP-site:

ftp://ftp.parallaxinc.com/pub/text/losa.txt

You can also find the latest version on the following URL...

http://www.hth.com/losa.htm

[--- cut ---]
```

```
================================================================================
- L.O.S.A Contribution Form -
================================================================================
New Contribution [ ] Update [ ]
--------------------------------------------------------------------------------

Title :
Author: Date:

E-mail: (optional)
--------------------------------------------------------------------------------

Stamp model : BASIC Stamp/BS1-IC/BS2-IC/BS2SX-IC
Code available: YES/NO
Filename : (optional)
URL : (optional)
--------------------------------------------------------------------------------
Description : (5-50 rows describing your application)

================================================================================

[--- cut ---]

Regards,

/Christer

[NOTE: Clear the "X" from my e-mail address if you want to e-mail me]

-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
Send and receive serial data over the power lines... For more info
about the PLM-24 Power Line Modem go to http://www.hth.com/plm-24/
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
```

3044. Re: Sex Photo from 12 to 16 years old! 78

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-24 00:00:00 UTC
From: KC8JBO <kc8jbo@my-deja.com>
Message-ID: <7sgvh1rmj1@nnrp1.deja.com>
Source record: 66694
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <7sb7tfmeg1@nnrp1.deja.com>,
getback <getback@my-deja.com> wrote:
> In article <#1nyNpIB$GA.338@cpmsnbbsa05>,
> "kc8jbo" <kc8jbo@email.msn.com> wrote:
> > stlpor@ghg.com wrote in message
> <7ropap$m2u$3978@newsgate.elender.hu>...
> > >SEX PHOTO FROM 12 to 16 YEARS OLD!
> > >hvktnddjvzylzmylzotdzupkmulpryuzetgmqwmjivrvewwencxpzmg
> >
> > GetbacKKK posts his porn to the internet again...
> > If there is any "PORN" people on here , it is you "Slope Head". You
> are always talking and posting about homosexuals and other
> pornographic subjects. You must be involved with the "GAY MOVEMENT".

Poor polly, his first wife and his daughter comitted suicide when they
found out Georgey Ashley is gay........

--
73 de KC8JBO

Sent via Deja.com http://www.deja.com/
Before you buy.

3045. Re: Why narrow FM instead of AM on VHF?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-24 00:00:00 UTC
From: "Christopher (Chris) W. Boone" <cboone@jacor.com>
Message-ID: <37EBD0D1.AC380867@jacor.com>
Source record: 66695

Dave a couple of minor corrections:

Dave Shrader wrote:
> Is it?? Pi / 2 = ~ 1.57 to 1 <use radians not degrees>
>
> M.I. for typical 2 meter is much greater than 1.57 to 1. Consider the
> following:
>
> Assume a bandwidth of 5 kHz in your 2 meter FM rig.
> Assume your repeater uses a tone of 100 Hz for access, finally assume
> your tone encoder is set for 10% 'modulation level'.
>
> Your 100 Hz tone at 10% will cause a 500 Hz deviation in the output.
> (deviation ratio of 10%)
>
> However the Modulation Index is the bandwidth (5 kHz divided by the
> frequency of the modulating signal e.g. 100 Hz, or 50 to 1).

MI is equal to DEVIATION (not bandwidth)/ highest audio
freq used in modulation.....so the typical MI of NBFM
is 5/3 or 1.666...still more than Pi/2 though.

Chris
WB5ITT

3046. Re: Help: Modifying comp.switching power supply to 12V 20A??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-24 00:00:00 UTC
From: JW <jdwalton@home.com>
Message-ID: <37EBFC45.DDBBCD9A@home.com>
Source record: 66696

Simple question: I picked up an Acopian power supply surplus (it was on a burned out piece of seismographic equipment) From the catalog it would appear to be 0 - 60V, 250ma. The "+ output" is connected to the "+ sense" via a jumper, there are "- output" and a "- sense" terminal also. I guess that the "- sense" should feed an error signal back to the supply. How? Jack

Murray Kelly wrote:

> Gerard van Antwerpen wrote:
> >
> > I'm looking for any ideas on how to modify a standard computer power
> > supply (switching) to a usefull 12V 20 Amp. unit. Must reasonably easy
> > since there is already 12V on these things and they are grunty enough.
> >
> > Any body heard or seen any descriptions for this???
> > Thanks
> > Gerard ZL2GVA
>
> Several articles for doing just that have been in EA and Radio
> & Communications earlier this year. Essentially they start off with
> 230 or greater SMPS and rewind the transformer for 14V instead of
> 5V.
>
> I am collecting old power supplies! :-) At the very least you will
> learn a lot.
> --
> **********
> * Murray Kelly vk4aok mkelly@powerup.com.au *
> * 29 Molonga Ter. / Graceville/ QLD. 4075/ Australia *
> * ph/fax Intl+ 61 7 3379 3307 *
> **********

3047. Re: Looking for CK722 projects/Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-24 00:00:00 UTC
From: Dick Grindley <Dick@langwang.demon.co.uk>
Message-ID: <VP3V5GAK4z63EwH+@langwang.demon.co.uk>
Source record: 66697

I remember a simple 1 or 2 CK722 home brew SW Rx circuit in a copy of a
US Scouting magazine my US pen-friend sent me in the early '60s, the
local radio shop (remember radio shops ??) wasn't much help when I took
it in - but we were out in the sticks (even by UK standards) in those
days. If anyone has that circuit in their archives I wouldn't mind a
copy for old times sakes - I think the magazine was American Scouting or
something like that.
Sorry if this has got a bit out of thread.
>Yes, Brad there are small transistors inside the CK722 metal shell. You'll
>find photos and all the details on my CK722 webpage.
>
>http://www.geocities.com/~ck722transistor
>
>Thanks,
>Jack

--
Dick G.
Speak well o' pipers, yir faither was a fiddler

3048. Re: What does 3/4 of digit mean?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-24 00:00:00 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <37EBC6DA.7461779A@dialpoint.net>
Source record: 66698

Don't recall seeing that but the 1/2 digit usually ment the digit to
the far left was either a blank or a 1.

jhoyos@hoth.gcn.ou.EDU wrote:
>
> Hi listers:
>
> For digital instruments, what's 3/4 of digit?
>
> Thanks in advance.
>
> Jorge Hoyos

3049. Re: Help: Modifying comp.switching power supply to 12V 20A??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-24 00:00:00 UTC
From: "Thomas C. Sefranek" <tcs@cmcorp.com>
Message-ID: <37EBEC35.78F890B3@cmcorp.com>
Source record: 66699

JW wrote:

> Simple question: I picked up an Acopian power supply surplus (it was on a
> burned out piece of seismographic equipment) From the catalog it would
> appear to be 0 - 60V, 250ma. The "+ output" is connected to the "+ sense"
> via a jumper, there are "- output" and a "- sense" terminal also. I guess
> that the "- sense" should feed an error signal back to the supply. How?
> Jack
>

Sense terminals are used to compensate for wire distribution loss.

You can just tie them to the appropriate (Polarity) outputs.
--
Thomas C. Sefranek WA1RHP
ARRL Instructor, Technical Specialist, VE Contact.
http://www.harvardrepeater.org
http://hamradio.cmcorp.com/inventory/Inventory.html

3050. video pre-emphasis

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-24 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@bellsouth.net>
Message-ID: <ueUG3.694$cQ3.12190@news2.mia>
Source record: 66700
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad,sci.electronics.design

Hi all,

Can anyone tell me about the existing conventions (or standards) concerning pre-emphasis for NTSC video signals?

Thanks,
Bert Douglas

3051. Re: What does 3/4 of digit mean?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-24 00:00:00 UTC
From: davem@cs.ubc.ca
Message-ID: <7sho9slnn1@newcastle.cs.ubc.ca>
Source record: 66701

jhoyos@hoth.gcn.ou.edu writes:

>For digital instruments, what's 3/4 of digit?

A somewhat ambiguous convention for naming.

If you have an instrument that can read 000-999, that's pretty clearly
3 digits. If it will read up to 9999, that's 4 digits. But what
do you call something that reads 0-1999?

I would call that 3.3 digits (log10(2000)) but someone somewhere
decided to call a 2000-count range "3 1/2 digits" instead.

But what if you have a device that reads from zero to 3000? 3200?
4000? 4400? You need another number, larger than 3 1/2, but smaller
than 4, to describe meters that have more than 2000 but less than 10000
possible readings, so someone uses 3 3/4. But which of these does
3 3/4 actually mean?

It becomes silly pretty fast.

Dave

3052. Re: Sex Photo from 12 to 16 years old! 78

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-25 00:00:00 UTC
From: doublewide@my-deja.com
Message-ID: <7shhp7$7oq$1@nnrp1.deja.com>
Source record: 66702
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <7sgvh1rmj1@nnrp1.deja.com>,
KC8JBO <kc8jbo@my-deja.com> wrote:
> In article <7sb7tfmeg1@nnrp1.deja.com>,
> getback <getback@my-deja.com> wrote:
> > In article <#1nyNpIB$GA.338@cpmsnbbsa05>,
> > "kc8jbo" <kc8jbo@email.msn.com> wrote:
> > > stlpor@ghg.com wrote in message
> > <7ropap$m2u$3978@newsgate.elender.hu>...
> > > >SEX PHOTO FROM 12 to 16 YEARS OLD!
> > > >hvktnddjvzylzmylzotdzupkmulpryuzetgmqwmjivrvewwencxpzmg
> > >
> > > GetbacKKK posts his porn to the internet again...
> > > If there is any "PORN" people on here , it is you "Slope Head".
You
> > are always talking and posting about homosexuals and other
> > pornographic subjects. You must be involved with the "GAY MOVEMENT".
>
> Poor polly, his first wife and his daughter comitted suicide when they
> found out Georgey Ashley is gay........
>
> --
> 73 de KC8JBO
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.
> slophead you are a low life egg sucking dog . you have taken it to
far this time. the war is NOW own. Justin Time

Sent via Deja.com http://www.deja.com/
Before you buy.

3053. Re: Morse Clock

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-25 00:00:00 UTC
From: dana <dana@randomc.com>
Message-ID: <Pine.GSO.4.10.9909242141370.21971-100000@cluster2>
Source record: 66703

there is allready an swr metter that will give the swr in morse code, but
i am blind, and waiting for a talking freq counter.
i know that it could be done, but if it is for the blind, it will be
costly, because there aren't that many blind people. thats the way it
allways is. when they get screen read programs that work really well, they
charge lots of many for it. if i had a real good programmer, i would
put jfw, and all theese people out of business, and would sell a product
that would really work well.

On Thu, 9 Sep 1999, Bob Lewis wrote:

> Date: Thu, 09 Sep 1999 08:15:25 -0400
> From: Bob Lewis <aa4pb@erols.com>
> Newsgroups: rec.radio.amateur.homebrew
> Subject: Re: Morse Clock
>
> You have my permission :-)
>
> Bob Kimbrell wrote:
> >
> > I would like to build a clock that sends the time in Morse Code at the
> > touch of a button. I think this would be a great feature for some of the
> > qrp kits to add. It would be a boon to blind hams as well.
> >
> > 73, Bob
> > KD7AHO Kingman, Arizona
>
>

3054. FA Rare vintage RME VHF 152 converter going real cheap

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-25 00:00:00 UTC
From: Robert Parker <rparker@sprint.ca>
Message-ID: <6dYG3.627$xJ4.33949@newscontent-01.sprint.ca>
Source record: 66704

FA Rare vintage RME VHF 152 converter going real cheap
Rare vintage RME converter for auction with 7MHZ IF for conversion to
10m,2m,and 6m.
End of auction is the 26th of sept. So far going very cheap so get it at a
real good price!
I would like to see this excellent piece of equipment go to someonw who will
use it and not try and resell
it.
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=167498005

3055. Re: Morse Clock

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-25 00:00:00 UTC
From: maddog@io.com
Message-ID: <37ec53cf.1636178@news.io.com>
Source record: 66705

On Sat, 25 Sep 1999 01:52:34 GMT, dana <dana@randomc.com> wrote:

>there is allready an swr metter that will give the swr in morse code, but
>i am blind, and waiting for a talking freq counter.
>i know that it could be done, but if it is for the blind, it will be
>costly, because there aren't that many blind people. thats the way it
>allways is.

Well, Dana, sometimes it's nice to be wrong. Check out the "FreqMite"
Morse Frequency Counter by Dave Benson, NN1G for just $20:

http://www.smallwonderlabs.com/

I've built two so far and they are wonderful. I put one in every
homebrew project I build. The resolution is 1 KHz and the accuracy is
only +/- 1.5 KHz, but it will measure to 20 MHz and it's quality/price
quotient is just right. It serves my needs just great!

73,
monty

3056. Re: What does 3/4 of digit mean?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-25 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <37ECA1A0.9E657E09@bellsouth.net>
Source record: 66706

Ralph Mowery wrote:
> Don't recall seeing that but the 1/2 digit usually ment the digit to
> the far left was either a blank or a 1.
>
> jhoyos@hoth.gcn.ou.EDU wrote:
> > For digital instruments, what's 3/4 of digit?

Doesn't 3/4 mean the first digit can be 0, 1, or 2? (but not 3-9)
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

Due to excessive spam, messages
with "angelfire.com" in the
body are subject to automatic
deletion from my mailbox.

3057. Need help with product detector mod

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-25 00:00:00 UTC
From: Bob <XYZ_p15218@flash.net>
Message-ID: <01bf0745$a11f8ac0$a309d7d8@default>
Source record: 66707
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave

Hi, anyone know of any magazine articles on updating an older radio with a product detector or syncronous detector? Radios in mind are a SX-28 and a 51J-4.
Thanks
Bob
KB8TL
--------------remove the XYZ_ from the e-mail address-------------
--------------remove the XYZ_ from the e-mail address-------------
------------------------REMOVE THE XYZ_------------------------
---------e-mail to XYZ_P15218@FLASH.NET remove the XYZ_
=================REMOVE THE XYZ_=============================

root@localhost
postmaster@localhost
admin@localhost
abuse@localhost
postmaster@127.0.0.1

3058. Re: Need help with product detector mod

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-25 00:00:00 UTC
From: jvr@pclink.com
Message-ID: <37ecc386.4659454@news.protocom.com>
Source record: 66708
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave

Hi,

Electric Radio issue 99 has a nice article on what you seek. The mod
uses a 6BE6 as a combined BFO and product detectro. This could be
easily adapted to your radio. If you don't want to use a minature
tube, an equivalent full size tube could be used. My SP600 had been
modified that way and works quite well on SSB.

Bob

On Sat, 25 Sep 1999 11:09:13 GMT, "Bob" <XYZ_p15218@flash.net> wrote:

>Hi, anyone know of any magazine articles on updating an older radio with a
>product detector or syncronous detector? Radios in mind are a SX-28 and a
>51J-4.
>Thanks
>Bob
>KB8TL
>--------------remove the XYZ_ from the e-mail address-------------
>--------------remove the XYZ_ from the e-mail address-------------
>------------------------REMOVE THE XYZ_------------------------
>---------e-mail to XYZ_P15218@FLASH.NET remove the XYZ_
>=================REMOVE THE XYZ_============================
>
>root@localhost
>postmaster@localhost
>admin@localhost
>abuse@localhost
>postmaster@127.0.0.1
>
>

3059. Re: Decibel 'References'.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-25 00:00:00 UTC
From: Terry Sanford <tsanford@roadrunner.nf.net>
Message-ID: <37ECC652.428B@roadrunner.nf.net>
Source record: 66709

TO: Paul Keinanen, AC6V, Doug Smith and alforo.

Many thanks for your detailed responses to my enquiry.

Also the background references. Including sound reduction and the effect of various levels of 'noise' on humans.

Made me realise once again that although I had been using 'dbs' for years as measurement of circuit/radio path loss etc. it' s all based on the threshold of hearing and the logarithmic perception of the human ear.

Again, thanks to each of you. When things slow down this weekend I'll be studying the information some more.

Best Regards. Terry Sanford.

3060. Re: TRF chip needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-25 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <7singsvle1@nnrp1.deja.com>
Source record: 66710

In article <37ea7110.25702595@news.tds.net>,
artky1k@northlandlink.com wrote:
> Hi Everyone,
>
> I need a source for a TRF receiver chip.
>
> The numbers are ZN414, ZN416 or MK484. These are 3 terminal chips
> that run on 1.8 volts @ low current and are usable from 30 khz through
> 1.8 Mhz.
>
> I have no other information.
>
> If anyone knows of a source for these chips or an equiv type, I'd
> appreciate knowing too.
>
> email response preferred-
>
> Thanks,
>
> Art
>
>

Dear Art,

Try this page http://www.oatleyelectronics.com/componts.html
where you'll find ZN414 or MK484 for US$ 2.50.
ZN414Z and ZN416E, both from GEC-Plessey, can be found with Partminer at
http://www.partminerclient.com for US$ 1.70 and US$ 3.00 respectively.
From there you can download Partminer version 3.0, a software that will
help you to find your components.

Greetings,

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Before you buy.

3061. Re: help! connect extention speaker to car speakers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-25 00:00:00 UTC
From: Terry Sanford <tsanford@roadrunner.nf.net>
Message-ID: <37ECD101.4BB@roadrunner.nf.net>
Source record: 66711
Cross-posted to: alt.autos.ford,alt.ham-radio.marketplace,alt.radio.scanner,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner

TJ wrote:
>
> OK all you electronic buffs, I need to connect my ham radio and/or cell
> phone extention speaker to one or more car stereo speakers, preferably the
> door speakers. How can I do this without blowing up something??
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Suggestion: Use a transformer with several 'one to one' ratio windings
to couple the speaker outputs and ensure that the output circuits of
each equipment do not have any DC connection, only audio.
You never know, even if one equipment was switched off that if the
speaker circuits were connected directly together, DC could feed back
from some other equipment and damage the output of the the switched off
equipment.
Also some speaker output circuits might/might not be connected to the
chassis potential of vehicle etc. so direct connection of out put
circuits could be 'potentially' (pun intended!) damaging.
You are only dealing with 'voice' frequencies (300 to 3000 hertz etc.),
so the transformer could be fairly low quality. Even one designed for 60
hertz would prob. be OK to isolate voice frequencies.
Might be easier to use a seperate speaker?
BTW please let us know what you eventually decide is your best
solution.
Regards.

3062. Re: Need 3x7x12 chassis

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-25 00:00:00 UTC
From: Terry Sanford <tsanford@roadrunner.nf.net>
Message-ID: <37ECD38D.43B6@roadrunner.nf.net>
Source record: 66712

Greg Carter wrote:
>
> Howdy!
> I need an aluminum chassis 3"x7"x12" for a homebrew
> 6l6/807 transmitter I'm building. Can anyone help me
> out ? Please reply with price to kx4r@mindspring.com
>
> Tnx and 73, Greg KX4R
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Why Aluminum? One advantage of using a 'baking tin' is that with a
little bit of heat heat you can solder directly to the 'tin' (tinned
steel) chassis. Can be used for electrical connections or to fasten
things down!
Just an idea.

3063. FS: QST Back Issues $1.00 each

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-25 00:00:00 UTC
From: Andrew <xandrew@tropicom.net>
Message-ID: <37ECE0EE.675F5AE9@tropicom.net>
Source record: 66713
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.space

I am clearing out the ham shack of all my QST magazines once again. If anyone is interested, I am selling
1992-1998 at $1.00 ea. (you pay shipping costs however you want them shipped). If you
are interested in over 12 issues or the entire collection, make me an offer. I am willing to ship anywhere on
this planet so long as you are willing to pay the shipping costs.

Here are the issues that I have remaining:

QST

[1992 through 1998 issues are $1.00 each - 1999 issues are $2.50 each]

1992 Jan Feb Mar April
1993 Jan Feb Apr May June July Aug Sept Oct Nov Dec
1994 Jan Feb Mar Apr May June July Aug Sept Oct Dec
1995 Jan - Dec
1996 Jan - Dec
1997 Jan - Dec
1998 Jan - Dec (May issue is missing page 73)
1999 Jan Feb Mar Apr May June July Sept Oct $2.50 ea.

All the issues are in perfect condition with no ripped pages or covers. Sorry I don't have anymore, but the last
time I did this in 1993, I sold all my 1989 through my 1992 issues less a few months still available.
If you would like to check my references, please feel free to do so. I am on Ebay and my user ID is: Andrew45
http://cgi2.ebay.com/aw-cgi/eBayISAPI.dll?ViewFeedback&userid=andrew45
--
********** DO NOT AUTOREPLY **********

TO REPLY REMOVE THE TWO 'X' FROM MY EMAIL
ADDRESS. ANTI SPAM MEASURES IN EFFECT

XANDREW@XTROPICOM.NET

****

3064. FS: QST Back Issues $1.00 each

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-25 00:00:00 UTC
From: Andrew <xandrew@tropicom.net>
Message-ID: <37ECE15E.80B458DA@tropicom.net>
Source record: 66714
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.space

I am clearing out the ham shack of all my QST magazines once again. If anyone is interested, I am selling
1992-1998 at $1.00 ea. (you pay shipping costs however you want them shipped). If you
are interested in over 12 issues or the entire collection, make me an offer. I am willing to ship anywhere on
this planet so long as you are willing to pay the shipping costs.

Here are the issues that I have remaining:

QST

[1992 through 1998 issues are $1.00 each - 1999 issues are $2.50 each]

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1995 Jan - Dec
1996 Jan - Dec
1997 Jan - Dec
1998 Jan - Dec (May issue is missing page 73)
1999 Jan Feb Mar Apr May June July Sept Oct $2.50 ea.

All the issues are in perfect condition with no ripped pages or covers. Sorry I don't have anymore, but the last
time I did this in 1993, I sold all my 1989 through my 1992 issues less a few months still available.
If you would like to check my references, please feel free to do so. I am on Ebay and my user ID is: Andrew45
http://cgi2.ebay.com/aw-cgi/eBayISAPI.dll?ViewFeedback&userid=andrew45
--
********** DO NOT AUTOREPLY **********

TO REPLY REMOVE THE TWO 'X' FROM MY EMAIL
ADDRESS. ANTI SPAM MEASURES IN EFFECT

XANDREW@XTROPICOM.NET

****

3065. Re: uA723 temperature drift

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-25 00:00:00 UTC
From: la8ak@online.no
Message-ID: <37ec1001.182244524@news.online.no>
Source record: 66715

On Mon, 20 Sep 1999 16:01:28 -0400, Ralph Mowery
<rmowery@dialpoint.net> wrote:

>The 723 circuits have been around for years and seem to work very well.
>Astron (one of the more popular supplys) has used that type of circuit
>with 2n3771 (think that is the number) for years and seems not to have
>had any problems. I have a 50 amp version and can not see any voltage
>change like that. Also have used many variations the uese the 723
>regulator and had no problems with the voltage changing.
>

have tried almost a douzen applications using 723, never experienced
any problems before, only the last two items drifts, perhaps it is
just the production series which is not good, or the ic is too old?

Hooked up a high quality OPAMP MC1741 working as constant current
supply with 5.1V ZD (3mA zener current) - 24VDC supply, and output
stayed within 10mV of 8.14V, while 723's reference voltage drifted
from 7.2-7.9V in the same period of time - without any more load on
the IC than 1mA

73
Jan-Martin LA8AK

3066. Re: What does 3/4 of digit mean?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-25 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <7sir5d$ilo@dfw-ixnews12.ix.netcom.com>
Source record: 66716

In article <19990924155628250.AAA853.171@DEP_FISICA.ucaldas.edu.co>,
<jhoyos@hoth.gcn.ou.edu> wrote:
>For digital instruments, what's 3/4 of digit?

National, RCA and others had voltmeter chipsets that displayed
+/- 3999 instead of the more common +/-1999. These were called
3 3/4 digit units.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

3067. Re: Looking for CK722 projects/Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-25 00:00:00 UTC
From: "Cestyll O. Dywod" <willi6@erols.com>
Message-ID: <37ECF741.60ED@erols.com>
Source record: 66717

Dick Grindley wrote:
>
> I remember a simple 1 or 2 CK722 home brew SW Rx circuit in a copy of a
> US Scouting magazine my US pen-friend sent me in the early '60s, the
> local radio shop (remember radio shops ??) wasn't much help when I took
> it in - but we were out in the sticks (even by UK standards) in those
> days. If anyone has that circuit in their archives I wouldn't mind a
> copy for old times sakes - I think the magazine was American Scouting or
> something like that.

It was in Boy's Life magazine and would probably have been before 1961.
My best guess would be 1959/60. Will see what I can find out.

I remember the article and a friend built the radio.

73, Dave K7HMP

> Sorry if this has got a bit out of thread.
> >Yes, Brad there are small transistors inside the CK722 metal shell. You'll
> >find photos and all the details on my CK722 webpage.

3068. Re: What does 3/4 of digit mean?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-25 00:00:00 UTC
From: Marv Luse <mwluse@dimensional.com>
Message-ID: <37ED254E.EED706C@dimensional.com>
Source record: 66718

jhoyos@hoth.gcn.ou.EDU wrote:

> Hi listers:
>
> For digital instruments, what's 3/4 of digit?
>
> Thanks in advance.
>
> Jorge Hoyos

Dunno about digital instruments, but for fingers it means you were careless with a power tool. :-)

73,

Marv
AB0IO

3069. Re: video pre-emphasis

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-25 00:00:00 UTC
From: yvon roy <soj@sympatico.ca>
Message-ID: <37ED6229.88A20629@sympatico.ca>
Source record: 66719
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad,sci.electronics.design

What do you mean by video pre-emphasis? In video transmission NTSC; whether cable or over the air broadcast, there
is no video pre-emphasis as far as amplitude is concerned. There is however at the transmission site, a group delay
compensation call a luminance to chrominance dealy pre-distortion network that will compensate for the group delay
error in the TV receiver due to the sound trap. Regards

Bert Douglas wrote:

> Hi all,
>
> Can anyone tell me about the existing conventions (or standards) concerning pre-emphasis for NTSC video signals?
>
> Thanks,
> Bert Douglas

3070. Re: video pre-emphasis

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-25 00:00:00 UTC
From: Woody White <woody.white@att.net>
Message-ID: <37ED400F.CD73E386@att.net>
Source record: 66720
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad,sci.electronics.design

How about for FM rather than AM modulation? Woody
---
yvon roy wrote:
>
> What do you mean by video pre-emphasis? In video transmission NTSC; whether cable or over the air broadcast, there
> is no video pre-emphasis as far as amplitude is concerned. There is however at the transmission site, a group delay
> compensation call a luminance to chrominance dealy pre-distortion network that will compensate for the group delay
> error in the TV receiver due to the sound trap. Regards
>
> Bert Douglas wrote:
>
> > Hi all,
> >
> > Can anyone tell me about the existing conventions (or standards) concerning pre-emphasis for NTSC video signals?
> >
> > Thanks,
> > Bert Douglas

--

---------- de Woody, WB4QXE ----------

Ham Homebrew/ATV Circuits -*- Scanning Electron Microscope Images

http://www.geocities.com/capecanaveral/3722

3071. Re: video pre-emphasis

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-25 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@bellsouth.net>
Message-ID: <iPbH3.4381$OU1.42888@news4.mia>
Source record: 66721
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad,sci.electronics.design

Well, for example ATV at 2.4 GHZ FM.

Is there a convention on pre-emphasis?

Thanks,
Bert Douglas

3072. Q: Tube-Type Balanced Modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-25 00:00:00 UTC
From: maddog@io.com
Message-ID: <37ed46f7.680855@news.io.com>
Source record: 66722

Hey Gang!

I'm looking for a practical balanced-modulator (tube-type) for a 7 MHz direct-conversion receiver I want to build with vacuum tubes (now, don't ask "why tubes", I just wanna... and don't know why). I figure with a balanced modulator at the front end, I can keep the BFO energy out of the antenna, and maybe even get a few db gain. Maybe a dual triode? two?

thanks,
monty N5FC

3073. Re: Need help with product detector mod

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-25 00:00:00 UTC
From: NANCY GIANAKOPOULOS <n.gianakopoulos@worldnet.att.net>
Message-ID: <7sjihu$f85$1@bgtnsc02.worldnet.att.net>
Source record: 66723
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave

I
Bob <XYZ_p15218@flash.net> wrote in message
news:01bf0745$a11f8ac0$a309d7d8@default...
> Hi, anyone know of any magazine articles on updating an older radio with a
> product detector or syncronous detector? Radios in mind are a SX-28 and a
> 51J-4.
> Thanks
> Bob
> KB8TL
> --------------remove the XYZ_ from the e-mail address-------------
> --------------remove the XYZ_ from the e-mail address-------------
> ------------------------REMOVE THE XYZ_------------------------
> ---------e-mail to XYZ_P15218@FLASH.NET remove the XYZ_
> =================REMOVE THE XYZ_=============================
>
> root@localhost
> postmaster@localhost
> admin@localhost
> abuse@localhost
> postmaster@127.0.0.1
>
I've got a product detector design that uses an NE602 chip. The transformer
that you need is a Toko RMC 502-182. The Digi-Key part# is TK1305-ND.
Unfortunately, I don't have a scanner; otherwise, I would be able to send
the schematic file to you as a gif. I am not sure where you are located,
but e-mail me if you would like to pursue this option. I have been using
this design in my own radios for the last 3 years, and it works great!

Pete Gianakopoulos>

3074. Re: Need help with product detector mod

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-25 00:00:00 UTC
From: la8ak@online.no
Message-ID: <37ed3561.257359179@news.online.no>
Source record: 66724
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave

On Sat, 25 Sep 1999 12:48:47 GMT, jvr@pclink.com wrote:

>Hi,
>
>Electric Radio issue 99 has a nice article on what you seek. The mod
>uses a 6BE6 as a combined BFO and product detectro. This could be
>easily adapted to your radio. If you don't want to use a minature
>tube, an equivalent full size tube could be used. My SP600 had been
>modified that way and works quite well on SSB.
>
>Bob
>
>On Sat, 25 Sep 1999 11:09:13 GMT, "Bob" <XYZ_p15218@flash.net> wrote:
>
>>Hi, anyone know of any magazine articles on updating an older radio with a
>>product detector or syncronous detector? Radios in mind are a SX-28 and a
>>51J-4.
>>Thanks
>>Bob
>>KB8TL

It is important to bear in mind that a circuit which is good for one
receiver is bad for another, BC342 and BC348 are dissimilar in this
way, for some receivers a heptode (6SA7, 6BE6, 6BA7) will work, while
others require triode-hexode/heptode like 6K8 or ECH81/6AJ8, I have
drawn a suggested circuit (gif format) for AR88 which requires the
latter solution, a similiar circuit is planned to be tested in
SP-210/BC-779 using ECH35 or 6K8

it is two possibilities of which I prefer the first:
1. You replace the octal based tube with plug-in octal plug mounted
with a noval type socket with and extra components for minimum
rewiring under chassis

2. You change wiring inside the receiver, but it is more work to
restore it later.

73 jan-martin
LA8AK

3075. FS: Ceramic Filters and other RF components

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-25 00:00:00 UTC
From: bw201@torfree.net
Message-ID: <FIn37x.I6q.0.queen@torfree.net>
Source record: 66725

For all of you homebrewers, I am cleaning out my drawers and junk box and most of the stuff is listed at http://www3.sympatico.ca/aquariusr/sale1.htm

I have a bit more High Voltage stuff and some minicircuits MMIC's and mixers still to add in case you are interested in them you can e-mail me at mailto: bw201@torfree.net

Thanks

3076. Re: What does 3/4 of digit mean?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-25 00:00:00 UTC
From: "Joseph A. Consugar" <joesugar@erols.com>
Message-ID: <37ED7AA0.22EDA8AA@erols.com>
Source record: 66726

Doug Smith wrote:
>
> Ralph Mowery wrote:
> > Don't recall seeing that but the 1/2 digit usually ment the digit to
> > the far left was either a blank or a 1.
> >
> > jhoyos@hoth.gcn.ou.EDU wrote:
> > > For digital instruments, what's 3/4 of digit?
>
> Doesn't 3/4 mean the first digit can be 0, 1, or 2? (but not 3-9)
> --
> Doug Smith W9WI
> Pleasant View (Nashville), TN EM66
> http://personal.bellsouth.net/~w9wi

My understanding is that the second number refers to the base of the
digit, the first refers to the maximum value it displays. Therefore,
a digit referred to as 3/4 has a maximum value of 3 and rolls over
when it reaches 4. 1/2 has a maximum value of 1 and rolls over at 2.
Using the same logic, our base ten digits would be 9/10.

Joseph

3077. Re: Looking for CK722 projects/Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-25 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <37ED72FA.348E@pop.valley.net>
Source record: 66727

Roy Lewallen wrote:
>
> I'm sure we all did that at least once. I learned to make a little wood
> or plastic spacer with three tiny holes to slide against the case. When
> the lead inevitably broke, but flush with the spacer, you could remove
> the spacer and use the transistor for a while longer before the lead
> finally broke flush to the case.
>
> Roy Lewallen, W7EL
>
> Woody White wrote:
> >
> > ...Will never forget the distress I felt as a kid when my
> > well used CK722 "lost a leg" due to fatigue. had to save
> > for weeks and weeks to buy another...
>

Hello--
Actually, after I "discovered" that the CK722 had an even smaller
transistor inside, I attempted to reuse one that had a lead broken off
at the case... alas, my 100-watt soldering iron fried the inner
critter<g>.

Speaking of devices inside of devices, I saw a photo of a Darlington
power transistor that had a TO-46 transistor mounted inside the
larger device's case. The TO-46's base went to the base terminal,
and the TO-46's emitter lead was bonded to the power-transistor die.

73,
Brad AA1IP

3078. Re: Merit plate transformer specs?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-25 00:00:00 UTC
From: Lynn Coffelt <lynnc@sos.net>
Message-ID: <37ED9E17.A1B4CA2C@sos.net>
Source record: 66728

866s at least once in a lifetime! How true, how true! My first observation of the inner feelings one gets was on Dec 8, 1941. I was a kid, and a teacher by the name of Wheeler, and also a ham, was talking to Pearl Harbor in the aftermath. The blinking eerie blue glow accompanied by a faint mechanical click from the straight key and the throb (thump?) of the swinging choke ended my naivety as a child. Those blinking thumps from the screened box under the table are as clear in my memory as if it was an hour ago. Wow! Communicating across the Pacific! Imagine!
My most powerful rig sizzled with a pair of 816s supplying push-pull 211s in a rig made from BC375 parts. My Mom's clothes line had fire on the ends, when key down on 40!
Thanks again for the tech data and the inspiration. Not many can talk real "Ham" talk these days!

3079. Re: Q: Tube-Type Balanced Modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-26 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <7sjrbj$ni4$1@nnrp1.deja.com>
Source record: 66729

In article <37ed46f7.680855@news.io.com>,
maddog@io.com wrote:
> Hey Gang!
>
> I'm looking for a practical balanced-modulator (tube-type) for a 7 MHz
> direct-conversion receiver I want to build with vacuum tubes (now,
> don't ask "why tubes", I just wanna... and don't know why). I figure
> with a balanced modulator at the front end, I can keep the BFO energy
> out of the antenna, and maybe even get a few db gain. Maybe a dual
> triode? two?
>
> thanks,
> monty N5FC
>
>

A very nice tube for doing this is the classical 7360 (RCA,Philips,...).
There is a Swan Newsletter issue (1990, I think) that shows how to
replace this rather expensive tube in Swan radios by a cheap 6JH8. These
can be found at http://www.vacuumtubes.net/price3.html for US$ 34.00 and
US$ 7.00.
But, for sure, any double triode or pentode can do the job perfectly and
you will find the circuits in old Radioamateur Handbooks.

--
Greetings,

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Before you buy.

3080. Toroid transformer design

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-26 00:00:00 UTC
From: abicz@sombor.net
Message-ID: <7sk41u$t64$1@nnrp1.deja.com>
Source record: 66730

Does anyone know the formulas for design a toroid transformer
for main supply (50 Hz) ie. how can I calculate number of coils per
volt for primar and secundar coils and the diameter of wire for defined
current (power consumption). I have a toroid core (an old transformer)
with specified dimensions, and I want to know how many power consumption
can I achieve, and how to calculate number of coils per volt and
dimensions of wire for specified current.
Please post an answer to my e-mail: abicz@sombor.net
Thank you very much for any answer !!!

Sent via Deja.com http://www.deja.com/
Before you buy.

3081. Re: Merit plate transformer specs?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-26 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19990925233953.12041.00000847@ngol03.aol.com>
Source record: 66731

In article <37E837A7.6913FCFC@sos.net>, Lynn Coffelt <lynnc@sos.net> writes:

>Wow! Thanks, Jim! Exactly what I wanted.

You're welcome!

>I think I have the parts for
>the style rectifier(s) and filter you mentioned.

If not, let me know. You gotta have a rig that uses mercury vapor rectifiers at least once in your life! I've got a little experience (20 years) with 866As.

>And I assume with a
>small bleeder load that would net almost 750watts ICAS.

Yep - but you have to be careful about the bleeder. For a choke input filter to work properly, the bleeder must draw enough current so that the input choke has enough inductance (critical inductance) to give proper operation.

For critical inductance in a 60 Hz system using a full wave rectifier, the input choke must have at least as many henries as "key-up" load resistance in kilohms. For a 2500 volt supply and an input choke of 25 henries, the bleeder resistance should be 25,000 ohms - which works out to 100 mA of bleeder current, and 250 watts of dissipation! You can use less, but the regulation will suffer, and the rectifiers will have to work harder.

The bleeder problem can be partially solved by using the idle current of the tubes as part of the bleeder. You can connect several chokes in series to get more inductance, too. Swinging chokes are designed for exactly this kind of service.

> As a class C
>final on CW, it could probably handle a single 813 key down for a minute
>at a time, but don't you think it could handle a pair of 813s in AB1 in
>SSB linear service?

In Class C, it will easily handle a single 813 forever - one tube is good for 450 watts or so in Class C.

In Class AB1, grounded cathode, (grid driven) the books say a single 813 with 2500 volts on the plate, 750 volts on the screen, and -95 volts on the grid will idle at 25 mA and peak at 145 mA. A pair will idle at 50 mA and peak at 290 mA, so this transformer should do a good job if the input choke is big enough.

Here's a possible design:

To power a pair of 813s in grounded cathode AB1 at 2500 volts, use a pair of 866As and a single section choke input filter. The choke is 40 henries (at 60 mA - it can "swing" to a much lower value at higher currents). The filter capacitor is 10 uF or more. The bleeder resistor is 200,000 ohms at 50 watts or so (the bleeder should be very conservatively rated). A separate 750 volt supply is needed for the screens.

At idle, the tubes draw a total of 50 mA, and the bleeder resistor draws 12.5 mA. At peak, the tubes draw 290 mA and the bleeder still draws 12.5 mA. That's 750 watts of input, and the book says 490 watts output under those conditions. In practice, 475 or so is more realistic, because of losses. That's more than an S unit improvement over a 100 watt rig. The grid driven circuit requirs very little drive power, of course.

The plate and screen voltages should be turned off during receive periods, both to reduce hash noise and to save power and heat. There should be an interlock system to prevent turning on screen voltage until plate voltage is applied, and to prevent turning on the plate voltage until the rectifiers have had time to heat up. Such circuits are not hard to design - I can supply, if needed.

Grounded grid operation is similar, and no screen supply is needed. The info I have says GG operation at 2000 to 2250 plate volts should give 40 mA idle current and 400 mA peak plate current. This may work, given the low duty cycle of SSB.

In the old days, it was common to push the ratings of tubes and components, 'specially if they were cheap surplus, and replacements were easily available. Today, it's usually more prudent to go easy on parts that may be irreplaceable.

> Again, thanks for the help. It has been bugging me
>for weeks!

You're quite welcome. Old catalogs are often priceless for this sort of stuff.

73 de Jim, N2EY

3082. Re: Q: Tube-Type Balanced Modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-26 00:00:00 UTC
From: blackm00@cam.org
Message-ID: <blackm00-2609990011420001@dialup-344.hip.cam.org>
Source record: 66732

In article <37ed46f7.680855@news.io.com>, maddog@io.com wrote:

> Hey Gang!
>
> I'm looking for a practical balanced-modulator (tube-type) for a 7 MHz
> direct-conversion receiver I want to build with vacuum tubes (now,
> don't ask "why tubes", I just wanna... and don't know why). I figure
> with a balanced modulator at the front end, I can keep the BFO energy
> out of the antenna, and maybe even get a few db gain. Maybe a dual
> triode? two?
>
> thanks,
> monty N5FC

While I think the name might have come with solid state devices, the first reference to the term "direct conversion" that I can think of was Hayward and Bingham's article in QST for November 1968, "Direct Conversion -- A Neglected Technique", there is nothing new about direct conversion receivers.

One could argue that the regen receiver oscillating for CW reception is the basic principle, and I think there were direct conversion receivers made with tubes years ago, though I"m too tired at the moment to track down references. Homodyne comes to mind, and there was a synchronized variant, the synchrodyne, for AM with carrier reception.

Most definitely, there was a tube direct conversion receiver in QST for May 1961. I believe it gets mentioned in the Hayward article, with a comment that the concept had been around for a long time but hadn't seen much practical use in some time.

While it's probably smartest to use a balanced mixer for direct conversion, there were plenty of articles published in the early days after the 1968 article where all kinds of mixers were used. Anything that would work as a mixer was used to make the conversion from RF to audio.

The same thing happened with tubes, though they weren't called mixers. Instead, they were called product detectors. You'd see plenty of single triode unblanced mixers used, along with a lot of 6BE6s.

My point being that just about anything that was used for product detectors, or balanced modulators (where you are more likely to see a good selection of balanced mixers) in the days of tubes has potential for a direct conversion receiver.

Of course, some probably are better than others, for the same reasons that some solid state mixers work better.

I don't have the 1961 article handy, but one book I have mentions it and says it used 2 6SB7Ys in the in the balanced product detector, with 2 6SA7s also said to work well.

There was a time when the 7360 beam deflection tube was considered the ultimate in balanced mixer/modulator/product detector use. I'm not sure that you'd stumble on such tubes. At this late a date it might be smarter to use a more commonly available tube.

Look in any tube era book, and you're bound to find plenty of balanced modulators and balanced mixers and balanced product detectors.

You may be entering new territory, begging the testing of various circuits, for the very reason that there's been very little written up about tube type direct conversion receivers.

Michael VE2BVW

3083. Any Tips for Hiding Antennas?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-26 00:00:00 UTC
From: miamibaker@aol.com
Message-ID: <19990926195612.20844.00002501@ng-fh1.aol.com>
Source record: 66733

I need help in camouflaging or otherwise hiding my antennas. Any tips on how to disguise antennas? Have info on how to build disguised antennas? I already have done a lot with loading rain gutters, et al, with tuners, so don't need to go in that direction. Looking more for true antennas that can be hidden or disguised. I appreciate any hints you can provide.

Thanks very much for your help.

73 de Jeff, WK3U
miamibaker@aol.com

3084. Re: Any Tips for Hiding Antennas?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-27 00:00:00 UTC
From: Gary Pearcey <wsbengineer@spam-me-not-earthlink.net>
Message-ID: <7smspr$c01$1@holly.prod.itd.earthlink.net>
Source record: 66635

MiamiBaker <miamibaker@aol.com> wrote in message
news:19990926195612.20844.00002501@ng-fh1.aol.com...
> I need help in camouflaging or otherwise hiding my antennas. Any tips on
how
> to disguise antennas

Why not be patriotic and fly the flag? You can make a decent HF vertical
with a nice tall flag pole and lots of ground radials. Just take a basic
textbook design and modify for use of pole.
Hardest part is insulating base to be fed from tuning network. Perhaps you
can ground bottom end and feed to a tap several feet up.
If you live in an apartment, the same thing can be done with a large flag
staff off your balcony. This will probably only be decent for 10 or 15 mtrs.
In both cases, watch for hardware rectification that can cause severe TVI.
Bond everything as best you can.

3085. Re: Any Tips for Hiding Antennas?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-27 00:00:00 UTC
From: cal25skipper <skipper3@swbell.net>
Message-ID: <_6DH3.867$Vf6.49152@typhoon01.swbell.net>
Source record: 66636

I use an inverted vee hanging in some trees. The conductors are green #10 solid, but you have to know what you are looking for to see them.

Brent Scott
N5CLK
Austin, TX

3086. Carbide Block Shears - Where to Buy?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-27 00:00:00 UTC
From: luke@trio.COM.AU
Message-ID: <199909270703.AAA22989@mailbox3.ucsd.edu>
Source record: 66637

Hi People,

3087. Re: Sex Photo from 12 to 16 years old! 78

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-27 00:00:00 UTC
From: ti2dll@expressmail.net
Message-ID: <slrn7usivg.fh.ti2dll@ti2dll.dynip.com>
Source record: 66638
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <OWV2cdUB$GA.302@cpmsnbbsa03>, kc8jbo wrote:

>I didn't imply that it bothered me, jackass. However, porno featuring 12-16
>year olds is sick. If you like child pornography, that is your business,
>Grunt. I wouldn't admit it in such a public forum if I was you, since the
>FBI does look for kiddie pornphiles such as yourself.

Well, look at the bright side... at least they're doing it on the net and
not over SSTV :)

--
//\/\ario //\/\elendez- TI2DLL
ti2dll@email.com

3088. WTB: 10.66667 MHz Crystal for 51J-x

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-27 00:00:00 UTC
From: Bob <XYZ_p15218@flash.net>
Message-ID: <01bf081e$bed5ffc0$2e0ed7d8@default>
Source record: 66639
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.swap

Help, need the 10.66667 MHz crystal for the Collins 51J-x radios.
Bob
KB8TL
--------------remove the XYZ_ from the e-mail address-------------
------------------------REMOVE THE XYZ_------------------------
---------e-mail to XYZ_P15218@FLASH.NET remove the XYZ_
=================REMOVE THE XYZ_=============================

root@localhost
postmaster@localhost
admin@localhost
abuse@localhost
postmaster@127.0.0.1

3089. Re: uA723 temperature drift

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-27 00:00:00 UTC
From: Jorgen Lund-Nielsen <mhflun@pktr.desy.de>
Message-ID: <37EFFED2.148926CC@pktr.desy.de>
Source record: 66640

Checked for oscillations ???

Jorgen dj0ud

J M Noeding wrote:
>
> Got a psu from a friend, it uses uA723IC with 1 in driver and 4x
> 2N3055 in output stage. He claimed it was rated 14V 40A (for at least
> 30 seconds). But I found it was kneeling for 22-25A, and even
> worse.... loading it with 10A for 10 minutes the voltage rises from 14
> to 15V.
> So I decided to look further on his construction. There was no current
> limit, and few of the recommended guidelines had been followed.
>
> I hooked up a new voltage regulator using MC1723CP in dead-bug
> technique with thermal compound between IC and PCB groundplane.
> Running with/without testload with only regulator and driver the
> reference voltage drifted from 7.2V to 7.9V over the first 5-10
> minutes. Motorola claims 1723C to have maximum 7.5V, but I believe
> having experienced earlier that this is not true.
>
> Is 1723 believed to unreliable, or will a conventional zener diode
> easily improve this bad temperature drift? I connected a 4.7k resistor
> between reference in/out with 4.7uF bead tantalum bypass. A 1000uF
> capacitor with separate rectifier is used for regulator supply, and a
> 60000uF capacitor is used for the main supply. Rather heavy wires are
> used throughout the construction
>
> 73 Jan-Martin

3090. Re: radio schematic research. PSE HELP ME!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-27 00:00:00 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <EqNH3.324$r46.364@news.indigo.ie>
Source record: 66641

>You can contact myself on luca.marco@tiscalinet.it and you can send me
> all you thing can be interesting to homemade a OM radio station.
> TNX, 73's de Luca
>

Hello Luca, You will find a few circuits on my web page.
You will also find links to other homebrew pages.
http://www.qsl.net/ei9gq

Have a look at Harrys homebrew homepage.
http://hem2.passagen.se/sm0vpo/index.htm

And JF1OZL's homepage.
http://www.intio.or.jp/jf10zl/

73, Ed. EI9GQ

--

Remove 'X' to reply.

3091. FS: Resistors on Tape and Reel

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-27 00:00:00 UTC
From: Clif Holland <clif@avvid.com>
Message-ID: <37EFD56D.74A9@avvid.com>
Source record: 66642
Cross-posted to: misc.industry.electronics.marketplace,rec.radio.amateur.homebrew

The following list of tape and reel resistors are all 1/4w 5%.
Price is $5 for a full reel(1). Half a reel (.5) would be $2.50 etc.
All are plus shipping from 75061

These are standard reels with 5000 resistors to a full reel.

2.2 0.75
10 1
18 0.3
18 0.5
20 1
27 0.75
51 0.5
68 0.75
75 0.25
120 0.75
150 1
180 0.25
220 0.75
270 1
300 0.125
330 1
430 0.25
470 0.5
680 0.6
820 0.75
1.8K 0.25
2.2K 0.75
3.3K 0.25
3.9K 0.25
4.3K 0.6
4.7K 0.75
6.8K 0.75
15K 0.75
22K 0.125
47K 0.5
68K 0.75
91K 0.5
100K 0.125
330K 1
560K 1
10M 0.75

I have one 3/4 reel of 1/2W 270 ohm resistors for $5

E-mail if interested.
--
Clif Holland, KA5IPF
Owner of AVVid, an Authorized Kenwood and Icom Service Center
For more info click on the following
http://www.avvid.com/

3092. Re: anyone seen a copy of this book? Looks quite interesting.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-27 00:00:00 UTC
From: bshort@speedchoice.com
Message-ID: <MPG.125a0bb1171d67599897b6@news.speedchoice.com>
Source record: 66643

Try:

alt.books.reviews
alt.books.technical

> comments? reviews?
>
> > The Electronics of Radio
> > by David B. Rutledge
> > Our Price: $44.95
> >
>

--
bshort@speedchoice.com
--

3093. FS HP Spectrum Analyzers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-27 00:00:00 UTC
From: Jay Wicklund <jwicklun@halcyon.com>
Message-ID: <37F024E6.28605412@halcyon.com>
Source record: 66644
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,sci.electronics.equipment

Two HP Spectrum analyzers for sale:

HP141T/8552B/8555A ---- (10MHz - 18GHz) $1500.00 plus shipping

HP141T/8552B/8553B ---- (1KHz - 110MHz) $1250.00 plus shipping

includes some manuals. Both were working the last time used, which was
about 6 months ago.
These are located near Seattle Washington, and can be shipped or picked
up.

Call (425)481-3573

or email: jwicklun@halcyon.com

3094. WTD: 1000pf/3kv Variable Cap

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-27 00:00:00 UTC
From: Greg Heath <gheath1@nycap.rr.com>
Message-ID: <CKVH3.3192$56.88684@typhoon.nyroc.rr.com>
Source record: 66645

I am looking for a single gang 1000pf/3kv variable cap, because I want to build a tunable Magnetic loop antenna....where can I find such a beast and not have to pay in krugerands?

3095. Re: FS HP Spectrum Analyzers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-27 00:00:00 UTC
From: k6hm <k6hm@wenet.net>
Message-ID: <37F036DD.30A3A7D0@wenet.net>
Source record: 66646
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,sci.electronics.equipment

HI,
I have an original HP manual for this 8553B for sale at $50 plus shipping.
de K6hm

Jay Wicklund wrote:

> Two HP Spectrum analyzers for sale:
>
> HP141T/8552B/8555A ---- (10MHz - 18GHz) $1500.00 plus shipping
>
> HP141T/8552B/8553B ---- (1KHz - 110MHz) $1250.00 plus shipping
>
> includes some manuals. Both were working the last time used, which was
> about 6 months ago.
> These are located near Seattle Washington, and can be shipped or picked
> up.
>
> Call (425)481-3573
>
> or email: jwicklun@halcyon.com

3096. 49 Mhz to 6

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-27 00:00:00 UTC
From: Gary Pearcey <wsbengineer@spam-me-not-earthlink.net>
Message-ID: <7smrkr$9s7$1@holly.prod.itd.earthlink.net>
Source record: 66734

In converting the Maxon 49-SX communicator to 6 Mtrs, has anyone been able
to increase output power without adding an entire new stage?
Can the output transistor be changed and/or resistors be reduced to get 1/4
watt or so out?
There isn't enough real estate to put a new final stage in the existing
case.

-Gary Pearcey
WB4RLW

3097. Re: Sex Photo from 12 to 16 years old! 78

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-28 00:00:00 UTC
From: Stephen Mitchell <smitche1@san.rr.com>
Message-ID: <q0UH3.775$e5.38841@newsr1.san.rr.com>
Source record: 66647
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I'd like to know why the prick has to tell everyone here about it and
where it's at.

3098. New Brewing Pages

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-28 00:00:00 UTC
From: John Heaps <buster.pjh@virgin.net>
Message-ID: <7spo53$8h3$1@nclient11-gui.server.virgin.net>
Source record: 66648
Cross-posted to: alt.beer.breweriana,alt.brewing,alt.collecting.breweriana,alt.fan.joan-brewer.kook.kook.kook,alt.homebrewing,rec.crafts.brewing,rec.radio.amateur.homebrew,uiuc.org.homebrewers

New brewing pages can be found here

http://freespace.virgin.net/buster.pjh

3099. Kenwood TH-22E handheld modification

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-28 00:00:00 UTC
From: Vladimir Nikitin <Vladimir.Nikitin@mea.junk-block.spb.ru>
Message-ID: <7sqn1n$bo4$1@news.leivo.ru>
Source record: 66649
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hi All!
Can someone share information about %Subject% please.
Now it is 144.000--145.995 but I wish it had wider frq range.
--
Vladimir, RA1AVA.
/don't forget to remove anti-spam string from my email address to contact
me/

3100. 2N4049 BASE

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-28 00:00:00 UTC
From: Ron Boden <majrabsr@rconnect.com>
Message-ID: <rv1f7g9o3i542@corp.supernews.com>
Source record: 66650

Need base diagram for a 2N4049 transistor. Tnx, Ron, KA9ALC

3101. FT-100 mars-cap won't work??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-28 00:00:00 UTC
From: no@one.con
Message-ID: <7sqvbj$7ff$1@holly.prod.itd.earthlink.net>
Source record: 66651

I have the mod from yaesu and it does not work any answers

3102. "Data" Column in RadCom

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-28 00:00:00 UTC
From: Ian Wade <ian@dowrmain.demon.co.uk>
Message-ID: <YbuKWgA3wQ83EwH$@dowrmain.demon.co.uk>
Source record: 66652

Yes, it's true! In this month's RSGB RadCom there's an announcement saying that yours truly is taking over the "Data" column again, starting in December.

I need input, lots of it. Please email me (g3nrw@arrl.net) if you have any points for discussion, any news of groups/individuals/products etc in the world of amateur radio data comms. Pictures (GIF/JPG) also very welcome.

Copy date for the December issue is a week tomorrow (Weds 6 October).

73
Ian, G3NRW
--
+---+
| G3NRW on APRS: [IO91SX] 144.800 MHz |
| QTH: Harlington, Beds, UK (~55 km/35 miles NNW of London) |
| email: g3nrw@arrl.net |
| |
| INTRODUCTION TO APRS: http://www.netro.co.uk/whitepaper.htm |
+---+

3103. Information on Lafeyette HA-250A

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-28 00:00:00 UTC
From: Peter en Helma Kerklaan <helma.kerklaan@icu.nl>
Message-ID: <7sr2uu$23fa$1@beast.euro.net>
Source record: 66653
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,nl.radio.amateur,alt.nl.radio.zendamateur.gelicentieerd,uk.radio.amateur

Hallo,

I have an old Lafayette HA-250A linear amplifier, it is an small desktop model with 2 pieces of 6JS6C tubes in it. I do not have any information of it, I do have the following questions:

1) For what frequency is this linear designed?
2) What is the output power? looking at the tubes I expect 2 x 50 = 100 watt
3) What is the input voltage? (12V ??)
4) What is the pinning of the 8 pens input-socket?

If you do have some information please drop me a message.

73, de Peter (PA5KE)

3104. Re: Information on Lafeyette HA-250A

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-28 00:00:00 UTC
From: lbrush <lbrush@hotpop.com>
Message-ID: <7sr49sevr1@news.telekabel.nl>
Source record: 66654
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,nl.radio.amateur,alt.nl.radio.zendamateur.gelicentieerd,uk.radio.amateur

Ja 2 x 6j6 buisjes zijn goed voor 100 watt maar moeten toch wel meer
spanning hebben dan 12 volt

Peter en Helma Kerklaan <helma.kerklaan@icu.nl> schreef in berichtnieuws
7sr2uu$23fa$1@beast.euro.net...
> Hallo,
>
> I have an old Lafayette HA-250A linear amplifier, it is an small desktop
> model with 2 pieces of 6JS6C tubes in it. I do not have any information of
> it, I do have the following questions:
>
> 1) For what frequency is this linear designed?
> 2) What is the output power? looking at the tubes I expect 2 x 50 = 100
watt
> 3) What is the input voltage? (12V ??)
> 4) What is the pinning of the 8 pens input-socket?
>
> If you do have some information please drop me a message.
>
> 73, de Peter (PA5KE)
>
>

3105. How Hot Is Your Coax ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-28 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <7sr5n9mfe1@neptunium.btinternet.com>
Source record: 66655

NOW AVAILABLE, NEW PROGRAM "COAXRATE.exe"

POWER RATING OF SOLID-POLYETHYLENE-INSULATED COAXIAL CABLES

The principal purpose of this program is to compute the temperature of inner and outer conductors and the jacket surface temperature for given RF input power, standing wave ratio and ambient temperature. Three different environments are covered - the cable in a draught-free close-confining duct, in still air on a bench or along a wall, or outdoors in a moderate breeze. From a few hundred kHz up to GHz.

From its dimensions the impedance and attenuation characteristics of an unknown length of cable may be found. If impedance is already known then a check on other data entries is available. Attenuation can be determined on a short length much more accurately than it can be measured directly.

INPUT DATA: Diameters of inner and outer conductors, jacket thickness, frequency, SWR, power input, ambient temperature and environment.

OUTPUT DATA: length of 1/4-wavelength, max possible SWR, nominal impedance, attenuation dB/100 feet and per metre, max amps, max volts, maximum power loss in watts per metre at a current loop, inner, outer and jacket temperatures in degrees Celsius, and the greatest voltage stress occurring at a voltage loop.

The dimensions of four common RG types of coax may be entered in the program by hitting a key.

By the way, the hottest place on a line is NOT where the SWR is at a maximum.

Program COAXRATE may be downloaded in a few seconds from my website. Not zipped-up. Can be run mmediately. (It can be run even without downloading.) Both educational and useful.
--
==========
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp
==========

3106. Need SM inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-28 00:00:00 UTC
From: Ham <hduff@ica.net>
Message-ID: <37F1287F.FC9FA764@ica.net>
Source record: 66656

Hi there.
I am need of a few 1210 size surface mount inductors:

2 pcs 33 uH
2 pcs 39 uH

I can't find 'em locally and the mail order houses like Digikey
want $8 handling plus $6.50 minimum order surcharge to order
these $1 parts.

Anyone ?
Please reply by e-mail
Thanks de Hugh VA3TO

3107. BTX-121 Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-28 00:00:00 UTC
From: headshope@aol.com
Message-ID: <19990928171804.16456.00001945@ng-fu1.aol.com>
Source record: 66657

Question: BTX-121 2 Channel Radio

Calling anyone familiar with this radio...

Anyone aware of any modifications available for the BTX-121 from Radio Shack.

This is a 2 channel, crystal controlled radio in the business band and preset to 154.600 MHz for channel 1 and channel 2 crystal slot clear.

What I am seeking is any tinkering experience anyone may have whatsoever in playing with the radio.

Any modifications that would enable tx/rx outside preset frequency ranges with conforming crystal installed, internal squelch controls, band modifications, power mods, dtmf or the like are sought.

Any adjustments available for this radio?

Understanding the general nature of this request, I am just seeking any mod or adjustments anyone may have experience with this rig.

These radios are on clearance for around $49.00, quite a mark down from the original prices, looks as though they are moving up. This may be a good opportunity to pick up a few.

Thanks for any reply,

Bill.

Headshope/b-us/w.no:
****

3108. Help: Knowcode.org

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-28 00:00:00 UTC
From: nw7us@hfradio.removethispart.org
Message-ID: <qicI3.216$5T4.4950@sea-read.news.verio.net>
Source record: 66658
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Howdy,

Does anyone know what happened to the knowcode.org site? Is it moved? Is there a better url?

Thanks. (You may email me at nw7us@hfradio.removethispart.org by removing the remove part of the address)

73!

--

: World-Wide Communications via Amateur Radio : 122.93W : 47.67N :
: 10x56526 : CW/SSB - DX hunter : Brinnon, WA : Code Warrior #60 :
: visit http://hfradio.org/ :

3109. Re: Tesla -- Program! -- at the NJARC meeting Oct. 8th

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-28 00:00:00 UTC
From: JW <jdwalton@home.com>
Message-ID: <37F17EAD.430EA53F@home.com>
Source record: 66659
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.swap,rec.antiques.radio+phono

Do we get to meet the fellow chronicled in the Star Ledger whose wife said
"It's either me or the radios"?

Jack

"John Dilks, K2TQN" wrote:

> to all,
>
> At the October 8 meeting of the New Jersey Antique Radio Club in
> Freehold, NJ, we are very fortunate to have as a presenter Mr. William
> Terbo, executive secretary of the Tesla Memorial Society. Mr. Terbo is
> the grand-nephew of Nikola Tesla and his closest living relative. Mr.
> Terbo actually met Tesla on several occasions and offers some unique
> perspectives on the man in his presentations.
>
> For more see our web page:
> http://www.eht.com/oldradio/
>
> --
> --
> 73' John Dilks, K2TQN
>
> Webmaster for "Page 2" all about Antique Wireless
> http://www.eht.com/oldradio/awa/
> -=and=-
> for the New Jersey Antique Radio Club
> http://www.eht.com/oldradio/
>
> Please visit my OldRadio Museum
> http://www.eht.com/oldradio/museum/

3110. Tesla -- Program! -- at the NJARC meeting Oct. 8th

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-28 00:00:00 UTC
From: "John Dilks, K2TQN" <oldradio@worldnet.att.net>
Message-ID: <37F14FAB.3A6A@worldnet.att.net>
Source record: 66660
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.swap,rec.antiques.radio+phono

to all,

At the October 8 meeting of the New Jersey Antique Radio Club in Freehold, NJ, we are very fortunate to have as a presenter Mr. William Terbo, executive secretary of the Tesla Memorial Society. Mr. Terbo is the grand-nephew of Nikola Tesla and his closest living relative. Mr. Terbo actually met Tesla on several occasions and offers some unique perspectives on the man in his presentations.

For more see our web page:
http://www.eht.com/oldradio/

--
--
73' John Dilks, K2TQN

Webmaster for "Page 2" all about Antique Wireless
http://www.eht.com/oldradio/awa/
-=and=-
for the New Jersey Antique Radio Club
http://www.eht.com/oldradio/

Please visit my OldRadio Museum
http://www.eht.com/oldradio/museum/

3111. Re: 2N4049 BASE

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-28 00:00:00 UTC
From: "Thomas C. Sefranek" <tcs@cmcorp.com>
Message-ID: <37F14EF5.D8E38DC0@cmcorp.com>
Source record: 66661

Ron Boden wrote:

> Need base diagram for a 2N4049 transistor. Tnx, Ron, KA9ALC

Upside down, locator pin towards you, from left to right:
Base, Collector (Threaded) Emitter.

--
Thomas C. Sefranek WA1RHP
ARRL Instructor, Technical Specialist, VE Contact.
http://www.harvardrepeater.org
http://hamradio.cmcorp.com/inventory/Inventory.html

3112. UPS to PS?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-28 00:00:00 UTC
From: Michael Ruzinsky <maruzin@earthlink.net>
Message-ID: <7srrcu$n0b$1@holly.prod.itd.earthlink.net>
Source record: 66662

Can uninterrupted power supplies (UPS) be used to power high current rigs?

About a week ago I came across an APC 650VA smart ups rated at 410 watts output. I am in need of a power supple to power my HF rig (20A max. 16A cont.) and it occurred to me that I might be able to use the ups. The internal power supply has a 13.8V output to an 11 Ah battery. The positive lead to the battery is fused with a 40A 32V fuse. Other than that I am not sure how to proceed.

Does the very nature of an UPS prohibit me from simply connecting my rig to the ups 13.8V leads? I mean, does the ups only supply a small charging current to the battery when you have AC power available and then allow you to draw high current from the battery when the AC goes out?

Michael Ruzinsky
n8ecg@arrl.net

3113. Re: UPS to PS?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-28 00:00:00 UTC
From: davem@groucho.cs.ubc.ca
Message-ID: <7srtje$89u@groucho.cs.ubc.ca>
Source record: 66663

"Michael Ruzinsky" <maruzin@earthlink.net> writes:

>About a week ago I came across an APC 650VA smart ups rated at 410 watts
>output. I am in need of a power supple to power my HF rig (20A max. 16A
>cont.) and it occurred to me that I might be able to use the ups. The
>internal power supply has a 13.8V output to an 11 Ah battery. The positive
>lead to the battery is fused with a 40A 32V fuse. Other than that I am not
>sure how to proceed.

>Does the very nature of an UPS prohibit me from simply connecting my rig to
>the ups 13.8V leads? I mean, does the ups only supply a small charging
>current to the battery when you have AC power available and then allow you
>to draw high current from the battery when the AC goes out?

That's pretty much true.

If the battery is rated at 11 Ah, the *maximum* safe charge rate is
probably about 2.5 A. That's a characteristic of lead-acid batteries.
So the UPS internal charger is probably capable of no more than this.
Quite possibly it's only capable of 1 A or so, since UPSes don't
expect to be triggered very often and a slow charge (overnight or
even 24 hours) is considered OK.

Now, the battery *will* supply the 20 amps you need for short periods,
just not for long. If you intend to use the rig for receive almost
all the time, only transmitting in short bursts, and if the current
drawn by the receiver during receive is less than what the UPS charger
puts out, you could get away with powering the receiver from the
battery. The UPS will slowly charge the battery most of the time,
with the battery supplying the bulk of the current during transmit.

But really, this isn't a very good system. You'd be better off
getting an AC-powered supply rated for 20 A or more out, which would
allow you to transmit for as long as you want.

Dave

3114. Need free webspace for Ham/SWL/Scanner Page?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-29 00:00:00 UTC
From: nw7us@hfradio.removethispart.org
Message-ID: <qgdI3.231$5T4.5103@sea-read.news.verio.net>
Source record: 66664
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Want to have a Ham radio or SWL Web Page, for free? Without floating
ads and other popup banner windows, etc.?

I am offering free web space for Shortwave, Scanner, and Ham Radio hobbiests.
Please come and visit http://hfradio.org - there is a link to the sign-up
page. There are a few already active with their sites, which you can also
see from the listing page.

There is a lot of other things at the site, as well. But if you are looking
for a great place to mirror your site, or to have your main site, consider
http://hfradio.org.

73!

(10 meters is starting to show signs of activity. You can find me there often)

--

: World-Wide Communications via Amateur Radio : 122.93W : 47.67N :
: 10x56526 : CW/SSB - DX hunter : Brinnon, WA : Code Warrior #60 :
: visit http://hfradio.org/ :

3115. Wanted 2m SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-29 00:00:00 UTC
From: redberd95@aol.comnospam
Message-ID: <19990928221527.19800.00002246@ng-ce1.aol.com>
Source record: 66665

I am looking for 2m ssb equipment, either commercial or "9" homebrew. Must be in good working conditon. Also have some items to trade (100M hard drives, Hustler 5btv vertical, auto fax switch, 8 shareware cd's, Regency scanner, etc) toward the 2M equipment.

Randy KA4NMA
Please reply to redberd95@aol.com and rdav@truck.ds.adp.com

3116. Re: UPS to PS?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-29 00:00:00 UTC
From: noone@nowhere.com
Message-ID: <37f3ce17.79328122@news.squonk.net>
Source record: 66666

On 28 Sep 1999 19:30:06 -0700,
davem@groucho.cs.ubc.ca (Dave Martindale) wrote:

>"Michael Ruzinsky" <maruzin@earthlink.net> writes:
>
>>About a week ago I came across an APC 650VA smart ups rated at 410 watts
>>output. I am in need of a power supple to power my HF rig (20A max. 16A
>>cont.) and it occurred to me that I might be able to use the ups. The
>>internal power supply has a 13.8V output to an 11 Ah battery. The positive
>>lead to the battery is fused with a 40A 32V fuse. Other than that I am not
>>sure how to proceed.
>
>>Does the very nature of an UPS prohibit me from simply connecting my rig to
>>the ups 13.8V leads? I mean, does the ups only supply a small charging
>>current to the battery when you have AC power available and then allow you
>>to draw high current from the battery when the AC goes out?
>
>That's pretty much true.
>
>If the battery is rated at 11 Ah, the *maximum* safe charge rate is
>probably about 2.5 A. That's a characteristic of lead-acid batteries.
>So the UPS internal charger is probably capable of no more than this.
>Quite possibly it's only capable of 1 A or so, since UPSes don't
>expect to be triggered very often and a slow charge (overnight or
>even 24 hours) is considered OK.
>
>Now, the battery *will* supply the 20 amps you need for short periods,
>just not for long. If you intend to use the rig for receive almost
>all the time, only transmitting in short bursts, and if the current
>drawn by the receiver during receive is less than what the UPS charger
>puts out, you could get away with powering the receiver from the
>battery. The UPS will slowly charge the battery most of the time,
>with the battery supplying the bulk of the current during transmit.
>
>But really, this isn't a very good system. You'd be better off
>getting an AC-powered supply rated for 20 A or more out, which would
>allow you to transmit for as long as you want.
>
> Dave

Two more things to consider:

First, the battery ground may or may not be an
electrical ground. This would be a bad thing.

Second, although the battery could output the 11A OK, the charger may not be designed to run properly when the battery is being discharged at this rate. (At power fail conditions, the charger is off) Seems to me you could blow the charger.

Just random thoughts

3117. Re: Diagram for HF Tube lineair amp.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-29 00:00:00 UTC
From: mark&nina kilson <mnskk@socket.net>
Message-ID: <01bf0a4d$337db860$900b6ad8@default>
Source record: 66667

Peter,
Go to Svetlana's web site and under technical bulletins you might
find what you are looking for. Try bulletin No. 34
73, Mark KC0FZX

Peter en Helma Kerklaan <helma.kerklaan@icu.nl> wrote in article
<7s8jrj$1dg9$1@beast.euro.net>...
> Hi,
>
> I am looking for a diagram to build a HF lineair amplifier, I prefere to
use
> a one tube solution that delivers me the legal limit for Holland which is
> 400 watt.
>
> If you know a suitable diagram somewhere on the web or in the literature,
> please send me a message.
>
> 73, de Peter / PA5KE
>
>
>

3118. Re: UPS to PS?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-29 00:00:00 UTC
From: Wineteer Family <wz7w@inteliport.com>
Message-ID: <7st3qj$gl8$1@jaffa.itower.net>
Source record: 66668

I took the battery out of my APC 420 and built spade power cables to run my radio. I get 5 or six qso's out of it. My radio manual says max draw is 20.5, but a 20 amp fuse has been working for over a year. My cw qso's are rarely at hi power though. I should hook an ammeter up and see what it really draws. I own an 11 amp switching astron, and don't want to buy a 25 amp, so I am interested in using a sealed lead acid in parrallel with my power supply. I may need to switch off my power supply with the relay line to protect it. Could you switch off the ups's charger with your relay line? Good luck, and careful or you might learn something.
Jim WZ7W

In article <7srrcu$n0b$1@holly.prod.itd.earthlink.net>, "Michael Ruzinsky" <maruzin@earthlink.net> wrote:

> Can uninterrupted power supplies (UPS) be used to power high current rigs?
>
> About a week ago I came across an APC 650VA smart ups rated at 410 watts
> output. I am in need of a power supple to power my HF rig (20A max. 16A
> cont.) and it occurred to me that I might be able to use the ups. The
> internal power supply has a 13.8V output to an 11 Ah battery. The positive
> lead to the battery is fused with a 40A 32V fuse. Other than that I am not
> sure how to proceed.
>
> Does the very nature of an UPS prohibit me from simply connecting my rig to
> the ups 13.8V leads? I mean, does the ups only supply a small charging
> current to the battery when you have AC power available and then allow you
> to draw high current from the battery when the AC goes out?
>
> Michael Ruzinsky
> n8ecg@arrl.net
>
>
>

3119. POW Camp Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-29 00:00:00 UTC
From: Robert <nospam@nospam.com>
Message-ID: <37F207D3.1EEB@nospam.com>
Source record: 66669

Howdy:

I came across this account of a radio that was built in a Japanese POW camp that I thought I might share with the group: http://chide.bournemouth.ac.uk/people/r.g.wells.html

Anyone know of other INTERNET postings on the the subject of POW camp receivers---or transmitters.

Anyone have information regarding the POW camp receiver utilizing an automotive lightbulb; I've tried a number of hookups but have failed to get it to work.

Best regards

3120. Re: Kenwood TH-22E handheld modification

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-29 00:00:00 UTC
From: Louis Albert <lalbert@uakron.edu>
Message-ID: <37F226AF.5A88D6BD@uakron.edu>
Source record: 66670
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

http://www.mods.dk/mods.php3?model=th-22&radio=kenwood#435

WA8PHD
http://ifip.com/wa8phd.htm

Vladimir Nikitin wrote:

> Hi All!
> Can someone share information about %Subject% please.
> Now it is 144.000--145.995 but I wish it had wider frq range.
> --
> Vladimir, RA1AVA.
> /don't forget to remove anti-spam string from my email address to contact
> me/

3121. Re: Decibel 'References'.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-29 00:00:00 UTC
From: achilds@pacbell.net
Message-ID: <37F226DD.6423@pacbell.net>
Source record: 66671

I have found out that db is one of those
apples and oranges type of things, because
the term is used in two related fields:
1) acoustics
2) electronics

A good reference on electronics is: "Reference
Data for Radio Engineers" by ITT pub. by Howard
Sams. I have 6th ed, but ther maybe later ones
out.

My reference on acoustics is "Acoustics" which is
one of the Schaum's Outline Series in Engineering
by McGraw-Hill

But in all fields it is the log (or ln if it is Nepers)
of a ratio. The confusion is what is the basis, that is
why I think db should not be used by itself. One should use
dbm, dbu, dba0, dbr, etc.

Doug Smith wrote:
>
> Terry Sanford wrote:
> > These days one hears such things as 113 db. can damage your hearing, OR;
> > interior noise is 70 db.;
> > But in reference to what?
>
> Bels were originally developed as a measurement of sound intensity,
> their application to radio signals came later. If I recall properly
> (and this deserves double-checking) 0db was defined as the threshold of
> audibility. (whose ears? I have no idea. Presumably it has since been
> redefined in some other more reproducible terms.)
> --
> Doug Smith W9WI
> Pleasant View (Nashville), TN EM66
> http://personal.bellsouth.net/~w9wi

3122. Re: I need help with a KPC-3

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-29 00:00:00 UTC
From: james <j@mes.preece.co.uk>
Message-ID: <7stda4$7di$1@news2.news.technocom.net>
Source record: 66672
Cross-posted to: alt.ham-radio.packet,alt.radio.amateur.club.taparc,rec.radio.amateur.antenna,rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

I have a kpc and all the manuals, please can you e-mail me you address Ill
do a photocopy of the whole lot and mail it to you.

erm also what computer are you going to use I have plenty of freeware
software which will help you out.

All I ask in return is your qsl card !!

Bargin !!

Please e-mail j@mes.preece.co.uk

my call sign is 2e1avx, name james age 23.

I run the club aclled Taparc, teenage packet amateur radio club.

Best regards

2e1avx (73
MD Miller wrote in message ...
>I inherited a Kantronics KPC 3 from my father in law, and I cant find
>anything that goes with it.
>
>I need to get
>1. Copy of a manual and instructions
>2. I need to know where to get the software for it
>3. What type of AC adapter goes on this unit
>4. How to wire up the cabling to a PC
>Any and all help would be greatly appreciated
>Thanks
>
>

3123. Re: UPS to PS?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-29 00:00:00 UTC
From: noone@nowhere.com
Message-ID: <37f27743.117773700@news.squonk.net>
Source record: 66673

On Wed, 29 Sep 1999 08:36:32 +0000, "Wineteer
Family" <wz7w@inteliport.com> wrote:

>I took the battery out of my APC 420 and built spade power cables to run my
>radio. I get 5 or six qso's out of it. My radio manual says max draw is
>20.5, but a 20 amp fuse has been working for over a year. My cw qso's are
>rarely at hi power though. I should hook an ammeter up and see what it
>really draws. I own an 11 amp switching astron, and don't want to buy a 25
>amp, so I am interested in using a sealed lead acid in parrallel with my
>power supply. I may need to switch off my power supply with the relay line
>to protect it. Could you switch off the ups's charger with your relay line?
>Good luck, and careful or you might learn something.
>Jim WZ7W
>
You don't have to use a relay, just use a big 12v
incandescent bulb. It'll act as a cheap
non-linear resistor, limiting the peak current
from the supply.

>----------
>In article <7srrcu$n0b$1@holly.prod.itd.earthlink.net>, "Michael Ruzinsky"
><maruzin@earthlink.net> wrote:
>
>
>> Can uninterrupted power supplies (UPS) be used to power high current rigs?
>>
>> About a week ago I came across an APC 650VA smart ups rated at 410 watts
>> output. I am in need of a power supple to power my HF rig (20A max. 16A
>> cont.) and it occurred to me that I might be able to use the ups. The
>> internal power supply has a 13.8V output to an 11 Ah battery. The positive
>> lead to the battery is fused with a 40A 32V fuse. Other than that I am not
>> sure how to proceed.
>>
>> Does the very nature of an UPS prohibit me from simply connecting my rig to
>> the ups 13.8V leads? I mean, does the ups only supply a small charging
>> current to the battery when you have AC power available and then allow you
>> to draw high current from the battery when the AC goes out?
>>
>> Michael Ruzinsky
>> n8ecg@arrl.net
>>
>>
>>

Just random thoughts

3124. 99 Pack Rats VHF Conference/Hamfest

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-29 00:00:00 UTC
From: landisj@nad.com
Message-ID: <7stuldmgs1@nnrp1.deja.com>
Source record: 66674
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew
Body handling: HTML body converted to readable text

23 rd MID-ATLANTIC STATES VHF CONFERENCE
Saturday, October 2, 1999

Hampton Inn
1500 Easton Road (Rte. 611)
Willow Grove, PA

Hotel Reservations 215-659-3535 or 800-426-7866*
Rates are $89 to $99 + 8% tax
Conference Admission: $24

Free Admission to Hamarama Flea Market with Conference Ticket on Sunday
Oct. 3

Hospitality Suite at Hotel Friday and Saturday Night at 7 PM

Lunch and Conference Dinner Saturday at the Hotel

Door Prizes at the Conference Dinner

You don't want to miss the 1999 Pack Rat sponsored 23rd Mid Atlantic
States VHF Conference . It's packed with lots of great technical
presentations.

We look forward to seeing everyone on Saturday Oct. 2rd. Registration
is
at 0800 and the conference starts at 0900 on Saturday.

The Hospitality suite will be open Friday (7 PM) and Saturday Night.

Free Ticket to the Hamarama Hamfest the following day, Sunday October
3rd. See the Packrats web page at
http://www.ij.net/packrats/HAMARAMA.HTM
for a map to Hamarama just off of Rt. 232 Middleton Grange Fairgrounds
in
Wrightstown, PA north of Newtown.

See the Pack Rat Web page for additional information:
http://www.ij.net/packrats

Conference Speaker List:
Frank Potts, NC1I - 432 EME/Limited Multi-Op Effort

Matthew Reilly, KB1VC - Line-of-Sight Plot Server

Brian Justin, WA1ZMS, Douglas A. Sharp, K2AD, Gordon Howell, WA4RTS -
1st 75 GHz VUCC

Buzz Miklos, WA4GPM - 6 Meter Power using a 4CX1500B

Paul Drexler, W2PED/John Sortor, KB3XG - 1 Watt, 24 GHz Power Amp

David Meier, N4MW - Microwave Activity from FM17

Brian Skutt, ND3F - A Unique Rover Operation

Peter Anderson, KC1HR - A Direct Digital Conversion Receiver

Al Katz, K2UYH/Tom Dinyovszky, KB2AH - 60 Foot EME Dish Project

An afternoon technical session will be held from 2pm to 6pm. It will not be a Noise Figure contest. This session allows hands on data taking, tweaking, and optimization consultants will be on hand to troubleshoot dead equipment. We will have same compliment of HP equipment as last year
consisting of a HP network analyzer to 6 GHz, HP Noise Figure meter to 18
GHz, HP Spectrum Analyzer to 22 GHz, Power Meters, Power Supplies, coax adapters, spare GaAs fets, and soldering equipment.

For further information, contact Conference Chairman, John Sortor, KB3XG
at 610-584-2489, 610-613-9360 or e-mail at JohnKB3XG@aol.com.

* Local number preferred for the Hampton Inn. Other local hotels can be found at http://www.bccvb.org/hotels.html or use the link on the packrat web
page.

Visit the Mt. Airy VHF Radio Club at:
0000,0000,fefehttp://www.ij.net/packrat
s/
Check the June 1999 VHF Contest Photos at the Web
site

Info on VHF/Microwave Nets, Beacons & Subscription to Cheesebits

Beacons at 50.080, 144.284, 222.065, 432.295, 903.071,
1,296.251, 2,304.037, 3456.220, 5,760.200 and 10,368.200 MHz from FM29JW

73,
Joe - AA3GN

Sent via Deja.com http://www.deja.com/
Before you buy.

3125. Transmitter for 23cm band

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-29 00:00:00 UTC
From: zac@54rvc.freeserve.co.uk
Message-ID: <7stnhk$2fd$1@news4.svr.pol.co.uk>
Source record: 66675

I have got hold of a 3W mobile phone booster amplifier and would like to use it as a PA block in my hombrew 1.2Ghz txmitter.

The phone booster is and NEC A5M3W-32 and uses a PF0032A output device. It is designed for use with the NEC MP5B2A mobile phone hands free kit.

If anyone has ANY information on the above (pin-outs, wiring diagrams etc...) could they please reply.

Cheers
Jon

3126. Going like hot cakes....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-29 00:00:00 UTC
From: Duncan Walters <tesla@cwcom.net>
Message-ID: <37F270BC.BE19A623@cwcom.net>
Source record: 66676

South Normanton & District Amateur Radio Club are holding a Radio &
Electronics Equipment Mini-Fair at the New Street Community Centre,
South Normanton, near Alfreton, Derbyshire, (England) on Monday 15th
November 1999. Starts 6.00pm, everyone welcome, refreshments available.
Easy access from M1 J28 and A38.
QRP kits, radio equipment and component traders in attendance. Tables
are available for booking, but are going like hot cakes.These are
available on a first-come, first-served basis, so don't be disappointed,
please book early!
For further information, and to book tables, please call Russell Bradley
G0OKD on 01773 863892, or e-mail Duncan Walters G4DFV on tesla@cwcom.net

3127. Current ratio through parallel resistances

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-29 00:00:00 UTC
From: Xjshillw6ivw@earthlink.net
Message-ID: <37f28c20.23547872@news.earthlink.net>
Source record: 66677

I think there's a relatively simple equation that gives the current
ratio through two resistors in parallel, given the resistance values.
For example, 80% of the total current would flow through one resistor
and 20% through the other resistor. I tried deriving an equation, but
the math quickly got out of hand. Any ideas?
73's Jim
Delete the X before using my e-mail address.
The X was added to stop spam.

3128. **** WANTED: Tannoy & Jensen speakers circa 1940's to 1960's ****

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-29 00:00:00 UTC
From: lzayas@xsite.net
Message-ID: <37f29b74.4069176@nntp.xsite.net>
Source record: 66678
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

WANTED: old Jenzen corner speakers ,TRI-axials, drivers,tweeters from
the 40's,50's,60's
Dual concentric TANNOYS.

e-mail or call <LZAYAS@XSITE.NET>

(773-594-1041) Chgo.

Thank You Louis

Louis Zayas
lzayas@xsite.net
773.594.1041
Chicago Illinois

3129. Speaker for TM-741/ 742 ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-29 00:00:00 UTC
From: Ham <hduff@ica.net>
Message-ID: <37F2AEE7.2BB169DE@ica.net>
Source record: 66679

I am in need of a speaker for my Kenwood TM-741 (742 would work too).
Anyone ?

3130. Re: Current ratio through parallel resistances

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-29 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <lbyl3.26835$d71.784220@news4.giganews.com>
Source record: 66680

The voltage is the same across both resistors. The total current is the sum of the two currents. The current through each resistor is inversely proportional to its resistance.

So the currents are E/R1 and E/R2. 1/R1 and 1/R2. The ratio of the currents is R2/R1 = I1/I2. The sum of the currents is I1+I2. The total resistance is !/((1/R1)+(1/R2)).

Calculate the total resistance and the current is shared in inverse proportion to the individual resistances.

3131. Re: Current ratio through parallel resistances

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-29 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37F2F8FB.49D67933@teleport.com>
Source record: 66681

I believe the formulas others have given are correct. But what you're looking for might be:

For R1 and R2 in parallel, the fraction of the total current which flows through R1 is R2/(R1+R2) and through R2 is R1/(R1+R2).

Roy Lewallen, W7EL

Jim Hill wrote:
>
> I think there's a relatively simple equation that gives the current
> ratio through two resistors in parallel, given the resistance values.
> For example, 80% of the total current would flow through one resistor
> and 20% through the other resistor. I tried deriving an equation, but
> the math quickly got out of hand. Any ideas?
> 73's Jim
> Delete the X before using my e-mail address.
> The X was added to stop spam.

3132. Re: Information on Lafeyette HA-250A

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-29 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <7t011r$5kg@dfw-ixnews15.ix.netcom.com>
Source record: 66682
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,nl.radio.amateur,alt.nl.radio.zendamateur.gelicentieerd,uk.radio.amateur

In article <7sr2uu$23fa$1@beast.euro.net>,
Peter en Helma Kerklaan <helma.kerklaan@icu.nl> wrote:
>I have an old Lafayette HA-250A linear amplifier, it is an small desktop
>model with 2 pieces of 6JS6C tubes in it. I do not have any information of
>it, I do have the following questions:
>
>1) For what frequency is this linear designed?
>2) What is the output power? looking at the tubes I expect 2 x 50 = 100 watt
>3) What is the input voltage? (12V ??)
>4) What is the pinning of the 8 pens input-socket?

The HA-250, in their 1968 catalog is speced at 20 to 54 MHz, 50 watts,
(100 PEP), 1 watt input, max input 10 watts, power 11.5 to 14.5 volts
negative ground, 8 amps max, 1 amp idle. Output impedance 40 to 600
ohms. Input 50 ohms. Built in antenna switching. $79.95

10-4, Good buddy. ;-)

Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

3133. Re: Decibel 'References'.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-29 00:00:00 UTC
From: Nick Kennedy <nkennedy@cswnet.com>
Message-ID: <7t0usu$2ddq$1@news.csw.net>
Source record: 66683

achilds@pacbell.net wrote in message <37F226DD.6423@pacbell.net>...

>But in all fields it is the log (or ln if it is Nepers)
>of a ratio. The confusion is what is the basis, that is
>why I think db should not be used by itself. One should use
>dbm, dbu, dba0, dbr, etc.
>

I'd think more often, dB would be expressed _without_ the reference. That's cause it is a pure ratio. But it depends on entirely what info you're trying to convey.

If your amplifier has 10 dB gain, it's 10 dB, period. Regardless of whether you want to put a microwatt or a milliwatt into the input.

On the other hand, if your expressing dB relative to a fixed reference, then you certainly have to say what the reference is, as in 10 dBm. In that case, use of dB is almost kind of superfluous. Saying 6 dBm is the same as saying 4 milliwatts.

Nick, Wa5BDU

7 dB older than 10.

3134. Re: Current ratio through parallel resistances

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-30 00:00:00 UTC
From: noone@nowhere.com
Message-ID: <37f5e478.145719045@news.squonk.net>
Source record: 66535

Way to not proofread my own post, I should say:

On Thu, 30 Sep 1999 03:52:38 GMT,
noone@nowhere.com (KC2FCR) wrote:

>Way to think of it is this: In series, the ratio
>of the voltage drop of one resistor to the total
>resistance is that resistance over the total
>resistance. The bigger the resistor, the higher
>the percentage. This is a voltage divider.
>
>In a parallel setup, it becomes a current divider
>(as you know), and the *inverse* of the resistance
>over the total of the inverse of all the resistors
>gives the current ratio for the one resistor.
>
>parallel current percentage =
>(1/Ra)/(1/Rb+1/Rc+1/Rd...)

should be:
(1/Ra)/(1/Ra+1/Rb+1/Rc...) (over ALL
resistances!)

>
>series voltage percentage =
>Ra/(Rb+Rb+Rc...)

Ra/(Ra+Rb+Rc...) (again, over the total!)

Text correct, equation typo...!
>
>
>On Wed, 29 Sep 1999 22:09:02 GMT,
>Xjshillw6ivw@earthlink.net (Jim Hill) wrote:
>
>>I think there's a relatively simple equation that gives the current
>>ratio through two resistors in parallel, given the resistance values.
>>For example, 80% of the total current would flow through one resistor
>>and 20% through the other resistor. I tried deriving an equation, but
>>the math quickly got out of hand. Any ideas?
>>73's Jim
>>Delete the X before using my e-mail address.
>>The X was added to stop spam.
>

Just random thoughts

3135. New Apartment/Condo Antenna Site

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-30 00:00:00 UTC
From: Greg Heath <gheath1@nycap.rr.com>
Message-ID: <KFCI3.1517$56.118946@typhoon.nyroc.rr.com>
Source record: 66536

[Last updated on: Sat Sep 25 8:51:39 1999]
Hello, I would like to welcome you to the new site, Cliffdwellers. A discussion of Antennas in restricted locations such as Apartment Buildings, Condos, Small Lots, and Stealth Antennas. I want to help amateur radio operators with the difficulties of operating from locations with less than desirable conditions. I myself have been a ham for the past 6 years and have operated from apartments all of that time. I always struggled building something that was hidden and functional. With Cliffdwellers I hope to be able to provide a resource for people to share their thoughts and ideas with others in need of finding a solution. Below is how to subscribe, unsubscribe, and list to the group.
Enjoy ! Greg Heath KB2QQM

To subscribe, send a message to:
Majordomo@qth.net Leave the "Subject" line blank. Under the Main body write in "subscribe cliffdwellers"

To unsubscribe, send a message to:
Majordomo@qth.net Leave the "Subject" line blank. Under the Main Body write in "unsubscribe cliffdwellers"

To Post items to the Group send your messages to: Cliffdwellers@qth.net

To view the Archives Page. Go to WWW.QTH.NET and select "Cliffdwellers" on the left from the pulldown, and select it, then
select one of the buttons Information, Archives, Digests, etc.

If you have problems accessing the site. You can send me email at gheath1@nycap.rr.com Greg Heath KB2QQM

3136. Re: Current ratio through parallel resistances

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-30 00:00:00 UTC
From: Xjshillw6ivw@earthlink.net
Message-ID: <37f2fd81.1813773@news.earthlink.net>
Source record: 66537

Thanks for the answers. Looking at the info, I came up with the
following: Assume two resistors, R1 and R2. The current through R1 is
100xR2/(R1+R2) percent of the total current. It came from
100x(1/R1)x(R1xR2/(R1+R2)), and the R1's cancel out.
73's Jim

On Wed, 29 Sep 1999 22:09:02 GMT, Xjshillw6ivw@earthlink.net (Jim
Hill) wrote:

>I think there's a relatively simple equation that gives the current
>ratio through two resistors in parallel, given the resistance values.
>For example, 80% of the total current would flow through one resistor
>and 20% through the other resistor. I tried deriving an equation, but
>the math quickly got out of hand. Any ideas?
>73's Jim
>Delete the X before using my e-mail address.
>The X was added to stop spam.
>

Delete the X before using my e-mail address.
The X was added to stop spam.

3137. Re: Q: Tube-Type Balanced Modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-30 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19990930033423.08459.00001671@ngol05.aol.com>
Source record: 66538

In article <37ed46f7.680855@news.io.com>, maddog@io.com writes:

>I'm looking for a practical balanced-modulator (tube-type) for a 7 MHz
>direct-conversion receiver I want to build with vacuum tubes (now,
>don't ask "why tubes", I just wanna... and don't know why). I figure
>with a balanced modulator at the front end, I can keep the BFO energy
>out of the antenna, and maybe even get a few db gain. Maybe a dual
>triode? two?
>
Hello,

Sorry to take so long to reply, but better late than never.

Two QST articles are "must reads" on this subject.

The first is the article by White in May, 1961. He built a direct conversion 80/40 receiver with five tubes: 6SK7 RF amp, two 6SB7 in the balanced detector, a 6U8 audio amp, and a 6C4 local oscillator. His reason for using a balanced detector was to eliminate any signal reception by direct rectification of the signal. (Note: The 6BA6 is essentially an improved miniature version of the 6SK7, and the 6BA7 is a miniature version of the 6SB7).

The second article is by DeMaw and Wilson and appeared in July, 1973. They describe a complete 80 meter QRP transceiver using tubes. The product detector is a single ended 6GX6 circuit. Apparently they had no trouble with direct signal rectification. This design should be easily adaptable to 40 meters.

Leakage of the LO signal into the antenna is not a major concern unless a detector circuit which has poor isolation is used. If an RF amplifier is used ahead of the detector, there is no reason to be concerned at all.

The most important concern is that the detector operate in true "product detector" fashion. What is meant is this: The only output from the detector should be the result of beating (heterodyning) between the received signals and the local oscillator. Direct signal rectification should not produce any output. The reason for this requirement is simple: It's not practical to have much RF selectivity in front of the detector. So if a detector which rectifies the signal is used, you'll hear dozens of signals at once.But if a true product detector is used, only signals which are within a few kHz of the LO frequency will produce audio output.

The White receiver, based on an article by Villard, achieves true product detection by means of a balanced circuit that causes rectification products to cancel out. Other product detectors avoid the problem by operating only on the linear region.

Other considerations are low noise, reasonable gain, and available parts.

Some have suggested using the balanced modulator circuits used in SSB transmitters. While the basic circuits may be adaptable, it must be remembered that a balanced modulator for an SSB transmitter is not designed with low noise figure in mind.

The 7360 tube was widely used in such circuits, but it can be expensive and hard to get. The 7360 was considered to be a transmitting tube, and was only made by RCA (I think). There are other beam deflection tubes, however, such as the 6ME8 and the 6JH8, which are often not recognized for what they really are. They were designed as demodulators in color TV sets, and are actually newer designs than the 7360. By the way, if anybody has practical data on the use of either tube as a receiver mixer, please let us know!

My recommendation would be to start with either the White circuit or the DeMaw/Wilson one, depending on what parts you have available.

You don't have to explain why you want to use tubes. Those who know why, don't need an explanation.

73 de Jim, N2EY

3138. Re: New Brewing Pages

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-30 00:00:00 UTC
From: joe holladay <holladay@primenet.com>
Message-ID: <7svan6nds1@nnrp03.primenet.com>
Source record: 66539
Cross-posted to: alt.beer.breweriana,alt.brewing,alt.collecting.breweriana,alt.fan.joan-brewer.kook.kook.kook,alt.homebrewing,rec.crafts.brewing,rec.radio.amateur.homebrew,uiuc.org.homebrewers

mundo bizzaro

John Heaps <buster.pjh@virgin.net> wrote in message
news:7spo53$8h3$1@nclient11-gui.server.virgin.net...
> New brewing pages can be found here
>
> http://freespace.virgin.net/buster.pjh
>
>
>
>

3139. Re: Current ratio through parallel resistances

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-30 00:00:00 UTC
From: Mike Willis <M.J.Willis@rl.ac.uk>
Message-ID: <37F31377.4FD1B6A2@rl.ac.uk>
Source record: 66540

Jim Hill wrote:

> I think there's a relatively simple equation that gives the current
> ratio through two resistors in parallel, given the resistance values.
> For example, 80% of the total current would flow through one resistor
> and 20% through the other resistor. I tried deriving an equation, but
> the math quickly got out of hand. Any ideas?

I think the open university in the UK do courses in basic algebra. I recommend you sign up for one if you are finding the mathematics (what is "math" anyway? it is not in my dictionary) hard. There must be similar courses and evening classes all over the world.

3140. Re: UPS to PS?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-30 00:00:00 UTC
From: n8blk@aol.com
Message-ID: <19990930113049.15277.00000049@ngol05.aol.com>
Source record: 66541

In article <7srrcu$n0b$1@holly.prod.itd.earthlink.net>, "Michael Ruzinsky" <maruzin@earthlink.net> writes:

>About a week ago I came across an APC 650VA smart ups rated at 410 watts >output. I am in need of a power supple to power my HF rig (20A max. 16A >cont.) and it occurred to me that I might be able to use the ups. The >internal power supply has a 13.8V output to an 11 Ah battery. The positive >lead to the battery is fused with a 40A 32V fuse. Other than that I am not >sure how to proceed.

I seem to recall an article in either 73 or QST with a belief it was 73 that featured using the transformer in a UPS to get approximately 15 volts and filtering down to 13.8 volts or so at about 20 amps. If you can get the thing cheap enough and it really does have a transformer to go from 12 volts to 120, you might be able to duplicate the feat. Please note that you will have to use pass transistors, large capacitors and the like, and if I remember correctly, he also had to use the leads of the transformer secondary as the primary, in other words, it took some doing.
-art clemons-

3141. Re: Q: Tube-Type Balanced Modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-30 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7t05bl$9tm$1@nnrp1.deja.com>
Source record: 66542

There is discussion of tube balanced mixers (including the
7360/6JH8) in G3VA's Technical Topics collections (ART7 and
the two Scrapbooks). The information is from a superhet
viewpoint, not direct conversion, but is likely to still
be useful.
--
Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte
Satellite: VA3SFL on UO-22, KO-23, KO-25

Sent via Deja.com http://www.deja.com/
Before you buy.

3142. Big Diode

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-30 00:00:00 UTC
From: Grif <kgriffit@wolfenet.com>
Message-ID: <37F38DFC.2412@wolfenet.com>
Source record: 66543

I need (need,,, funny word) Anyway,,, maby I want is a better way. I would like someone to point me to a source of something around 100 volts, 200 amps surplus,,, scr's ok, diodes was what I had in mind,,, but thinking about it a bit,,, the scr's would let me do some interesting control things. Anyway, would (of course) rather not spend a real pile of $$ on the project, figguring my design skills usually allow for about a %50 part mortality during the construction/design phase anyway. ;-)

3143. aor 8000

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-30 00:00:00 UTC
From: Kenneth Sprinkles Jr <kenneth@erinet.com>
Message-ID: <X5fzN1T0uyDSRZTo5ZbitAIKQxcm@4ax.com>
Source record: 66544

What is the best computer interface to get for the
aor 8000 without modifying it??
Also where bouts to buy it from and maybe a
ball park price. Thanks in advance.

3144. US, VE and DX HAM LICENSE PLATES

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-30 00:00:00 UTC
From: K2BJ <webmaster@k2bj.com>
Message-ID: <7t0biu$552@dfw-ixnews16.ix.netcom.com>
Source record: 66545

Seeking image files of all ham plates from everywhere to add to HF Mobile oriented site . Canada and DX under represented!

See all Canadian provinces and almost all 50 states at:

http://www.k2bj.com

3145. Re: UPS to PS?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-30 00:00:00 UTC
From: davem@groucho.cs.ubc.ca
Message-ID: <7t0d88$b1e@groucho.cs.ubc.ca>
Source record: 66546

nick.foot@dial.pipex.com writes:

>There are 2 types of UPS, on line and off line

>If yours is the on line type it will be excellent for the purpose. If it is off
>line it will be useless.

The APC 650 UPS that he has is an off-line type. It uses a 60 Hz
inverter and step-up transformer to produce 120 V. The battery is
slow-charged, so the charger output current is low.

Dave

3146. Re: Q: Tube-Type Balanced Modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-30 00:00:00 UTC
From: la8ak@online.no
Message-ID: <37f3a295.159878760@news.online.no>
Source record: 66547

On Sun, 26 Sep 1999 16:49:33 GMT, mjmanship@iquest.net (Mike Manship)
wrote:

>
>>sorry, apart from the obsolete 7360, it is hard to find good valve
>>mixers, particularly difficult to achieve good balance.
>
>
>How about a 6AR8 ?
>
Are you one of those demanding somebody else to try it?

3147. WWVB Receiver Chips?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-30 00:00:00 UTC
From: cj <cj_johansson@hp.com>
Message-ID: <37F3F16E.7D94@hp.com>
Source record: 66548

Anybody know of any chips out there that receive/decode WWVB time signals? I've heard that Raido Shack has a cheap receiver ($40?), does anyone know what they use? (Yeah, I could build one, but this is aimed at a product, so ready-made is really better here)

-cj
KD6AEG


```
-------------------------------------------------------------
|cj@boi.hp.com |
|=============================================================|
|Out ranchin' | |
|in the Wild, Wild | Froghorn Ranch |
|West, of Idaho... | Registered Missouri Foxtrotters |
| | http://www.froghorn.com |
-------------------------------------------------------------
```

3148. Re: Q: Tube-Type Balanced Modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-30 00:00:00 UTC
From: blackm00@cam.org
Message-ID: <blackm00-3009992319490001@dialup-511.hip.cam.org>
Source record: 66549

In article <19990930213726.16105.00000181@ngol08.aol.com>, n2ey@aol.com (N2EY) wrote:

> In article <7t05bl$9tm$1@nnrp1.deja.com>, marsgal42@hotmail.com writes:
>
> >There is discussion of tube balanced mixers (including the
> >7360/6JH8) in G3VA's Technical Topics collections (ART7 and
> >the two Scrapbooks). The information is from a superhet
> >viewpoint, not direct conversion, but is likely to still
> >be useful.
>
> Laura,
>
> Thanks for the pointer! Is any of the above available online, or should I start
> looking for the books?
>
> 73 de Jim, N2EY

I would think that if you looked in old QSTs and ARRL handbooks you'd find plenty of information on the 7360. Squires wrote about it in QST in 1963, I've never seen that article but I gather it was sort of a designer's eye view of the Squires-Sanders receiver that came out around then, and then for the rest of the sixties the 7360 was seen as the ultimate for mixer purposes. The tube was all over the place.

Pat Hawker has had a column in the RSGB's magazine for what seems like forever. He goes through all the other amateur publications and professional magazines, and copies out interesting schematics and detail into the column. Since he's based in the UK, it often covers items that we don't see over here, and often covers the things we do see here in a somewhat different fashion. The column certainly saves people from each wading through all the magazines.

In truth, I've never seen the column. My comments are based on having a couple editions of his book that collected up the various bits from the column in book form. The most recent one I have is twenty years old, and it's still a good source of information. Sice he collects the important bits, it is a lot more condensed than a book that tries to cover everything by collecting full articles in one place, which the ARRL handbook often looks like.

I assumed that the RSGB stopped publishing the collections at some point, because I don't recall seeing anything in the North American (read US) amateur press about a new edition in an awful long time.

But in a recent QST that I bought, I see that the ARRL ia advertising RSGB publications, and among them is Pat Hawker's book. I assume it's a more recent edition (I don't have the ad handy), and while it perhaps is too recent to cover the 7360, it is a book well worth buying.

Unless the title has changed, it's "Amateur Radio Techniques" by Pat Hawker.

I just discovered that the remaining local place that sells anything remotely ham related carries the RSGB books, and I intend to splurge later this month and get the latest edition of Amateur Radio Techniques and a couple of other RSGB titles that looked neat. I'm rather excisted about getting them.

Michael VE2BVW

3149. Re: Current ratio through parallel resistances

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-09-30 00:00:00 UTC
From: noone@nowhere.com
Message-ID: <37f4dcdd.143771844@news.squonk.net>
Source record: 66684

Way to think of it is this: In series, the ratio
of the voltage drop of one resistor to the total
resistance is that resistance over the total
resistance. The bigger the resistor, the higher
the percentage. This is a voltage divider.

In a parallel setup, it becomes a current divider
(as you know), and the *inverse* of the resistance
over the total of the inverse of all the resistors
gives the current ratio for the one resistor.

parallel current percentage =
(1/Ra)/(1/Rb+1/Rc+1/Rd...)

series voltage percentage =
Ra/(Rb+Rb+Rc...)

On Wed, 29 Sep 1999 22:09:02 GMT,
Xjshillw6ivw@earthlink.net (Jim Hill) wrote:

>I think there's a relatively simple equation that gives the current
>ratio through two resistors in parallel, given the resistance values.
>For example, 80% of the total current would flow through one resistor
>and 20% through the other resistor. I tried deriving an equation, but
>the math quickly got out of hand. Any ideas?
>73's Jim
>Delete the X before using my e-mail address.
>The X was added to stop spam.

Just random thoughts

3150. Re: Q: Tube-Type Balanced Modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-01 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19990930213726.16105.00000181@ngol08.aol.com>
Source record: 66550

In article <7t05bl$9tm$1@nnrp1.deja.com>, marsgal42@hotmail.com writes:

>There is discussion of tube balanced mixers (including the
>7360/6JH8) in G3VA's Technical Topics collections (ART7 and
>the two Scrapbooks). The information is from a superhet
>viewpoint, not direct conversion, but is likely to still
>be useful.

Laura,

Thanks for the pointer! Is any of the above available online, or should I start looking for the books?

73 de Jim, N2EY

3151. Varian VA-152-B Klystron question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-01 00:00:00 UTC
From: Joe Leikhim <jleikhim@nettally.com>
Message-ID: <37F436C8.F8C9670F@nettally.com>
Source record: 66551

I have come across a Varian VA-152-B Klystron tube. The spec sheet enclosed with the tube states only "FO" in the frequency column. The tube itself has no waveguide flange, instead it has an elongated oval window like a waveguide with a metal tab in front of it. It appears the tube is a cartridge to be inserted in a waveguide. There are no tuning screws visible anywhere. Does anyone have any idea the operating frequency range of this tube? Does it require an external cavity?

--
Joe Leikhim K4SAT (EX KE4TZH)
Jleikhim@nettally.com

"tv dinner by the pool,
i'm so glad i finished school" -F.Zappa 1967

"The Revolution will NOT be televised" -Gil Scott Heron

3152. Re: Sex Photo from 12 to 16 years old! 78

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-01 00:00:00 UTC
From: gutsyme <tayger1@netscape.net>
Message-ID: <37F47122.BD080C9B@netscape.net>
Source record: 66552
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc
Body handling: Binary attachment payload not displayed: tayger1.vcf

this garbage needs to be gone!

kc8jbo wrote:

> stlpor@ghg.com wrote in message <7ropap$m2u$3978@newsgate.elender.hu>...
> >SEX PHOTO FROM 12 to 16 YEARS OLD!
> >hvktnddjvzylzmylzotdzupkmulpryuzetgmqwmjivrvewwencxpzmg
>
> GetbacKKK posts his porn to the internet again...

--

[One or more binary attachments are retained only in the source text.]

3153. Need free webspace for Ham/SWL/Scanner Page?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-01 00:00:00 UTC
From: nw7us@hfradio.removethispart.org
Message-ID: <DL%I3.121$YI2.3840@sea-read.news.verio.net>
Source record: 66553
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hello,

I am inviting you to come visit http://hfradio.org - a site with many resources for Shortwave Radio and Utility Listeners, Ham Radio Hobbiests, and others who might be interested in this type of content.

So, come on by and check out my non-commercial SWLing/Ham Radio website. The URL is http://hfradio.org and features DX information, including QSL Route/Manager Lookups and Callbook Lookups; a Propagation Center including my eAlert service (allows you to sign up with your email address. Then the eAlert system will send you email propagation reports. I use this with my pager.); Equidistant Azimuth Map software (allows you to create maps of any QTH); Swap and Shop; Bookstore (I've hand-picked over a thousand book titles on radio, etc.); Free website space for YOU to create your own Ham or SWL site, and there's more. Easy to navigate. Open for suggestions.

If you feel up to it, after looking around the site, drop me a note (you'll find my address on the site) and share your thoughts.

73!

--

: World-Wide Communications via Amateur Radio : 122.93W : 47.67N :
: 10x56526 : CW/SSB - DX hunter : Brinnon, WA : Code Warrior #60 :
: visit http://hfradio.org/ :

3154. Connectors for Blaupunkt "Gamma" radio/cassette ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-01 00:00:00 UTC
From: Ian Wade <ian@dowrmain.demon.co.uk>
Message-ID: <DySccLAAhJ93Ew$a@dowrmain.demon.co.uk>
Source record: 66554
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,uk.radio.amateur

I've acquired a Blaupunkt "Gamma" radio/cassette, but without any connectors for power, control, antenna and speakers.

Can anyone point me to where I might get these from, together with pin-out details?

73
Ian, G3NRW
--
+---+
| Editor: RSGB's RadCom "Data" column. |
| email: g3nrw@arrl.net |
| AX.25: G3NRW @ GB7ZPU.#21.GBR.EU |
| |
| INTRODUCTION TO APRS: http://www.netro.co.uk/whitepaper.htm |
+---+

3155. Re: Q: Tube-Type Balanced Modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-01 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7t2er3uop1@nnrp1.deja.com>
Source record: 66555

To fill in some details:

Amateur Radio Techniques is based on material originally published in Pat Hawker's Technical Topics column in RadCom and its predecessors. The last edition was the 7th, hence the acronym ART7.

Since then, the RSGB have opted to collect and reprint the columns verbatim. They have published two such collections, Technical Topics Scrapbook 1985-89 and 1990-94. There is thus no overlap between any of the books.

They're fab. Buy them.
--
Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte
Satellite: VA3SFL on UO-22, KO-25

Sent via Deja.com http://www.deja.com/
Before you buy.

3156. Re: Speaker for TM-741/ 742 ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-01 00:00:00 UTC
From: Jim Devenport <jdport@concentric.net>
Message-ID: <37F4C61C.95BA09E8@concentric.net>
Source record: 66556

Pacific Coast Parts should have them new..... try
https://www.pacparts.com/whlsl.html
Jim W5AOX

Ham wrote:

> I am in need of a speaker for my Kenwood TM-741 (742 would work too).
> Anyone ?

3157. HIGH VOLTAGE RECTIFIERS AND POWER TUBES

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-01 00:00:00 UTC
From: Lcagle <lcagle@dibbs.net>
Message-ID: <7t2js2$fg3$0@198.79.30.56>
Source record: 66557

Electronics Manufacturing, Inc. manufactures a complete line of
high voltage rectifiers for amateur and commerical applications.

From 100 Watts to 100,000 Watts we can supply rectifiers for
you amateur projects.

We are the sole rectifier supplier for Henry Radio and many
other transmitter companies.

We also carry a full line of new and rebuilt power tubes.

Eimac Tubes Svetlana Tubes

3CX400A7 $400.00
3CX800A7 $420.00 3CX800A7 $357.00
3CX1200A7 $540.00
3CX1200D7 $600.00
8877 $725.00
3CX3000A7 $850.00 3CX3000A7 $725.00

5CX1500A $1100.00
5CX1500B $1000.00

These are fresh new tubes shipped from our stock with
new factory warranty.

Call us for rectifiers for all amateur applications.

See our Web Site at http://www.rectifiers.com

3158. Re: uA723 temperature drift

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-01 00:00:00 UTC
From: Clarke Echols <clarke@verinet.net>
Message-ID: <37F4D746.4F2661@verinet.net>
Source record: 66558

J M Noeding wrote:
>
> Got a psu from a friend, it uses uA723IC with 1 in driver and 4x
> 2N3055 in output stage. He claimed it was rated 14V 40A (for at least
> 30 seconds). But I found it was kneeling for 22-25A, and even
> worse.... loading it with 10A for 10 minutes the voltage rises from 14
> to 15V.
> So I decided to look further on his construction. There was no current
> limit, and few of the recommended guidelines had been followed.

I used the 723 regulator nearly 30 years ago when designing power
supplies
at Hewlett-Packard, and never had a problem with them. However, I quit
using 2N3055 power transistors before 1973 because they are dependable
but
not very impressive in higher currents.

If your 723 output voltage is drifting at low-level load, it might be a
bad regulator. The 723 is normally solid as a rock with little
temperature
drift.

However, the amount of output current the 723 can provide to drive a
series-pass
transistor is limited. 40 amps is a *LOT* of current, so you need a
current
gain of at least 400 in the pass transistor to carry that kind of load.
That
means you need a good power darlington transistor with an hfe of 1000 or
so
at the rated current if you expect good stability over a wide current
range,
with an appropriate base-to-emitter resistor to make sure you meet the
minimum load current needs of the 723 when the base of the darlington
device
might not be drawing enough at low output current.

It has been years since I looked at the device, so I don't recall
whether there
is or is not a minimum output current required.

Clarke Echols, P.E.

3159. Re: Q: Tube-Type Balanced Modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-01 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <7t2q1c$7j0$1@nnrp1.deja.com>
Source record: 66559

In article <blackm00-3009992319490001@dialup-511.hip.cam.org>,
blackm00@cam.org (Michael Black) wrote:
> In article <19990930213726.16105.00000181@ngol08.aol.com>,
n2ey@aol.com
> (N2EY) wrote:
>
> > In article <7t05bl$9tm$1@nnrp1.deja.com>, marsgal42@hotmail.com
writes:
> >
> > >There is discussion of tube balanced mixers (including the
> > >7360/6JH8) in G3VA's Technical Topics collections (ART7 and
> > >the two Scrapbooks). The information is from a superhet
> > >viewpoint, not direct conversion, but is likely to still
> > >be useful.
> >
> > Laura,
> >
> > Thanks for the pointer! Is any of the above available online, or
should
> I start
> > looking for the books?
> >
> > 73 de Jim, N2EY
>
> I would think that if you looked in old QSTs and ARRL handbooks you'd
find
> plenty of information on the 7360.

Hello,

There's lots of basic info about the 7360 in old QSTs and other ARRL publications, as well as in the RCA transmiting tube manual of the era. Trouble is, it's mostly info on using the tube in SSB transmitter applications, not as a high performance receiving mixer. The receiver applications of the 7360 described in the above publications are either for use as a single-ended mixer, or as a product detector. The info presented is good, but certain details are lacking, such as the optimum drive level for the deflector plates and the optimum plate load impedance.

> Squires wrote about it in QST in 1963,
> I've never seen that article but I gather it was sort of a designer's
eye
> view of the Squires-Sanders receiver that came out around then, and
then

> for the rest of the sixties the 7360 was seen as the ultimate for
mixer
> purposes. The tube was all over the place.

The Squires article gives lots of good RX design philosophy, and some
circuits, but again lacks the detail needed. This is understandable -
one can hardly expect the authors to give away their unique and
advanced receiver design to the competition.

The tube WAS all over the place. There was even an article on a phasing-
type 6 meter SSB exciter using the 6JH8. But hard data on how to design
practical balanced receiver is hard to find on this side of the pond.
>
> Pat Hawker has had a column in the RSGB's magazine for what seems like
> forever. He goes through all the other amateur publications and
professional
> magazines, and copies out interesting schematics and detail into the
column.
> Since he's based in the UK, it often covers items that we don't see
over
> here, and often covers the things we do see here in a somewhat
different
> fashion. The column certainly saves people from each wading through
all
> the magazines.

I gotta start digging in other places, then. Wonder if anybody can copy
me some of that info? (Will reimpurse costs, of course).

> In truth, I've never seen the column. My comments are based on having
> a couple editions of his book that collected up the various bits from
> the column in book form. The most recent one I have is twenty years
old,
> and it's still a good source of information. Sice he collects the
> important bits, it is a lot more condensed than a book that tries to
> cover everything by collecting full articles in one place, which the
ARRL
> handbook often looks like.

I will keep an eye out for those publications.
>
> I assumed that the RSGB stopped publishing the collections at some
point,
> because I don't recall seeing anything in the North American (read US)
> amateur press about a new edition in an awful long time.
>
> But in a recent QST that I bought, I see that the ARRL ia advertising
> RSGB publications, and among them is Pat Hawker's book. I assume it's
> a more recent edition (I don't have the ad handy), and while it
perhaps
> is too recent to cover the 7360, it is a book well worth buying.

Christmas is coming.....I better tell Santa what I want...
>
> Unless the title has changed, it's "Amateur Radio Techniques" by Pat
Hawker.
>
> I just discovered that the remaining local place that sells anything
remotely
> ham related carries the RSGB books, and I intend to splurge later
this month
> and get the latest edition of Amateur Radio Techniques and a couple of
> other RSGB titles that looked neat. I'm rather excisted about
getting them.

Over the years I have collected (for very little money, actually) every QST from mid 1944 to the present, most of them back into the mid-20s, and most of the Handbooks and other ARRL publications. Also, "the Radiotron", lots of RCA tube manuals, and a smattering of other stuff - but no RSGB goodies. Invaluable info and history, but in certain very specialized areas the coverage is a bit thin.

Primary interest here is building a high performance CW transceiver around the few hundred pounds of hollow-state parts I have available. Current rig uses a 7360 receiving mixer in the classic single ended mixer configuration. Works, but IF rejection is lacking, compared to a balanced design. Have some 6JH8s and 6ME8s, too.

Thanks for the tips.

73 de Jim, N2EY
FISTS #4360
BIT #0001

Sent via Deja.com http://www.deja.com/
Before you buy.

3160. Re: WWVB Receiver Chips?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-01 00:00:00 UTC
From: cj <cj_johansson@hp.com>
Message-ID: <37F4E8AC.4E8D@hp.com>
Source record: 66560

Just in case anyone else is interested, I found one source:

Temic semiconductors

see: http://www.temic-semi.com/hn/broadcas/broadcas.htm

Look for the Radio controlled clock receiver IC's

-cj

cj wrote:
>
> Anybody know of any chips out there that receive/decode WWVB time
> signals? I've heard that Raido Shack has a cheap receiver ($40?),
> does anyone know what they use? (Yeah, I could build one, but this is
> aimed at a product, so ready-made is really better here)
>
> -cj
> KD6AEG
>
> ----------
> ----------
> |cj@boi.hp.com |
> |==========|
> |Out ranchin' | |
> |in the Wild, Wild | Froghorn Ranch |
> |West, of Idaho... | Registered Missouri Foxtrotters |
> | | http://www.froghorn.com |
> ----------

3161. 10 GHz cavities, help needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-01 00:00:00 UTC
From: Andrea Grillini <ME1852@NOSPAM.mclink.it>
Message-ID: <7t3a4f$5tp$1@news.mclink.it>
Source record: 66561

I've two cavities working I guess in the 10 GHz band, recovered from an old home alarm system. I'd like to use them to set up a radio link between two computers. I knew somebody had already found the way to connect such cavities with Ethernet cards, but that subject is described on a magazine I haven't at hand. Has anyone already had any experience of that kind? At the beginning I thought I could use the RS232 line,
but I knew connecting to an Ethernet card is easier. I've been searching on the web for such a topic: so far no result. Any suggestion?
--

Andrea Grillini
Rome city (JN61FU)
ICQ UIN: 5510272
amateur radio station call: IK&#65533;RNT
****
****

3162. FS to USA residents

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-01 00:00:00 UTC
From: "D/\\\\/ID Pickard" <pickards@zen.co.uk>
Message-ID: <newscache$a54yif$9gj$1@socrates.zen.co.uk>
Source record: 66562

AM CB. 40ch. Cannot use legally in UK so that's reason for sale. Want old
HF rx or will take money ;o)
Please email me on 180152@qsl.net or pickards@zen.co.uk
tnx and vy 73 de

--
[)/\\/|[) :oP

3163. Re: 10 GHz cavities, help needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-01 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <37F533C1.12CC@pop.removethistomailme.net>
Source record: 66563

Andrea Grillini wrote:
>
> I've two cavities working I guess in the 10 GHz band, recovered from an old
> home alarm system. I'd like to use them to set up a radio link between two
> computers. I knew somebody had already found the way to connect such
> cavities with Ethernet cards, but that subject is described on a magazine I
> haven't at hand. Has anyone already had any experience of that kind? At the
> beginning I thought I could use the RS232 line,
> but I knew connecting to an Ethernet card is easier. I've been searching on
> the web for such a topic: so far no result. Any suggestion?
> --
>
> Andrea Grillini
> Rome city (JN61FU)
> ICQ UIN: 5510272
> amateur radio station call: IKï¿½RNT
> **
> *******

See my website (below) for some pointers on this. My guess is that
anything you salvage from a burglar alarm system is going to be hard to
modulate properly at 10 mbit/s, but lower speeds should certainly be
achievable.

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

3164. 10 GHz cavities, help needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-01 00:00:00 UTC
From: Andrea Grillini <ME1852@NOSPAM.mclink.it>
Message-ID: <7t1tuksvo1@news.mclink.it>
Source record: 66564

I've two cavities working I guess in the 10 GHz band, recovered from an old home alarm system. I'd like to use them to set up a radio link between two computers. I knew somebody had already found the way to connect such cavities with Ethernet cards, but that subject is described on a magazine I haven't at hand. Has anyone already had any experience of that kind? At the beginning I thought I could use the RS232 line,
but I knew connecting to an Ethernet card is easier. I've been searching on the web for such a topic: so far no result. Any suggestion?
--

Andrea Grillini
Rome city (JN61FU)
ICQ UIN: 5510272
amateur radio station call: IK&#65533;RNT
****
****

3165. Radio Amateur software for AMIGA ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-02 00:00:00 UTC
From: Geert Pirens <geert.pirens@ping.be>
Message-ID: <7t3emvklq2@news3.Belgium.EU.net>
Source record: 66565
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,tw.bbs.rec.radio.amateur,uk.radio.amateur

Hello,

I like to make a list about all available AMIGA software that is useble for
radio amateur purposes.
So if you now some name, a link on the net, a address where to buy or other?
Please let me now by mailing me.

I'll make the list vieweble for everyone at my homepage.

All information is welcome!

Thanks in advance.

Geert - ON1DQD

3166. Re: Q: Tube-Type Balanced Modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-02 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <37F5DF19.54E17145@bellsouth.net>
Source record: 66566

n2ey@aol.com wrote:
> > Pat Hawker has had a column in the RSGB's magazine for what seems like
> > forever. He goes through all the other amateur publications and
> professional
> > magazines, and copies out interesting schematics and detail into the
> column.
> > Since he's based in the UK, it often covers items that we don't see
> over
> > here, and often covers the things we do see here in a somewhat
> different
> > fashion. The column certainly saves people from each wading through
> all
> > the magazines.

Pat's column is indeed excellent, the first thing I read when my RadComm arrives. There are plenty of other excellent technical articles elsewhere in there too. I think you can still sign up for RSGB membership through the ARRL, using US $. (I keep renewing with my credit card so it becomes a non-issue..) It's well worth it. The proportion of useful information in a copy of RadComm far exceeds that in a copy of QST. (and I consider contest results "useful information"..)

Amazingly, Pat also finds time to get on the air; I've worked him at least three times...

> Primary interest here is building a high performance CW transceiver
> around the few hundred pounds of hollow-state parts I have available.
> Current rig uses a 7360 receiving mixer in the classic single ended
> mixer configuration. Works, but IF rejection is lacking, compared to a
> balanced design. Have some 6JH8s and 6ME8s, too.

I would love to see a circuit diagram somewhere once you get it done.. Not that I have the time to actually use the info, but it'd sure be interesting to look at.
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

Due to excessive spam, messages
with "angelfire.com" in the
body are subject to automatic
deletion from my mailbox.

3167. List of the rec.radio newsgroups

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-02 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <7t4750$n41$1@news.hawaii.edu>
Source record: 66567
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Archive-name: radio/personal-brief-introduction

In an effort help ensure a poster's article reaches the appropriate audience, below is a list of the rec.radio newsgroups. In most cases, a group's name will explain its purpose. Cross-posting should rarely be necessary.

rec.radio.broadcasting (devoted to the broadcast industry; moderated)
rec.radio.cb
rec.radio.info (periodic informational bulletins; moderated)
rec.radio.scanner
rec.radio.shortwave
rec.radio.swap (for buying, selling, and trading; not a discussion group)

rec.radio.amateur.antenna
rec.radio.amateur.boatanchors (tube-type communications equipment)
rec.radio.amateur.digital.misc (packet, pactor and other digital modes)
rec.radio.amateur.dx (long-distance amateur communications)
rec.radio.amateur.equipment (questions, comments regarding commercially-built amateur gear; not for buying/selling)
rec.radio.amateur.homebrew (devoted to home-building ham gear)
rec.radio.amateur.policy (issues include code, restructuring, local restrictions in conflict with FCC R&R)
rec.radio.amateur.space (satellites, meteor scatter, EME)
rec.radio.amateur.misc (any topic not covered in the above groups)

(At least two other English language radio hierarchies exist, prefixed with "uk" (United Kingdom), and "aus" (Australia), in place of "rec.")

Again, cross-posting should rarely be necessary. Many times, a long-running thread results from a single cross-posted article, and its content drifts further and further away from being "on-topic" in the various NGs which receive each and every followup.

For more detailed information, see "Guide to the Rec.radio Newsgroups" posted on the 15th of each month.

Jeffrey Herman, KH6O
(rec.radio.amateur working-group)

*It's been sadly reported that the moderator was lost to us in an automobile accident; the future of this newsgroup is not known. 73 Bill...

3168. Re: Connectors for Blaupunkt "Gamma" radio/cassette ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-02 00:00:00 UTC
From: Woody <woody@tangon.demon.co.uk>
Message-ID: <NTLXoGAXVb93EwcX@tangon.demon.co.uk>
Source record: 66568
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,uk.radio.amateur

In article <DySccLAAhJ93Ew$a@dowrmain.demon.co.uk>, Ian Wade
<ian@dowrmain.demon.co.uk> writes
>I've acquired a Blaupunkt "Gamma" radio/cassette, but without any
>connectors for power, control, antenna and speakers.
>
>Can anyone point me to where I might get these from, together with pin-
>out details?
>
>73
>Ian, G3NRW

Er, Halfords? They do a whole range. Other than that any car radio
shop. They should be standard DIN connectors on a Blaupunkt.

--
Andrew W.
Harrogate, UK
woody@tangon.demon.co.uk
g1uxp@gb7cym

3169. Re: Q: Tube-Type Balanced Modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-02 00:00:00 UTC
From: arnoldg@sf.telia.no
Message-ID: <37f5f5b1.1191158@news1.telia.no>
Source record: 66569

>
>Over the years I have collected (for very little money, actually) every
>QST from mid 1944 to the present, most of them back into the mid-20s,
>and most of the Handbooks and other ARRL publications. Also, "the
>Radiotron", lots of RCA tube manuals, and a smattering of other stuff -
>but no RSGB goodies. Invaluable info and history, but in certain very
>specialized areas the coverage is a bit thin.
>
>Primary interest here is building a high performance CW transceiver
>around the few hundred pounds of hollow-state parts I have available.
>Current rig uses a 7360 receiving mixer in the classic single ended
>mixer configuration. Works, but IF rejection is lacking, compared to a
>balanced design. Have some 6JH8s and 6ME8s, too.

Then you probably have the RCA Transmitting Tube Manual - Technical Series TT5.
You will find technical data on the 7360 on page 224 - 229 (If I remember
correctly..) If you don't have this manual, you can buy it from me if you want
- or, shit, I can just take a copy of those pages and send you by mail.

Best regards,

Arnold Goksoyr

DEMOSTENES A.Goksoyr N6899 Balestrand - Norway
Tlf.+47 57691340 Fax +47 57691267 http://demostenes.vestdata.no
Valves (tubes), sockets, transformers, books, capacitors and resistors
Svetlana distributor. We ship everywhere in the world.

3170. WTB: Small Bud (or similar) Cabinet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-02 00:00:00 UTC
From: "Cestyll O. Dywod" <willi6@erols.com>
Message-ID: <37F61849.5B2B@erols.com>
Source record: 66570

I'm looking for some small cabinets for nostalgia Home Brew Projects. Something along the line of a Bud Model C-993 or equivalent would be great. That one measures 10" Wide, 7" High, and 6" Deep. I can work with something a little larger or a tad smaller. Not too pickie! Has a trap door on the top, louvers on the side, detachable front panel, and with or without a matching chassis.

I'd prefer an unused one, but could work with something with limited previous holes (e.g., I could make a new front panel). Any classic finish (black, grey, wrinkle, hammertone) would be fine.

Drop me an e-mail if you have something in this line.

Thanks!

73, Dave K7HMP

Dave Williams
Sterling, Virginia

3171. Re: I need help with a KPC-3

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-02 00:00:00 UTC
From: wa6ylb@remove.this.theworks.com
Message-ID: <37f61df2.4977764@news.theworks.com>
Source record: 66571
Cross-posted to: alt.ham-radio.packet,alt.radio.amateur.club.taparc,rec.radio.amateur.antenna,rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

The De9 plug is the interface to the radio.
Pin1 is tx audio to your radio
Pin 3 is PTT for the radio
Pin 5 is receive audio from the radio.
Pin 6 is ground to the radio

The round coaxial plug uses anything from 6V or so above. Common is
12V.

The DB25 female jack is the same as an external modem. I use a
external modem cable to conenct to the KPC3.

If using comm 1, which on my PC is a DE9, then a external modem cable
is in order. If you need pin outs, let me know and I'll send them.

If using comm 2 , which on my PC is a DB25, then the external modem
cable is a db25 to db 25 "straight thru" cable, where pin 1 goes to
pin 1, pin 2 to 2 etc.

On Tue, 21 Sep 1999 16:47:22 GMT, "MD Miller"
<mdmiller@nospam.sybercom.net> wrote:

>I inherited a Kantronics KPC 3 from my father in law, and I cant find
>anything that goes with it.
>
>I need to get
>1. Copy of a manual and instructions
>2. I need to know where to get the software for it
>3. What type of AC adapter goes on this unit
>4. How to wire up the cabling to a PC
>Any and all help would be greatly appreciated
>Thanks
>
>

remove the REMOVE.THIS from email addr...
WA6YLB Byron Smith
http://www.theworks.com/~wa6ylb

3172. Re: FS to USA residents

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-02 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <37F67295.49CFE504@bellsouth.net>
Source record: 66572

Peter wrote:
> Just curious - why illegal in UK, is it the wattage?

UK uses FM for CB.
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

Due to excessive spam, messages
with "angelfire.com" in the
body are subject to automatic
deletion from my mailbox.

3173. Antenna restrictions help here

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-02 00:00:00 UTC
From: "john williams (remove FILTER/)" <FILTER/ac6ts@n2.net>
Message-ID: <37F6413C.6374B30C@n2.net>
Source record: 66573

Many ideas, designs, groups for antenna restrictions, RFI problems, etc.

Go to page below and click on STEALTH antennas-restriction solutions-RFI

LINK.
No need to wait for images to load, just go straight to bottom and click

on the link!

--
PAGE AT-> http://www.angelfire.com/ca2/home4biz/index.html

---/---
---/---
----/----
-----/-----

AC6TS John Williams
LAT. 33.06.15 LON. -117.03.36 7.030Mhz CW
DM13KC 14.030Mhz CW

3174. Pye and Phillips M290

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-02 00:00:00 UTC
From: Bob <merryprankster@cwcon.net>
Message-ID: <PErJ3.354$5Z5.11745@news1-hme0>
Source record: 66574

Hi all,
any sites to get mod info on this radio,
will be very appreciated...
Thanks from Bob.
Short and sweaty

3175. W7PUA DSP Transceiver Update

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-02 00:00:00 UTC
From: Derek K7XD <dhutter@pacifier.com>
Message-ID: <37f65074.0@news.pacifier.com>
Source record: 66575

> To the DSP-10 Transceiver 'User's Group':
>
> Here is an update. Details on all items are available on my web site
> http://www.proaxis.com/~boblark/dsp10.htm
>
> The following are available now:
> 1- Unpopulated PC Boards from Mashell Electric.
> 2- Updated Assembly Notes (v4.1) and Readme16 file for the software.
> 3- Version 1.6 of both the DSP and PC software.
> 4- Source code for all programs.
> 5- EZ-KIT Lite (and other parts) at 10% off from Newark (until Oct 15.)
> 6- Info on where to get EZFAST dsp loader.
>
> For those new to this, the DSP-10 is an all mode low-power transceiver for
2
> meters, using DSP and your PC as a front panel. See QST for Sept, Oct and
> Nov of 1999 for the whole story. This is an 'open' project with all
> information being shared among the users.
>
> Most questions are probably handled by the web site, but if not, send me
> email and I'll try. Also, continue to send me your experiences with the
> project and I'll try to get these to the other users.
>
> 73, Bob W7PUA
> boblark@proaxis.com
>
>

3176. scart switch design ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-02 00:00:00 UTC
From: mike@corn2.freeserve.co.uk
Message-ID: <37f670e0.4656431@news.freeserve.net>
Source record: 66576

Hi All, I'mlooking for a scart switch design, or info on what signals need to be switched for switching between a SKY settop RX and an OnDigital Settop rx
many thanks Mike W
mike@corn2.freeserve.co.uk

3177. Re: Q: Tube-Type Balanced Modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-02 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <7t5sj9$25e$1@neptunium.btinternet.com>
Source record: 66577

Pat does a saleable job.

However he is unable to sort out the wheat from the chaff and consequently, for evermore, he plagiarises and propogates old wives' tales.

Reg.

==========
<marsgal42@hotmail.com> wrote
> To fill in some details:
>
> _Amateur Radio Techniques_ is based on material originally
> published in Pat Hawker's Technical Topics column in RadCom
> and its predecessors. The last edition was the 7th, hence
> the acronym ART7.
>
> Since then, the RSGB have opted to collect and reprint the
> columns verbatim. They have published two such collections,
> Technical Topics Scrapbook 1985-89 and 1990-94. There is
> thus no overlap between any of the books.
>
> They're fab. Buy them.
> --
> Laura Halliday VA3LDH "Que les nuages soient notre pied
> Grid: FN03gs a terre..." - Hospital/Shafte
> Satellite: VA3SFL on UO-22, KO-25
>
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

3178. Re: Q: Tube-Type Balanced Modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-02 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19991002172802.16344.00000462@ngol08.aol.com>
Source record: 66578

In article <37f5f5b1.1191158@news1.telia.no>, arnoldg@sf.telia.no (DEMOSTENES A. Goksoyr) writes:

>Then you probably have the RCA Transmitting Tube Manual - Technical Series >TT5.
>You will find technical data on the 7360 on page 224 - 229 (If I remember >correctly..)

Oh yes, got that. It was all in a QST article in the early '60s, too.

Trouble is, it's all about using the 7360 in TRANSMITTING applications, like balanced modulators and transmitting mixers where considerations like noise figure and wide dynamic range are of little concern. As a RECEIVING mixer, there is precious little that I have been able to dig up - the Squires article, the various single-ended designs in the Handbook and QST, and two QST articles in the early '70s. None of them gives "how-to" design info, which is what I'm looking for.

73 de Jim, N2EY

3179. Source for Weller Iron?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-02 00:00:00 UTC
From: TimH <NOSPAM@nada.net>
Message-ID: <7t60mf$dj4$1@news.monmouth.com>
Source record: 66579

Would appreciate info on mail order sources for a Weller soldering iron with
a big tip for soldering PL-259's

Tnx & 73,
Barry N1EU

to reply by email please remove "NOSPAM" from my reply address
(bee gee at albany dot net)

--

3180. Re: Source for Weller Iron?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-02 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <7t62bf$9k6$1@autumn.news.rcn.net>
Source record: 66580

Mouser Electronics at http://www.houser.com

TimH <NOSPAM@nada.net> wrote in message
news:7t60mf$dj4$1@news.monmouth.com...
> Would appreciate info on mail order sources for a Weller soldering
iron with
> a big tip for soldering PL-259's
>
> Tnx & 73,
> Barry N1EU
>
>
> to reply by email please remove "NOSPAM" from my reply address
> (bee gee at albany dot net)
>
> --
> -----
>
>

3181. LTB Motorola Convertacom

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-02 00:00:00 UTC
From: ralph <crlane@erols.com>
Message-ID: <37F6A2A7.C3B60C98@erols.com>
Source record: 66581

Looking to buy a Motorola Converta com for a Motorola Mx350 hand held transceiver.

Ralph Lane

contact me at:

crlane@erols.com

3182. Re: Source for Weller Iron?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-02 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <7t6b8rlnb1@autumn.news.rcn.net>
Source record: 66582

Sorry, that's http://www.mouser.com

3183. Re: Source for Weller Iron?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-02 00:00:00 UTC
From: Les + Heather Harris <les_harris@bc.sympatico.ca>
Message-ID: <37F653CF.BCF04E10@bc.sympatico.ca>
Source record: 66583
Body handling: Binary attachment payload not displayed: les_harris.vcf

Tim, after all these years that have gone by, and all the pl259s I have put on, I found the best way to ensure a leak free joint is to use a good old 1 pound propane bottle with a torch head attached. Up here we call them burnzomatics, I am sure in your neck of the woods you call them by another name. You can reduce that flame to just the right amount to get the right heat.
Good luck, Les
VE7-CIT

TimH wrote:

> Would appreciate info on mail order sources for a Weller soldering iron with
> a big tip for soldering PL-259's
>
> Tnx & 73,
> Barry N1EU
>
> to reply by email please remove "NOSPAM" from my reply address
> (bee gee at albany dot net)
>
> --
> -----

[One or more binary attachments are retained only in the source text.]

3184. Re: Converting $20 Electro Mavin GPS unit's uP to NMEA output

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-02 00:00:00 UTC
From: James Jefferson <jjeffers@deskmedia.com>
Message-ID: <37F6B65F.772F@deskmedia.com>
Source record: 66584

Just to let you guys know: Byon N6BG has written a little PIC code that
does the proprietory to NEMA conversion.

Take a look at: http://www.byonics.com/gst-2/

-James Jefferson KB0THN

3185. Re: FS to USA residents

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-03 00:00:00 UTC
From: audiofan@hotmail.com
Message-ID: <37f6dbca.584070@news.pacific.net.sg>
Source record: 66585

Just curious - why illegal in UK, is it the wattage?

On Fri, 1 Oct 1999 23:36:33 +0100, "D/\\\\/ID Pickard"
<pickards@zen.co.uk> wrote:

>AM CB. 40ch. Cannot use legally in UK so that's reason for sale. Want old
>HF rx or will take money ;o)
>Please email me on 180152@qsl.net or pickards@zen.co.uk
>tnx and vy 73 de
>
>--
>[)/\\/|[) :oP
>
>
>

3186. Re: Merit plate transformer specs?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-03 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19991002230216.15884.00000386@ngol06.aol.com>
Source record: 66586

In article <37ED9E17.A1B4CA2C@sos.net>, Lynn Coffelt <lynnc@sos.net> writes:

>866s at least once in a lifetime! How true, how true!

You've been there, so you know. You owe it to yourself to build that amplifier!

> My first
>observation of the inner feelings one gets was on Dec 8, 1941. I was a
>kid, and a teacher by the name of Wheeler, and also a ham, was talking
>to Pearl Harbor in the aftermath. The blinking eerie blue glow
>accompanied by a faint mechanical click from the straight key and the
>throb (thump?) of the swinging choke ended my naivety as a child. Those
>blinking thumps from the screened box under the table are as clear in my
>memory as if it was an hour ago. Wow! Communicating across the Pacific!
>Imagine!

Man oh man, what a story! How soon after that was it all shut down "for the duration"?

My first experience with MV rectifiers was when I built a new rig in 1979 that used a pair of 807s in the final. I'd picked up some nice iron and tubes for pennies at a local hamfest, so haywired together a supply just to see what it could do. Have built several rigs since then - all with 866As for the HV. Sure, it's overkill for a pair of 807s, but after 20 years I have only managed to wear out two tubes. The light show amazes and astounds both ham and nonham visitors. The six VR tubes of various colors also help.

> My most powerful rig sizzled with a pair of 816s supplying
>push-pull 211s in a rig made from BC375 parts. My Mom's clothes line had
>fire on the ends, when key down on 40!

Oh yeah!! Never could find decent 816s, though. 866As were cheap and plentiful until a few years ago, though, when "that old tube stuff" became "classic" and "boatanchor".

> Thanks again for the tech data and the inspiration.

If you need any parts, just let me know. I've got some nice UTC swinging chokes that can do the job. Put two of them in series and have fifty henries with the key up. Plus plenty of stuff from BC-375 TUs...

Since 1979, the main rigs here have been a succession of 150 watt homebrew hollowstate bandswitching CW transceivers made from "recycled" parts. ("Recycled" is more "electro-politically correct" than "junk"). From 1987 to 1995, these rigs were used on FD as well as at home, usually in Class 1B-1 or 1B-2. The flash of the rectifiers in the tent help keep one going at 3 AM!

In 1995, running this rig in a totally solo operation, I made 629 QSOs using just an inverted V and a homebrew vertical. Rained all weekend, too. Quite an experience!

>Not many can
>talk real "Ham" talk these days!

Just get me started and stand back!

The past few years I've gone out on FD with a local club, because family obligations prevented doing a solo operation. In FD, you could earn a bonus by copying a message from W1AW that was first sent at 10 AM on Saturday - usually before anybody had a working setup. So I showed up with a dynamotor-powered Command set receiver/converter setup, tossed a few feet of wire into a nearby tree, hooked into my car battery and made the first 100 points for the club. The expressions of the onlookers were priceless.

Now if I can just find some potash and enough jelly jars, perhaps I can give slopjar rectifiers a try.
>
73 de Jim, N2EY

3187. help - velocity factor, hookup wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-03 00:00:00 UTC
From: noone@nowhere.com
Message-ID: <37f7fc08.30684620@news.squonk.net>
Source record: 66587

Playing around with an antenna design, does
anybody know the velocity factor of 20ga insulated
hookup wire in free air?

Just random thoughts

3188. Re: help - velocity factor, hookup wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-03 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <7t7em8jqc1@neptunium.btinternet.com>
Source record: 66588

VF for PVC insulated wire with insulation thickness about same as wire diameter is about 0.985

The velocity is reduced more when the wire gets nearer to the ground than by its insulation.

For any real difference from bare wire the insulation would have to be inches thick.

If you intend to use insulated wire as a protection against acid rain I suggest enamelled copper wire - the stuff which is used to wind and repair small 60Hz power transformers and electric motors. I have never used anything else.

It is no heavier than bare wire - which is of importance in antenna construction.
--
==========
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp
==========

KC2FCR <noone@nowhere.com> wrote in message news:37f7fc08.30684620@news.squonk.net...
> Playing around with an antenna design, does
> anybody know the velocity factor of 20ga insulated
> hookup wire in free air?
>
>
> ------
> Just random thoughts

3189. Re: help - velocity factor, hookup wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-03 00:00:00 UTC
From: noone@nowhere.com
Message-ID: <XHr3Nwshkk6jlF44kZM4ALUdYqAW@4ax.com>
Source record: 66589

Thanks! That helps quite a bit.

I didn't think of using enameled wire, the PVC
stuff was what I had lying around.

On Sun, 3 Oct 1999 12:28:38 +0100, "Reg Edwards"
<G4fgq.Regp@btinternet.com> wrote:

>VF for PVC insulated wire with insulation thickness about same as wire
>diameter is about 0.985
>
>The velocity is reduced more when the wire gets nearer to the ground
>than by its insulation.
>
>For any real difference from bare wire the insulation would have to be
>inches thick.
>
>If you intend to use insulated wire as a protection against acid rain
>I suggest enamelled copper wire - the stuff which is used to wind and
>repair small 60Hz power transformers and electric motors. I have never
>used anything else.
>
>It is no heavier than bare wire - which is of importance in antenna
>construction.

Just random thoughts

3190. Re: help - velocity factor, hookup wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-03 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <7t84os$30$1@plutonium.btinternet.com>
Source record: 66590

Hi, if you already got it, then use it. The little extra weight and wind drag probably won't matter anyway. Reg.

3191. SP8793 and MC12016 wanted.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-03 00:00:00 UTC
From: Mauro <mrsucci@tin.it>
Message-ID: <7t84a7$6ev$2@nslave1.tin.it>
Source record: 66591

I need to replace a failed SP8793. It is a dual modulo 40/41 prescaler.
I'm looking for some advise on where i can buy two SP8793 or MC12016.
Thanks for the help.
Mauro (i2SUH)

3192. bottling lagers - a question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-03 00:00:00 UTC
From: Dan <djnaab@students.wisc.edu>
Message-ID: <7t89n3$ts8$1@news.doit.wisc.edu>
Source record: 66592

I am considering trying to brew a lager beer in an extra dorm fridge we have lying around, but am curious about what the consensus is on the best way to bottle. Surprisingly, I can't find any information about it online.

Should I rerefridgerate immediately after bottling and let it carbonate and age at cool temperatures, or is it okay to complete this stage at room temperature? I'd imagine doing so at room temperature may impart some undesired flavors into the beer, but aren't experienced enough to know if it's noticable enough to worry about. Unfortunately, I don't have a lot of fridge space. Also, how long do most people lager? After bottled and carbonated, how long will a typical lager keep if stored at room temperature?

Thanks for your help!

3193. sorry!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-03 00:00:00 UTC
From: Dan <djnaab@students.wisc.edu>
Message-ID: <7t89s2$12u6$1@news.doit.wisc.edu>
Source record: 66593

```
sorry - wrong group!
```

3194. Marconi T500

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-03 00:00:00 UTC
From: Ted Hay <tedh@xcelco.on.ca>
Message-ID: <rvfpn42qmom46@corp.supernews.com>
Source record: 66594

Anyone have any info on this one? Would like to know if it can be programmed to 2 meters. A copy of the service manual would be nice also.

Ted VE3ONJ

3195. 2-5/8" x 5/8" NiMH ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-03 00:00:00 UTC
From: Major Ron <majrabsr@rconnect.com>
Message-ID: <rvfq3virmom49@corp.supernews.com>
Source record: 66595

Hi, I'm looking for a source for NiMH cells which are rated at 3500MAH and measure 2-5/8" L x 5/8" diameter. Appreciate any responses. Ron, KA9ALC

3196. FS Greenlees Chassis Punches

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-03 00:00:00 UTC
From: Larry Asp <larry.asp@sympatico.ca>
Message-ID: <37F7E892.6765@sympatico.ca>
Source record: 66596
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.equipment

5/8" Greenlees Chassis Punch - nice shape with box and instructions
$17.00

1 1/8" Greenlees Chassis Punch - nice shape. $17.00

Shipping extra.

3197. Re: 2-5/8" x 5/8" NiMH ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-03 00:00:00 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <hZRJ3.6107$Od.23845@news.rdc1.il.home.com>
Source record: 66597

> Hi, I'm looking for a source for NiMH cells which are rated at 3500MAH and
> measure 2-5/8" L x 5/8" diameter. Appreciate any responses. Ron, KA9ALC

Batteries Plus carries them, I've hear them called AF cells, 5/4 AF, and A cells, so I'm a little unclear on the designation. They ones they carry are 3700mAH.

3198. Tandy 200 Laptop at eBay - Great for Hamming

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-03 00:00:00 UTC
From: miles@mail.utexas.edu
Message-ID: <miles-0310992140470001@128.83.41.1>
Source record: 66598
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.digital.misc

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=175358934

Minimum initial bid is $1.
--
Miles Abernathy, miles@mail.utexas.edu, 512-471-1600

3199. Q: Tube-Type Balanced Modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-03 00:00:00 UTC
From: stoskopf@tri.NET
Message-ID: <37F78CE9.883E645B@tri.net>
Source record: 66599

Peter Chadwick who is a professional RE and frequent contributor to the RSGB pubs spoke at one of the Dayton seminars some (many?) years ago on receivers. I asked about the 7360 Squires type first mixer. Not wanting to misquote, but here goes: Some trouble with hum, some trouble with microphonics, he commented that performance didn't seem as great as indicated in the articles. You must remember that when Squires published his QST article (and I think died shortly after), there was not the big emphasis on measurements. Suspect that the existing tube gear was very adequate for the QRM levels then and selectivity was a bigger problem. Shift to solid state poorly done and better filters changed the emphasis.

7360s are scarce and expensive now. The 6JH8 is a ruggeder tube, was used in TV's also and seems more available from the tube guys at the hamfests.

There are a couple of major differences between the diode switching modulators, the cross coupled transistor mixers and the beam deflection mixers . With the switching mixers, unless the rise times of the switches are short and of adequate power, a strong signal can actually cross-modulate the OSC signal during the transition. Not much actually happens during the time on or off. The cross coupled mixers have the same problem. Also since these a basically switches, the unwanted products at the output have to either be terminated accurately, shorted (current, no voltage: no power), or open circuited (no current, some voltage: no power). Otherwise they kick back into the modulator and add to the problem. (I'm going to get flamed here.)

With the cross coupled mixers and nice clean sinusoidal LO, the same thing happens.

With a beam deflection mixer, the beam is amplified by the grid-screen circuit and probably doesn't even know that the deflectors and plates are there. The deflectors swing the beam back and forth across the plates with the beam not really caring where it goes. The signal probably has little effect on the deflection electrodes. (Although Squires made a comment on not saturating the deflectors as they "stick"). Also the LO is pretty well isolated from "pulling" of the LO as the mixer sig level changes. It would seem that termination of the plates MIGHT be of lessor importance than with diode mixers as IF signals well away from the desired IF will be grounded by the HI-Q tuned plate circuit--a big NO with the diode ones.

I've built a couple in the past, but made no measurements. In fact, my old SX101 MKIII got converted to one in the product detector way back, and seemed to work ok. "All Indians walk single file, the one I saw

did!"

The 6JH8 and 7360 have different operating voltage levels. As for NF, again haven't measured, but at HF, bet one hooked directly to the antenna thru some BP filtering will have an adequate NF for any practical situation.

Hope these random thoughts are useful.

N0UU

3200. Re: Source for Weller Iron?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-03 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19991003233412704 32@zetnet.co.uk>
Source record: 66600

> Would appreciate info on mail order sources for a Weller soldering iron with
> a big tip for soldering PL-259's
==========
Have you considered a butane gas powered soldering iron .
Heat output is adjustable to up to equivalent 60 Watts.
Size of the 'iron' is that of a board marker. Interchangeable tips
each have a catalytic burner.
Gas 'refill' is from a 'Ronson' cigarette lighter butane can.
Excellent for your PL-259 plug application, but also for low heat
input soldering jobs.

The make I use is Portasol (Ireland) ,but Weller and others also
manufacture them.

Frank , GM0CSZ / KN6WH

gm0csz.kn6wh@ukrs.org

3201. Re: bottling lagers - a question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-04 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <37F840D4.E93EF1C8@bellsouth.net>
Source record: 66601

Dan wrote:
> I am considering trying to brew a lager beer in an extra dorm fridge we have
> lying around, but am curious about what the consensus is on the best way to
> bottle. Surprisingly, I can't find any information about it online.

Actually I find it somewhat shocking that a UW student would not know
how to brew beer<G>!

(not really.. I drank plenty of it in my time on campus but never tried
to make my own..)
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

Due to excessive spam, messages
with "angelfire.com" in the
body are subject to automatic
deletion from my mailbox.

3202. TiCK keyer in TenTec QRP rig

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-04 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <37F846B3.40C04B03@bellsouth.net>
Source record: 66602

I got my TiCK 4 keyer kit on Friday, and couldn't resist building it & hooking it up over the weekend.. (probably cost me about 100 QSOs in the Cal QSO Party, though the QRP rig seemed to be about as effective on 20CW as the 400-watt big rig...)

If anyone else is considering this combination.. here's how I did it.. It's only been tested with the 1320 20-meter radio, but I have every reason to believe it will also work in the other rigs of this line..

First, if you haven't built the Ten-Tec yet, I would recommend drilling the extra holes first. You'll need a 1/4" hole for the pushbutton switch used to access the TiCK menus. This is probably best put on the front of the radio -- I punched it 1" to the right of the headphone jack. You will also need a hole for the paddle jack. I used a 1/4" jack and drilled the hole just below and to the right of the Sevierville ZIP code - it obliterates the "862" part of 37862. The TiCK kit includes a 1/8" stereo jack, and that would be easier to deal with if you're willing to put a 1/8" plug on your paddles. Besides, if you use a 1/4" jack, the left-rear sheet-metal screw that holds the case in place is going to short to one of the contacts; you'll have to remove it..

Finally, you'll need a hole or two to hold the TiCK board in place. I drilled one hole about 1/4" to the left of the "M" in "MODEL 1320"; ran a #2 screw through this hole, and used a #2 nut on the other side to hold it in place. I then slipped the TiCK board over this screw and used a second nut to hold the board in place. The first nut served to hold the back side of the board away from the back panel of the radio. You should put some kind of insulating material between the foil side of the TiCK and the back of the TenTec case. I had some double-sided foam tape, and used it as insulation. If you haven't already built the 1320 (I had) it would be easy enough to drill another hole and use both mounting holes in the TiCK.

When building the TiCK, omit R2. I would probably omit C5 if I were to do it again too. These components serve to reduce the level of the sidetone signal fed to the rig. The sidetone level is too low as it is, you don't need to reduce it further! Wire the TiCK for 12-volt power - i.e., install U2, C1, and C2.

Of course, the paddle input (J1-1/2/3) goes to the paddle jack. J2-1, the 12-volt input, can be wired either to the switched side of the power switch or directly to the 12-volt power input. If you run your 1320 from an AC power supply or a fairly stout battery, the 12-volt power jack is probably the right place to go. This way, the TiCK won't lose its memories when you turn the rig off. I planned to operate mine from a less-than-stout battery, so I wired it to the switched side. Don't

forget to wire either J1-1, J2-2, J3-2, J5-2, and/or J6-2 to ground.

J3-1, the keyline, goes to the center of the KEY jack on the back panel. (I suppose you could remove the KEY jack and put a 3-circuit jack for the paddles here, but then you wouldn't have a way to temporarily connect a straight key -- or a computer interface for contesting) J4, the 5-volt input, should NOT be connected to anything; you're using the regulator circuit and J2 instead. J5 wires to the pushbutton switch. J6-1 I connected to the high side (the left side, as you look from the back of the radio) of the VOLUME control. This may not be the best place for it. There is just barely enough gain to hear the TiCK's sidetone -- which you need to navigate the menus. In fact, if the band is crowded I have to carefully tune to an open frequency before I can set up the keyer. Someday I will move this wire to the junction of R9, R10, and R11. (the input of the audio preamp/low pass filter) If you haven't built your TenTec yet, it may be a good idea to tack a length of hookup wire to this point. It's much easier to do during construction than after the rig is complete. (Oh, J7 doesn't go anywhere..)

The combination works great. It provides a handy little transceiver that can make plenty of fun CW QSOs all in one package.
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

Due to excessive spam, messages
with "angelfire.com" in the
body are subject to automatic
deletion from my mailbox.

3203. Re: SP8793 and MC12016 wanted.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-04 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <7ta586rqr1@nnrp1.deja.com>
Source record: 66603

In article <7t84a7$6ev$2@nslave1.tin.it>,
"Mauro" <mrsucci@tin.it> wrote:
> I need to replace a failed SP8793. It is a dual modulo 40/41
prescaler.
> I'm looking for some advise on where i can buy two SP8793 or MC12016.
> Thanks for the help.
> Mauro (i2SUH)
>
>

Dear Mauro, SP8793 can be found with Partminer. The MC12016 you can
found with Partminer, Newark Electronics or Future Electronics.
URL's: www.partminerclient.com/, www.newark.com and
www.future-active.com
--
Greetings,

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Before you buy.

3204. I2C <-> RS-485

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-04 00:00:00 UTC
From: Frederic Rible <frederic.rible@ercom.fr>
Message-ID: <37F8B75C.1F4464DC@ercom.fr>
Source record: 66604
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

I want to connect a homebrew parabolic dish motion controler
(PIC 16C84) to my Linux computer through a RS-485 link (30 meters).

As I have already an I2C interface in my computer connected to
other devices, I think about an I2C over RS-485 solution as below:

Computer <-I2C-> Converter <--RS485--> Converter <-I2C-> PIC 16C84

I am looking for any informations and experiences about I2C / RS485
level converters.

73's Frederic F1OAT.

My hombrew site : http://www.teaser.fr/~frible

--
Frederic RIBLE Tel : +33 1 39 46 50 50
ERCOM SA Fax : +33 1 39 46 25 25
13, Avenue Morane-Saulnier Email : frederic.rible@ercom.fr
F-78140 VELIZY - FRANCE Web : http://www.ercom.fr

3205. Tall Antenna Tales

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-04 00:00:00 UTC
From: bshort@speedchoice.com
Message-ID: <MPG.1262de00e435ba789897cc@news.speedchoice.com>
Source record: 66605

Tall Antenna Tales

A local ham friend (K7JAY) recently bought parts of
several antennas from a local horse trader (KI7ZZ).

The idea was to take parts of a Mosley PRO-95 and
PRO-67 and make a PRO-96 and a PRO-57 (which
was sold to W7HSP).

So, now 2 local hams have parts of 2 antennas each.

Next, I (K7ON) got recruited to help install the PRO-96
at my antenna farm after reading a comparison report
by N0AX.

K7JAY went with me to the desert one Saturday morning
to assemble the PRO-96, but it has now been about 5 or
6 more Saturdays and the antenna is still not assembled.

First, it was discovered that the traps had to be re-wound
and the inner trap tubing (forming the capacitance) cut.
Getting the proper turns/length took a couple weeks of
calls to Mosley in addition to actual labor. As I understand
it, the traps are all modified.

Then there is the issue of tubing lengths. I ended up donating
part of my stash of Texas Tower aluminum tubing to this effort
as well as much time looking at Mosley manuals for the PRO-96,
PRO-95, and PRO-67.

The antenna is still not assembled and the current estimate by
K7JAY is a couple more days of tubing cutting. Since he has
over $1000 invested as well as all of this time, he wants to see
it through.

Personally, I would not have touched a Mosley antenna from the
start! Furthermore, the report from Champion Radio and N0AX
casts a dark, but dubious, shadow on Mosley antennas.

From what I have observed, the assembly manuals are quite vague
though perhaps adequate for someone assembling one from a new
carton. Mosley was contacted repeatedly by email, US Mail, and
by phone before helping with the modification (I think I now understand
their reluctance to become involved). There is nothing in the way of
technical detail in their manuals.

So, at this point, I have KLM monobanders for 15 and 20 ready to
go up on the tower to be used for the PRO-96 experiment (which

could then be compared to a TH-7 at the same QTH). Should I continue to support this misguided effort?

The questions are:

Does a Mosley PRO-96 even properly assembled work properly?

What is the performance?

Am I missing something or is this far too much expense and effort for what it is worth?

What is Mosley's current reputation? (I had a TA-33 years ago that I liked)

Has anyone else put up a PRO-96 and if so what comments have you?

As I see it, the fellow who bought the "PRO-57" which ironically he is upgrading to a PRO-67 at great expense and the fellow with the "PRO-96" have nothing more than a pile of scrap. Or am I missing something?

Thanks, Brian

3206. Re: I2C <-> RS-485

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-04 00:00:00 UTC
From: Jim Deas <jdeas@jadsystems.com>
Message-ID: <7tamsarlu1@ffx2nh5.news.uu.net>
Source record: 66606
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

It is not practical. The master slave relationship, Ack/Nak returns, and the
mutimaster aspects of I2C can not be mapped into
a RS-485 system with anything less that a processor on each side.
For I2C to work you need both a clock and data line that can be driven or
received by all devices on the bus during all phases of communications.

JD

Frederic Rible <frederic.rible@ercom.fr> wrote in message
news:37F8B75C.1F4464DC@ercom.fr...
> I want to connect a homebrew parabolic dish motion controler
> (PIC 16C84) to my Linux computer through a RS-485 link (30 meters).
>
> As I have already an I2C interface in my computer connected to
> other devices, I think about an I2C over RS-485 solution as below:
>
> Computer <-I2C-> Converter <--RS485--> Converter <-I2C-> PIC 16C84
>
> I am looking for any informations and experiences about I2C / RS485
> level converters.
>
>
> 73's Frederic F1OAT.
>
>
> My hombrew site : http://www.teaser.fr/~frible
>
> --
> Frederic RIBLE Tel : +33 1 39 46 50 50
> ERCOM SA Fax : +33 1 39 46 25 25
> 13, Avenue Morane-Saulnier Email : frederic.rible@ercom.fr
> F-78140 VELIZY - FRANCE Web : http://www.ercom.fr

3207. Super project cabinet!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-04 00:00:00 UTC
From: Butch Magee <butchkay@netdoor.com>
Message-ID: <37F9152B.4F98DB18@netdoor.com>
Source record: 66607

Several years ago I purchased an expensive cabinet with chassis box and never got around to building the rf proof power supply from the ARRL Handbook. I now have a super duper project box for sale that has chassis and the cabinet includes the front (lolid aluminum) and rear (perforated panel aluminum) and a colapsable bar to elevate the front about 1.75 inches (like ts440, IC730 etc). The cabinet is 11" wide, 8" high and 11" deep and the chassis is 10" X 10" X 2.25".

It is a beauty and I can mail you .jpg images. It will be in the 45.00 plus shipping range OR trade for what have you.

Butch Magee KF5DE

3208. PLEASE HELP: I need plans to build doppler receiver, transmitter direction finder

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-04 00:00:00 UTC
From: Don Ashworth <spam@menot.com>
Message-ID: <rvi2mtearad27@corp.supernews.com>
Source record: 66608

I need to find plans that provides schematics, identifies doppler antena construction, and simple testing/configuration information.

I will be building a "fixed" receiver that detects a "moving" transmitter. I "hope" to eventually be able to build something that will detect the transmitter between 10 and 3 feet of the receiver.

Thanks,
don_ashworth@bmc(DOT)com

3209. Looking for CQ Article on Beautiful Operating Desk

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-04 00:00:00 UTC
From: RJ Scott <kf7qz@yahoo.com>
Message-ID: <37F91485.3F1867CD@yahoo.com>
Source record: 66609

It was beautiful and on the front cover. It looked to be 3 sections that fit together at about a 22deg angle (or 30). Appeared to be laminate on the front face and table. Leather (or similar) covering around. I believe he was a 7 land type. Had shelves inside that held rig and each rig,tuner,rotor control had small wood surrounds (made it look nice).

If anyone remembers this article or has it I would like Callsign of 7 lander to get plans :).

Rick KF7QZ

3210. Re: uA723 temperature drift

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-04 00:00:00 UTC
From: la8ak@online.no
Message-ID: <37f7eaf8.22308173@news.online.no>
Source record: 66610

On Fri, 01 Oct 1999 09:46:14 -0600, Clarke Echols <clarke@verinet.net>
wrote:

>
>If your 723 output voltage is drifting at low-level load, it might be a
>bad regulator. The 723 is normally solid as a rock with little
>temperature
>drift.
>
this could indicate that the device or the production series is bad, I
have used many 723's before and never experienced any problems

>However, the amount of output current the 723 can provide to drive a
>series-pass transistor is limited. 40 amps is a *LOT* of current, so you need a
>current gain of at least 400 in the pass transistor to carry that kind of load.

if the output stage has a HFE = 10 and the driver has 50, the total
gain in power transistors for this construction is 500

10A in each output stage considerably more than I use in my
constructions, the construction is not mine, I would rather use
something near 2A, without the need for particular cooling fin, but it
has an effective fan and temperature is low, somewhere around 300°K
max, if I should take the effort of modifications the first attempt
would be to use a better driver, possibly darlington and 2N3771 in
output stage. But I need the supply for some experiments with a PA.

It is silly to use a regulated supply for a linear amplifier, any
regulated 13V psu for more than 5-10A indicates that the person likes
"heating for the birds", only a silly person chooses 12V supply for an
amplifier when a 28V or 48V version is available, but perhaps
difficult to keep the output voltage between 13-15V for an unregulated
psu(?) I tried it for ATLAS210, but found it almost impossible to
have better regulation than 4V (11-15V)

I just collected a 2m 250W PEP RF linear amplifier running on 28V
unregulated supply.

73 Jan-Martin LA8AK

3211. Re: PLEASE HELP: I need plans to build doppler receiver, transmitter direction finder

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-04 00:00:00 UTC
From: "Laszlo I. Morocz" <kf4pv@SPAMMENOTlmorocz.com>
Message-ID: <Ux9K3.14739$WO4.11443@jump.innerx.net>
Source record: 66611

For plans, and how-tos:

Transmitter Hunting: Radio Direction Finding Simplified by Joseph D. Moell, K0OV and Thomas N. Curlee WB6UZZ
Published by TAB Books, 1987.
ISBN 0-8306-2701-4
Library of Congress TK6565.D5M64
Dewey Decimal 796.2

Chapter 9 (pg 120 - 142) is Doppler DF Units. Contains - How Doppler DFs Work -Doppler DFs for Radio Amateurs -The Roanoke Doppler for VHF - Modifications and Improvements - Hunting with Doppler DFs -Commercial Doppler DFs -Other Doppler DF Applications

Though if you're interested in only 3 to 10 feet of range, a system based on a Double-Ducky type unit might actually work better. I've seen one of these used as a camera motion controller (the target had a low power transmitter on board). This type of unit has an angular resolution of 3 degrees or less, substantially better than most 4 antenna dopplers. They're described in the ARRL Antenna Book 16th Edition and the ARRL Handbook (1996 - maybe later ones, too, but these are the latest I have).

73 de KF4PV/3, Laszlo

--
To reply, remove the text SPAMMENOT from the e-mail address.

Don Ashworth wrote in message ...
>I need to find plans that provides schematics, identifies doppler antena
>construction, and simple testing/configuration information.
>
>I will be building a "fixed" receiver that detects a "moving" transmitter.
>I "hope" to eventually be able to build something that will detect the
>transmitter between 10 and 3 feet of the receiver.
>
>Thanks,
>don_ashworth@bmc(DOT)com
>
>
>
>

3212. Re: Any Tips for Hiding Antennas?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-04 00:00:00 UTC
From: Terry Sanford <tsanford@roadrunner.nf.net>
Message-ID: <37F93184.3DC3@roadrunner.nf.net>
Source record: 66612

MiamiBaker wrote:
>
> I need help in camouflaging or otherwise hiding my antennas. Any tips on how
> to disguise antennas?
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Suggestions:
1) Put up a flag pole. Fly flags on it whenever there is a 'good'
national/state/local reason. You'll get a good reputation for patriotic
spirit; Rah, Rah raise the flag etc.
Otherwise the flag pole is actually a vertical antenna mast. The cross
member near the top can suspend two different vertical lengths of wire
(steel cored clothesline etc.) which individually or in combination can
be used as antennae!
2) A steel cored clothesline; a Scottish amateur came back to me on this
one, he transmits on an antenna made of it. From second floor window
would be good. If there are never any clothes drying on it, so what?
3) Very fine wire, almost invisible, strung out to a nearby tree, pole,
building etc. Taken from an old transformer winding, almost an
inexhautible supply! You'll never know how it got there. Dropped from a
plane, maybe?
4) Inside your roof, wing tip to wing tip not touching anything. Out of
the weather!
5) Disguised, if allowed, as the guy wire/s to a roof mounted TV
antenaa. The TV antenna itself can be a 'dud' but the sloping guy wires
are antenna!
6) A tuned coil wound on a big frame, say 6 feet square, disguised as a
screen or garden trellis. Or two at right angles. Bit of ivy growing on
them would help!
7) Big loaded whip, mounted on top of a 'parked' vehicle. Can't see how
anyone can object to a 'mobile' or recreational vehicle antenna!
8) Vertical antenna, down side of building disguised to look as part of
a lightning conductor (dummy spike on top of roof/chimney not actually
connected to anything. Tell your neighbours you'r just "making sure" and
it 'helps' your insurance!
9) 'Slot' antenna. This is where the 'outline' of an opening forms a
slot antenna. Don't know anything about these but they are used on
aircraft and some TV broadcast towers. A half wave slot on 40 metres
would be over 60 feet though!
10) Balloon/kite? After all Marconi used a kite (after his balloons blew
away) to receive the first trans Atlantic wireless message in 1901 on
Signal Hill, St.John's Newfoundland, Canada; about 6 miles from where
I'm writing this (nonsense).
Best of luck: Fortunately we don't have problems like that here.
Oh, and finally;

Number 11) Move; to a better location?
All the best of luck, Terry S. Torbay, Newfoundland, Canada.
PS. You got 'bitchy' neighbours or sumpin?
PPS. I got 7 acres, 1000 feet in length (or more) and a bunch of trees
you can borrow if you want to come and visit.

3213. Re: POW Camp Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-04 00:00:00 UTC
From: Terry Sanford <tsanford@roadrunner.nf.net>
Message-ID: <37F93B72.72EC@roadrunner.nf.net>
Source record: 66613

Robert wrote:

> Anyone have information regarding the POW camp receiver utilizing an
> automotive lightbulb; I've tried a number of hookups but have failed to
> get it to work.
>
> Best regards
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Robert: Would the bulb have been used as a diode detector tube; with the filament forming the cathode and a plate (anode) outside the glass envelope. I believe this is how the electron tube was 'discovered'?

The only other story I recall being told, by an ex RAF aircrew member who was released after the war, (I was aged 5 to 11 during WWII), was that a broken razor blade and the impurities in a piece of coal or coke were used as a 'crystal detector' by POWs in prison camps in Europe. No other details regarding coils or tuning or headphones etc. But in Europe distances were much smaller and stations were on Long and Medium wave and quite powerful. So it probably would have been possible to pick up broadcasts without tube amplification; as per crystal sets.

All the best. Terrry S.

PS. In Britain during WWII listening to the radio was not restricted and we used to tune in to 'Lord Haw-Haw' and his "GERMANY CALLING, GERMANY CALLING", broadcasts. His announcements were often greeted with loud laughter and remarks such as "Isn't that the third time he's sunk the battleship Prince of Wales?" My father said it was a shame to hang him, he was too good a comedian!

3214. Re: POW Camp Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-04 00:00:00 UTC
From: Robert <nospam@nospam.com>
Message-ID: <37F947CE.2FB7@nospam.com>
Source record: 66614

Terry Sanford wrote:
>
> Robert wrote:
>
> > Anyone have information regarding the POW camp receiver utilizing an
> > automotive lightbulb; I've tried a number of hookups but have failed to
> > get it to work.
> >
> > Best regards
> XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
> Robert: Would the bulb have been used as a diode detector tube; with the
> filament forming the cathode and a plate (anode) outside the glass
> envelope. I believe this is how the electron tube was 'discovered'?
>
> The only other story I recall being told, by an ex RAF aircrew member
> who was released after the war, (I was aged 5 to 11 during WWII), was
> that a broken razor blade and the impurities in a piece of coal or coke
> were used as a 'crystal detector' by POWs in prison camps in Europe. No
> other details regarding coils or tuning or headphones etc. But in Europe
> distances were much smaller and stations were on Long and Medium wave
> and quite powerful. So it probably would have been possible to pick up
> broadcasts without tube amplification; as per crystal sets.
>
> All the best. Terrry S.
>
> PS. In Britain during WWII listening to the radio was not restricted and
> we used to tune in to 'Lord Haw-Haw' and his "GERMANY CALLING, GERMANY
> CALLING", broadcasts. His announcements were often greeted with loud
> laughter and remarks such as "Isn't that the third time he's sunk the
> battleship Prince of Wales?" My father said it was a shame to hang him,
> he was too good a comedian!

Terry:

Thank you for replying; I thought that maybe my post didn't 'take'. I guess building a radio set in a Japanese PoW camp is not homebrew enough for this group:
http://chide.bournemouth.ac.uk/people/r.g.wells.html !

The Ft. Gordon web site had details on the canteen radios that were made in Japanese PoW camps and they even included a schematic for it but it seemingly has been deleted:
http://www.gordon.army.mil/OCOS/BMDIV/AC/WWII/POWRADIO.HTM (The radio, placed inside a GI canteen, was created by Capt. Russell Hutchinson of the Engineer Corps.).

Yes, you are quite right about razor blades---especially the older double-edged 'blued' (Gillete) and a cat whisker of a piece of pencil lead as having the makings of a diode detector. Over on this side of the pond they were refered to as Fox Hole radios and I have read of many hookups.

With regard to the camp radio using an automotive lightbulb, the only arrangement I could figure out is a detector using a dual filament bulb. I was not able to get it to conduct in my quick hookups. The concept was was mentioned in an early issue of Electric Radio magazine as being used in a PoW camp; no other details were supplied.

Somewhere on the INTERNET there are sound files of Lord Haw Haw and his female counterpart, as well as, the Japanese gal the GI's called Tokyo Rose (Little Orphan Ann). I can't share your experience of listening to those broadcasts first hand but they were thrilling to me just as well.

Sincerely

3215. Re: Big Diode

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-04 00:00:00 UTC
From: Matt Erickson <kk5dr@hotmail.com>
Message-ID: <37F958FE.31845ACB@hotmail.com>
Source record: 66615

Check out C&H sales, I saw some of those diodes in their catalog.

Grif wrote:

> I need (need,,, funny word) Anyway,,, maby I want is a better way. I
> would like someone to point me to a source of something around 100
> volts, 200 amps surplus,,, scr's ok, diodes was what I had in mind,,,
> but thinking about it a bit,,, the scr's would let me do some
> interesting control things. Anyway, would (of course) rather not spend
> a real pile of $$ on the project, figguring my design skills usually
> allow for about a %50 part mortality during the construction/design
> phase anyway. ;-)

3216. Re: POW Camp Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-04 00:00:00 UTC
From: "Al, N2NKB"
Message-ID: <7tbn9o$k0n$1@bgtnsc01.worldnet.att.net>
Source record: 66616

Robert wrote in message <37F947CE.2FB7@nospam.com>...
>Terry Sanford wrote:
>>
>> Robert wrote:
>>
>> > Anyone have information regarding the POW camp receiver utilizing an
>> > automotive lightbulb; I've tried a number of hookups but have failed to
>> > get it to work.
>> >
>> > Best regards
>>
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
>> Robert: Would the bulb have been used as a diode detector tube; with the
>> filament forming the cathode and a plate (anode) outside the glass
>> envelope. I believe this is how the electron tube was 'discovered'?
>>
>> The only other story I recall being told, by an ex RAF aircrew member
>> who was released after the war, (I was aged 5 to 11 during WWII), was
>> that a broken razor blade and the impurities in a piece of coal or coke
>> were used as a 'crystal detector' by POWs in prison camps in Europe. No
>> other details regarding coils or tuning or headphones etc. But in Europe
>> distances were much smaller and stations were on Long and Medium wave
>> and quite powerful. So it probably would have been possible to pick up
>> broadcasts without tube amplification; as per crystal sets.
>>
>> All the best. Terrry S.
>>
>> PS. In Britain during WWII listening to the radio was not restricted and
>> we used to tune in to 'Lord Haw-Haw' and his "GERMANY CALLING, GERMANY
>> CALLING", broadcasts. His announcements were often greeted with loud
>> laughter and remarks such as "Isn't that the third time he's sunk the
>> battleship Prince of Wales?" My father said it was a shame to hang him,
>> he was too good a comedian!
>
>Terry:
>
>Thank you for replying; I thought that maybe my post didn't 'take'. I
>guess building a radio set in a Japanese PoW camp is not homebrew enough
>for this group:
>http://chide.bournemouth.ac.uk/people/r.g.wells.html !
>
>The Ft. Gordon web site had details on the canteen radios that were made
>in Japanese PoW camps and they even included a schematic for it but it
>seemingly has been deleted:

>http://www.gordon.army.mil/OCOS/BMDIV/AC/WWII/POWRADIO.HTM (The radio,
>placed inside a GI canteen, was created by Capt. Russell Hutchinson of
>the Engineer Corps.).
>
>Yes, you are quite right about razor blades---especially the older
>double-edged 'blued' (Gillete) and a cat whisker of a piece of pencil
>lead as having the makings of a diode detector. Over on this side of
>the pond they were refered to as Fox Hole radios and I have read of many
>hookups.
>
>With regard to the camp radio using an automotive lightbulb, the only
>arrangement I could figure out is a detector using a dual filament
>bulb. I was not able to get it to conduct in my quick hookups. The
>concept was was mentioned in an early issue of Electric Radio magazine
>as being used in a PoW camp; no other details were supplied.
>
>Somewhere on the INTERNET there are sound files of Lord Haw Haw and his
>female counterpart, as well as, the Japanese gal the GI's called Tokyo
>Rose (Little Orphan Ann). I can't share your experience of listening to
>those broadcasts first hand but they were thrilling to me just as well.
>
>Sincerely
>

Don't forget that the clever writers of "Gilligans Island" featured an
episode where Gilligan's tooth filling acted as an A.M detector.
In fact, I see plenty of accidental detectors. In one case I have seen
a metal fence located near a cell site that actually produced intermods that
were degrading the system performance.
Once I tried an experiment to see if two plants could communicate
with each other. I attached a low noise amplifier and an o'scope
between the soil and leaves of one plant, and stimulated the other
plant across the room. I saw plenty of action on the o'scope,
and it looked very intelligent. Turns out the my plant was detecting
the local A.M. radio station.
Al

3217. ������!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-05 00:00:00 UTC
From: ���� <channel5@nikopol.net>
Message-ID: <939138246.875373@srv2.nikopol.net>
Source record: 66485
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.packet,rec.radio.amateur

������!!!!!
��������� ���. ������ �� ��707. (������� ⁄ ⁄ ⁄ ⁄ ⁄-⁄ ⁄ ⁄ ⁄

3218. Re: POW Camp Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-05 00:00:00 UTC
From: "Laszlo I. Morocz" <kf4pv@SPAMMENOTlmorocz.com>
Message-ID: <lopK3.14749$WO4.11902@jump.innerx.net>
Source record: 66486

Gives new meaning to having heard it on the grapevine :-)

73 de KF4PV/3 Laszlo

--
To reply, remove the text SPAMMENOT from the e-mail address.
Al, N2NKB wrote in message <7tbn9o$k0n$1@bgtnsc01.worldnet.att.net>...
<snip>
>Once I tried an experiment to see if two plants could communicate
>with each other. I attached a low noise amplifier and an o'scope
>between the soil and leaves of one plant, and stimulated the other
>plant across the room. I saw plenty of action on the o'scope,
>and it looked very intelligent. Turns out the my plant was detecting
>the local A.M. radio station.
>Al
>
>

3219. trade ya

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-05 00:00:00 UTC
From: Dick Elliott <elliottk@netusa1.net>
Message-ID: <7tdlga$1fu0$1@news.netusa1.net>
Source record: 66487

I am asking $500.00 for a CTX laptop. Or will trade for a Heathkit SB 104A with matching power supply and speaker and the SB 634 Station Console all with
manuals a 8+ condition trade. There is nothing wrong with the Lap top. Here is the info: All Manuals, Disks, and one cable for TV/CRT connection; AC/DC Battery included, Processor=Intel 166Mhz with MMX Pentium; ROM=256KB BIOS; RAM=8MB Standard on board memory, expansion to 16/24/40/72.; Cache=256L L2 Cache; Mass Storage=2.5-inch removable hard disk dirve; 3.5-inch removable diskette drive; 5.25-inch removable CD-ROM 16X; Display=Dual Screen or TFT LCD; SVGA (800 by 600 resolution), supporting 64k colors; Simultaneous CRT/LCE displayu at 640x480; Pointing Device=Built-in TouchPad; Interface Ports=9-pin RS-232 serial port, 25-pin parallel port. 15-pin CRT output port, Infared port supporting IrDA standard, One PCMCIA 2.0 type III slot or two type II slots, 6-pin mini DIN connector, 200pin-Docking port, 15-pin MIDI/Game port, DC-IN power input jack, RCA TV jack, and 3 Audio jacks. Comes with windows 95. Added on but no disk= Windows 95 & 98 PLUS. Windows 98 and 98 1/2. Plus many microsoft updates taken off the update program. Y2K ready. Also 56K Winmodem by RapidComm Modem for the PCMCIA slot. I am good in the call book as N9IPA.....hope to hear from you.....\'73' Dick Elliott -- elliottk@netusa1.net

3220. Re: I2C <-> RS-485

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-05 00:00:00 UTC
From: mike@corn2.freeserve.co.uk
Message-ID: <37fa5665.3037791@news.freeserve.net>
Source record: 66488
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

IIRC the relevant document was reproduced by ELECTOR a few years ago

On Tue, 05 Oct 1999 10:02:31 -0400, Shawn Upton
<supton@eece.maine.edu> wrote:

>
>I think I saw a device in a Phillips book which had a current amplifier
>for using I2C over long links.
>--
>**
>Shawn Upton
>Electrical Engineering Student
>University of Maine at Orono
>webpage: http://www.eece.maine.edu/~supton/
>mail: supton@eece.maine.edu
>KB1CKT Tech Plus
>**

3221. Re: Checking Traps on a beam antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-05 00:00:00 UTC
From: Mike Lucas W5CHR <lucascom@email.msn.com>
Message-ID: <uzeVUT3D$GA.290@cpmsnbbsa03>
Source record: 66489

Doug Snowden wrote in message <37F9EE66.AAA7A651@ncdc.noaa.gov>...
>I once saw an article written by HyGain on a method
>to check the traps on a beam like the TH3 or TH6.

Doug: I have a copy of an old Hygain paper on troubleshooting antennas, about 11 pages double sided. If you'd like I can scan them in and send as email attachments, or snail-mail (if my wife will tell me where the stamps are!!) Others on the group may also need the info, so I responded here and a cc:

Mike Lucas W5CHR
Memphis, tenn

3222. Need Data on Motorola MV2301 varicap

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-05 00:00:00 UTC
From: Bob <bmiller@calweb.com>
Message-ID: <37fac5ed_1@news.calweb.com>
Source record: 66490

Hi folks,

I need the data on a Motorola MV2301 varicap. min max capacity etc.

tnx for the read

Bob, KE6F

3223. HELP: Need schematic for Heath SB-610

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-05 00:00:00 UTC
From: <>
Message-ID: <KvbK3.14596$t%3.1132759@typ11.nn.bcandid.com>
Source record: 66617

I need to repair my SB-610 Monitor Scope. Does anyone have a manual for sell
or willing to send me a scanned file of the schematic??

Don AF4Z
af4z@palmnet.net

3224. Modifying a TK-820 (H)?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-05 00:00:00 UTC
From: jimn0oct@aol.com.clothes
Message-ID: <19991004225044.15494.00000805@ng-fj1.aol.com>
Source record: 66618

Anybody successfully moded a Kenwood TK-820(H) for use on the Amateur bands?
I've got the programmer, and have programmed in the frequencies, but it doesn't
seem to hear anything that low [it is a 450-470 MHz unit]. Any advice? Mess
with one of the VCO's??

Thanks for any and all help!

Jim Nï¿½OCT

To reply direct, remove clothes.
...-.-

3225. Re: POW Camp Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-05 00:00:00 UTC
From: JW <jdwalton@home.com>
Message-ID: <37F99D8F.4A88A6BD@home.com>
Source record: 66619

A great post from Bournemouth!

OK Ginger - now go back before Gilligan's Island - recall that the kid's novel "Henry and Beezus" - (early '50's - there were a series of these books, same vintage as "The Boy's Book of Electronics" by Morgan) same story with Henry complaining to the dentist that he was hearing radio on his fillings.

> Don't forget that the clever writers of "Gilligans Island" featured an
> episode where Gilligan's tooth filling acted as an A.M detector.
> In fact, I see plenty of accidental detectors. In one case I have seen
> a metal fence located near a cell site that actually produced intermods that
> were degrading the system performance.
> Once I tried an experiment to see if two plants could communicate
> with each other. I attached a low noise amplifier and an o'scope
> between the soil and leaves of one plant, and stimulated the other
> plant across the room. I saw plenty of action on the o'scope,
> and it looked very intelligent. Turns out the my plant was detecting
> the local A.M. radio station.
> Al

3226. Re: POW Camp Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-05 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <7tbtm7$32h$1@autumn.news.rcn.net>
Source record: 66620

> The only other story I recall being told, by an ex RAF aircrew
member
> who was released after the war, (I was aged 5 to 11 during WWII),
was
> that a broken razor blade and the impurities in a piece of coal or
coke
> were used as a 'crystal detector' by POWs in prison camps in Europe

As a kid I build radios using a razor blade and pencil lead as the detector. You had to use the razor blades with the blue coating. I assume it was the coating that acted as a semi-conductor.

3227. Re: HELP: Need schematic for Heath SB-610

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-05 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <37F9D433.3687408E@bellsouth.net>
Source record: 66621

Don Winn wrote:
> I need to repair my SB-610 Monitor Scope. Does anyone have a manual for sell
> or willing to send me a scanned file of the schematic??

I asked the same question a few weeks ago, and someone else (sorry, I
forgot who!) suggested:
http://users.accessus.net/~dwentz/kb9jja/heathkit/

There's a scanned schematic there.

In my case, I was unable to focus the trace. It was suggested that one
of the high-value resistors in the high-voltage chain might have changed
value, and that was in fact exactly what happened.
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

Due to excessive spam, messages
with "angelfire.com" in the
body are subject to automatic
deletion from my mailbox.

3228. Vintage style vacuum tube AM modulator circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-05 00:00:00 UTC
From: wa2ise@netcom.com
Message-ID: <7tc5cl$k0k@dfw-ixnews6.ix.netcom.com>
Source record: 66622

For thos of you into vintage electronics experimenting, here's a vacuum tube AM xmitter (QRP) or excitor. See: http://www.geocities.com/CapeCanaveral/9178/amtxmit.jpg

It uses a pentagrid tube 6CS6 as a mixer/modulator element.

3229. Re: POW Camp Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-05 00:00:00 UTC
From: n2cqr@erols.com
Message-ID: <37f9f776.209396729@news.erols.com>
Source record: 66623

On Tue, 5 Oct 1999 00:09:49 -0400, "Bob Lewis" <aa4pb@erols.com>
wrote:

>> The only other story I recall being told, by an ex RAF aircrew
>member
>> who was released after the war, (I was aged 5 to 11 during WWII),
>was
>> that a broken razor blade and the impurities in a piece of coal or
>coke
>> were used as a 'crystal detector' by POWs in prison camps in Europe
>
>As a kid I build radios using a razor blade and pencil lead as the
>detector. You had to use the razor blades with the blue coating. I
>assume it was the coating that acted as a semi-conductor.

Antique Electronic Supply http://www.tubesandmore.com
has for $12.95 a "WWII Foxhole radio kit" featuring razor blade and
pencil lead. Lots of other good radio stuff also.
73 Bill N2CQR http://www.erols.com/wmeara

3230. Re: POW Camp Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-05 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <37F9C50E.842ADD8@corecomm.net>
Source record: 66624

Al, N2NKB wrote:
> Once I tried an experiment to see if two plants could communicate
> with each other. I attached a low noise amplifier and an o'scope
> between the soil and leaves of one plant, and stimulated the other
> plant across the room. I saw plenty of action on the o'scope,
> and it looked very intelligent. Turns out the my plant was detecting
> the local A.M. radio station.

Now we *know* you're pulling our legs. There's nothing intelligent on AM
broadcast radio. :-)

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

3231. Checking Traps on a beam antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-05 00:00:00 UTC
From: Doug Snowden <dsnowden@ncdc.noaa.gov>
Message-ID: <37F9EE66.AAA7A651@ncdc.noaa.gov>
Source record: 66625

I once saw an article written by HyGain on a method
to check the traps on a beam like the TH3 or TH6.
I have a MFJ analyzer, but don't see how I can check.
Also, the article mentioned what the expected resonant
freqs should be for the various traps. I have a TH3 that
I would like to check. Any help/ideas?

Doug, N4IJ

3232. Re: POW Camp Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-05 00:00:00 UTC
From: noone@nowhere.com
Message-ID: <37fa1bf5.64354414@news.squonk.net>
Source record: 66626

On Tue, 05 Oct 1999 03:39:50 GMT, JW
<jdwalton@home.com> wrote:

>A great post from Bournemouth!
>
>OK Ginger - now go back before Gilligan's Island - recall that the kid's novel
>"Henry and Beezus" - (early '50's - there were a series of these books, same
>vintage as "The Boy's Book of Electronics" by Morgan) same story with Henry
>complaining to the dentist that he was hearing radio on his fillings.
>
Behind what used to be WPTR in Albany, a 50kW AM
station, there was/is an old junkyard. Legend has
it you could sometimes here the demodulated audio
on the rusted metal parts.

>> Don't forget that the clever writers of "Gilligans Island" featured an
>> episode where Gilligan's tooth filling acted as an A.M detector.
>> In fact, I see plenty of accidental detectors. In one case I have seen
>> a metal fence located near a cell site that actually produced intermods that
>> were degrading the system performance.
>> Once I tried an experiment to see if two plants could communicate
>> with each other. I attached a low noise amplifier and an o'scope
>> between the soil and leaves of one plant, and stimulated the other
>> plant across the room. I saw plenty of action on the o'scope,
>> and it looked very intelligent. Turns out the my plant was detecting
>> the local A.M. radio station.
>> Al

Just random thoughts

3233. DJ160 HT Lithium Battery?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-05 00:00:00 UTC
From: "Michael G. Heitmann" <michael.g.heitmann@boeing.com>
Message-ID: <37F9F7AA.6354C06A@boeing.com>
Source record: 66627

Greetings!

I've got an Alinco DJ160 Handheld VHF radio that appears to have "lost it's mind" and it's memory. I know there is a lithium type battery inside that needs to be replaced, because if I perform the CPU reset procedure per the operating instructions, the unit powers on and I can then program the memory channels and everything works until the unit is turned off again.

Are replacement batteries available? If so, will it be easy to replace or is it buried deep in the inards of the HT?

Thanks!

73 de N0SO

Mike

3234. Re: POW Camp Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-05 00:00:00 UTC
From: JW <jdwalton@home.com>
Message-ID: <37FA24BF.BBB084B6@home.com>
Source record: 66628

Now waiiiiiiiiiit a minute - Joan Rivers is on 710 am here in NYC and at least she is entertaining, and I can still hear the Cleveland Indians on 1100!

"Clifton T. Sharp Jr." wrote:

> Al, N2NKB wrote:
> > Once I tried an experiment to see if two plants could communicate
> > with each other. I attached a low noise amplifier and an o'scope
> > between the soil and leaves of one plant, and stimulated the other
> > plant across the room. I saw plenty of action on the o'scope,
> > and it looked very intelligent. Turns out the my plant was detecting
> > the local A.M. radio station.
>
> Now we *know* you're pulling our legs. There's nothing intelligent on AM
> broadcast radio. :-)
>
> --
> +-+
> | Cliff Sharp | "Speech isn't free when it comes postage-due." |
> | WA9PDM | -- Jim Nitchals, founder, FREE |
> +-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+

3235. Re: 2-5/8" x 5/8" NiMH ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-05 00:00:00 UTC
From: kc8adu <ns.kc8adu@dayton.net>
Message-ID: <37FA011D.C89ACB1@dayton.net>
Source record: 66629

murphys surplus has them.

Dave VanHorn wrote:

> > Hi, I'm looking for a source for NiMH cells which are rated at 3500MAH and
> > measure 2-5/8" L x 5/8" diameter. Appreciate any responses. Ron, KA9ALC
>
> Batteries Plus carries them, I've hear them called AF cells, 5/4 AF, and A
> cells, so I'm a little unclear on the designation. They ones they carry are
> 3700mAH.

--
remove ns. to reply.
too much spam!
all spam reported!
ya junkmail me ya lose your account!

3236. Re: I2C <-> RS-485

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-05 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <37FA04F7.59E2@eece.maine.edu>
Source record: 66630
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Frederic Rible wrote:
>
> I want to connect a homebrew parabolic dish motion controler
> (PIC 16C84) to my Linux computer through a RS-485 link (30 meters).
>
> As I have already an I2C interface in my computer connected to
> other devices, I think about an I2C over RS-485 solution as below:
>
> Computer <-I2C-> Converter <--RS485--> Converter <-I2C-> PIC 16C84
>
> I am looking for any informations and experiences about I2C / RS485
> level converters.
>
> 73's Frederic F1OAT.
>
> My hombrew site : http://www.teaser.fr/~frible
>
> --
> Frederic RIBLE Tel : +33 1 39 46 50 50
> ERCOM SA Fax : +33 1 39 46 25 25
> 13, Avenue Morane-Saulnier Email : frederic.rible@ercom.fr
> F-78140 VELIZY - FRANCE Web : http://www.ercom.fr

I think I saw a device in a Phillips book which had a current amplifier
for using I2C over long links.
--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

3237. Re: POW Camp Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-05 00:00:00 UTC
From: glass2@glass2.lexington.ibm.com
Message-ID: <7td2ls$ec6$1@ausnews.austin.ibm.com>
Source record: 66631

In <37F947CE.2FB7@nospam.com>, Robert <nospam@nospam.com> writes:

<snip>
>
>With regard to the camp radio using an automotive lightbulb, the only
>arrangement I could figure out is a detector using a dual filament
>bulb. I was not able to get it to conduct in my quick hookups. The
>concept was was mentioned in an early issue of Electric Radio magazine
>as being used in a PoW camp; no other details were supplied.
>
<snip>
>
>Sincerely

Are automotive lightbulbs made the same way now as they used to be?
I think most of them are filled with Nitrogen, which could interfere
with electron conduction. Were they always filled with Nitrogen, or
were the early ones vaccum?

I tried making a diode tube/valve from a partially burned out automotive
signal light bulb when I was young. The idea is that you start with a
two filament bulb for which one of the filaments is burned out (The two
filaments usually have a common terminal, so one of them needs to be
burned out to use it as the anode.). The good filament is connected
to a 12 volt source (assuming that it's a 12 volt bulb), and then the
end of the burned out element can be used as the plate.

The problem is that the Nitrogen filling tends to interfere with the
electron conduction. Plus, the relative size of the plate and the
separation does not make for a very good diode. I'm reasonably sure
that the filaments aren't optomized for electron emission, either.
And, the gas tends to arc if much voltage is applied. Finally, the
burned out filament can bounce around and if it strikes another
element, it can cause short circuits.

Of course, before anyone tries this, they should be aware of all of the
safety concerns. Any arcing may produce ultraviolet radiation which could
be dangerous to the eyes. The bulb gets VERY hot, and may produce burns
if contacted. Additionally, suitable safety shields should be in place
so that if the envelope of the bulb ruptures, the flying glass won't
be a safety hazard. The voltages employed may be hazardous, also.
Plus, there may be other safety hazards associated with such a
device.

Dave

P.S. Standard Disclaimer: I work for them, but I don't speak for them.

3238. Re: Source for Weller Iron?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-05 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19991005161345704 32@zetnet.co.uk>
Source record: 66632

> > Would appreciate info on mail order sources for a Weller soldering iron with
> > a big tip for soldering PL-259's
> ==========
> Have you considered a butane gas powered soldering iron .
> Heat output is adjustable to up to equivalent 60 Watts.
> Size of the 'iron' is that of a board marker. Interchangeable tips
> each have a catalytic burner.
> Gas 'refill' is from a 'Ronson' cigarette lighter butane can.
> Excellent for your PL-259 plug application, but also for low heat
> input soldering jobs.

> The make I use is Portasol (Ireland) ,but Weller and others also
> manufacture them.

> Frank , GM0CSZ / KN6WH

> gm0csz.kn6wh@ukrs.org
++++++++++++++++++++++++++
Further to my above message ,I also have a Portasol -Professional
iron with a catalytic heater/tip rated 100 Watts. Other accessories
are a special catalytic heater/blower for heat shrink applications
and a mini-torch.
I'll never use an electric soldering iron for > 25 Watts applications again.

Frank GM0CSZ / KN6WH.

Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland UK
e-mail : gm0csz.kn6wh@ukrs.org

3239. Kenwood TS50S rs232/c?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-05 00:00:00 UTC
From: siggraph@dgp.toronto.edu
Message-ID: <37FA16C9.45DB66D9@dgp.toronto.edu>
Source record: 66633

I have a TS50S and would like to build a rs232/c computer interface.

I see Kenwood has a very pricy unit for sale..

Can anyone comment on the complexity of the job? Perhaps
the Kenwood solution is the most cost effective way to go?

So just what do I need to do to build an interface?

Greg, ve0acr

3240. Re: POW Camp Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-05 00:00:00 UTC
From: davem@groucho.cs.ubc.ca
Message-ID: <7td6c4$2jb@groucho.cs.ubc.ca>
Source record: 66634

"Clifton T. Sharp Jr." <clifto@corecomm.net> writes:

>Now we *know* you're pulling our legs. There's nothing intelligent on AM
>broadcast radio. :-)

Sure there is - CBC is still AM here (690). It beats most of what you
can find on FM around here.

Dave

3241. Primestar Dishes, any info on using?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-06 00:00:00 UTC
From: dr.dongle@juno.com
Message-ID: <7teerl$9b$1@nnrp1.deja.com>
Source record: 66491

I have several retired Primestar dishes and no tech info. Can any one
point me to a URL for specifications for the dishes and LNB's? and
possable uses other than the original one,like mountantopping, or
easedropping on other satellits.
thanks
dr.d

--
Kiss Technologys
The more complicated the plumbing
the easer it is to stop up the pipes M. Scott

Sent via Deja.com http://www.deja.com/
Before you buy.

3242. Re: Need Data on Motorola MV2301 varicap

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-06 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <7tfhcmncn1@nnrp1.deja.com>
Source record: 66492

In article <37fac5ed_1@news.calweb.com>,
"Bob" <bmiller@calweb.com> wrote:
> Hi folks,
>
> I need the data on a Motorola MV2301 varicap. min max capacity
etc.
>
> tnx for the read
>
> Bob, KE6F
>
>

Dear Bob,

MV2301 has a capacitance value of 200pF for 1V reverse voltage; 100pF for 6V; 80pF for 10V and 60pF for 20V; C2/C20 = 2.3 min.; 6nH of series inductance and 0.18pF case capacitance; its Q value is 250 min. for 4V and f=20MHz operation.

--
Greetings,

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Before you buy.

3243. Re: Looking for CQ Article on Beautiful Operating Desk

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-06 00:00:00 UTC
From: Tom McDermott <Tom.Mcdermott@usa.alcatel.com>
Message-ID: <37FB4ACE.58B2E1E0@usa.alcatel.com>
Source record: 66493

Rick:

I don't recall the article, but made something that sounds similar to this
for my own shack in 1984. I used particle board and laminated it with high-pressure laminate (formica). It's easy to do it yourself. You need contact cement and a router with a flush trimming bit. Watch any of the home shows on PBS - you'll see then do it done sooner or later.

The front panel was sloped back 10 degrees. I bought a couple of 6-foot sticks of 19-inch rack-mount angle iron. Sawed off the angle iron into short lengths, and mounted then in the console. This allowed bolting 19-inch rack mount panels into the console. The console was about 12 inches high, and 3 (19-inch) bays wide.

For my TS-820S, I used 1/4" masonite, and scribed a cutout in it to fit
the radio front panel. Cut it out, and carefully rasped the opening until

it fit the radio quite tightly. The masonite is soft enough that it did not
scratch the finish on that radio. Not sure if newer radios have as tough a finish as the TS-820S.

Then I laminated the same formica to the masonite 19-inch panel, and used the router to remove the formica from the cutout. Drilled a couple of screw holes aligning with 19-inch EIA holes, and voila - instant custom

19-inch panel that looks spectacular. I removed the front feet of the radio,
and the back feet rest on the desktop to support the radio's significant weight.
The radio protudes through the front panel about 3/4-inch, and holds the radio
front up off the table top. This allows the radio panel to slope the same

10-degrees back from vertical as the sloping front panel of the console.

I mounted 2-meter radio, antenna control boxes, etc. that are a lot lighter
in the upper panels (elevated above the table top). Since these pieces of

equipment would not be able to rest on the table top, the panel had to support
their full weight. To do this, I cutout the masonite panels to 19 inches, and
made a tight opening, as before. Then I bent up some sheet aluminum into

support brackets and flanges. Theses were then screwed to the bare masonite
using flat-head screws resting in counter-sunk holes in the masonite. This
assured that the front surface of the masonite was still flush/flat. Then I laminated
formica to the front surface and routed out the opening. Thus the screws are
blind from the front finish side of the panel. The the 2-meter radio was inserted
from the behind side of the panel into the aluminum bracket. This panel was
sufficiently stiff to then just be screwed into the console.

I used white formica for the console, 19-inch panels, and feature trim. I
just set the console on top of a homemade table. The table top was 3-foot

deep by 5-foot wide, made with the same particleboard / formica lamnate
(white also). The table top was bolted to a suport carcass made of particle board
and Walnut laminate. It's fully laminated and finished on all surfaces except the
underside of the table top. I used Aluminum 2" x 2" angle iron to bolt all the table
partitions and table top together so that it could be disassembled is necessary.
These screws are not blind, so they can be unscrewed whenever necessary.
however they are placed so that they cannot be seen unless you crawl under the
table. With all the particle board, the table weighs over 100 pounds, and won't fit
through the door to the ham shack, so being able to take it down into pieces
is the only way it will ever get moved.

The 3-foot depth on the table is necessary when you set a console on top
as only about 15 inches remains in front of the console. And that's where you
put the log, keyer, mic, mail, books, all too much junk, etc.

I took the console off when I replaced the TS-820S, and have not had the time
to build new custom 19-inch panels and cutouts for the new rig. So the new
equipment just sits on top of the desk in the open, the console being thrown into
the closet. The 3-foot table is a bit too deep for this style, actually. Since I
removed the console, the ham shack just looks blah. When it was on the

table,
and all the equipment and TS-820S custom mounted, most hams would say
"wow!" when they saw it. Even the XYL would bring her friends through to
look
at it.

-- Tom, N5EG

RJ Scott wrote:

> It was beautiful and on the front cover. It looked to be 3 sections
> that fit together at about a 22deg angle (or 30). Appeared to be
> laminate on the front face and table. Leather (or similar) covering
> around. I believe he was a 7 land type. Had shelves inside that held
> rig and each rig,tuner,rotor control had small wood surrounds (made it
> look nice).
>
> If anyone remembers this article or has it I would like Callsign of 7
> lander to get plans :).
>
> Rick KF7QZ

3244. Re: I2C <-> RS-485

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-06 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@bellsouth.net>
Message-ID: <o9lK3.2116$4a1.27153@news1.mia>
Source record: 66494
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Jim Deas wrote in message <7tamsarlu1@ffx2nh5.news.uu.net>...
>It is not practical. The master slave relationship, Ack/Nak returns, and the
>mutimaster aspects of I2C can not be mapped into
>a RS-485 system with anything less that a processor on each side.

I think that he meant only to use the RS485 driver/receiver level converter chips to go from TTL levels to RS485 levels.

>For I2C to work you need both a clock and data line that can be driven or
>received by all devices on the bus during all phases of communications.

This is easy to do with RS485.

I think the only problems will be related to increased propagation delay.

Bert Douglas

3245. Re: Looking for CQ Article on Beautiful Operating Desk

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-06 00:00:00 UTC
From: RJ Scott <kf7qz@yahoo.com>
Message-ID: <37FB5C42.184472E5@yahoo.com>
Source record: 66495

Tom McDermott wrote a lot of really good information:

Tom,
Exactly what I was looking for. I believe the article that I saw in CQ was nearly the same thing :). Although his was, like I stated before, 3 sections that were angled approximately 22 degrees or so and used a T type connector to hold them together. I appreciate your input and wonder if you did an article or have pictures :), they are worth a 1000 words you know :).

Thanks a bunch. Im soon to get my own room (kids are grown and 1 left, but that is guest room now, other soon that's MY room) so I want a nice looking, functional desk. Although I must modify mine slightly as I wish to take my ICOM 735 and Yaesu FT-2700 out to use in truck.

Thanks for the information it was very very informative.

Rick KF7QZ

3246. Re: I2C <-> RS-485

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-06 00:00:00 UTC
From: Jim Deas <jdeas@jadsystems.com>
Message-ID: <7tfo7l$jh4$1@ffx2nh5.news.uu.net>
Source record: 66496
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Bert Douglas <bertdNOSPAM@bellsouth.net> wrote in message
news:o9IK3.2116$4a1.27153@news1.mia...
>
> Jim Deas wrote in message <7tamsarlu1@ffx2nh5.news.uu.net>...
> >It is not practical. The master slave relationship, Ack/Nak returns, and
the
> >mutimaster aspects of I2C can not be mapped into
> >a RS-485 system with anything less that a processor on each side.
>
> I think that he meant only to use the RS485 driver/receiver level
converter chips to go from TTL levels to RS485 levels.
>
> >For I2C to work you need both a clock and data line that can be driven or
> >received by all devices on the bus during all phases of communications.
>
>
> This is easy to do with RS485.
>
> I think the only problems will be related to increased propagation delay.
>
> Bert Douglas
>
>
Bert,
For I2C to Ack you need a passive pull-up that both the Xmit and Recvr can
both pulldown. RS-485 is not a
open collector driver. The RS-485 style drivers would not allow the xmiter
to send 'data' and on the same line
allow the slave to 'ack'. So even if you restricted the I2C to single master
and master xmit only, you still would
not be able to ack the address.

I.E. of the common data line (assume clock line)
First 7 bits are address (from master)
bit 8 = R/W (from master)
bit 9 = Ack (from slave)

The 9th bit must be pulled low by the slave not the master to ack the
address.
Maybe if you added some logic after the RS-485 drivers to multiplex the data
line into a xmit and recv data line?

As for the propagation delay, you can always slow the I2C bus down to a
crawl as it is self clocked.

JD

3247. NEEDED: HMC1002 HoneyWell two axis magnetic sensor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-06 00:00:00 UTC
From: Don Ashworth <spam@menot.com>
Message-ID: <rvms63ulklq43@corp.supernews.com>
Source record: 66497

```
NEEDED: HMC1002 HoneyWell two axis magnetic sensor
--------------------------------------------------------------------------------
-----

I would prefer not buying a 'lot' of 5 for $100.00.

Anyone have any of these laying arround? I need two.

don_ashworth@bmc(dot)com
```

3248. Re: SP8793 and MC12016 wanted.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-06 00:00:00 UTC
From: spam@nospam.com
Message-ID: <37fb89bd.236245@news.lin.foa.se>
Source record: 66498

Luiz!
Partminer is GREAT if you can stand the minmum order $200....
pretty steep if you just need one off....
Cheers

On Mon, 04 Oct 1999 12:06:37 GMT, py1ll@my-deja.com wrote:

>In article <7t84a7$6ev$2@nslave1.tin.it>,
> "Mauro" <mrsucci@tin.it> wrote:
>> I need to replace a failed SP8793. It is a dual modulo 40/41
>prescaler.
>> I'm looking for some advise on where i can buy two SP8793 or MC12016.
>> Thanks for the help.
>> Mauro (i2SUH)
>>
>>
>
>Dear Mauro, SP8793 can be found with Partminer. The MC12016 you can
>found with Partminer, Newark Electronics or Future Electronics.
>URL's: www.partminerclient.com/, www.newark.com and
>www.future-active.com
>--
>Greetings,
>
>Luiz - PY1LL
>
>
>Sent via Deja.com http://www.deja.com/
>Before you buy.

3249. Re: Primestar Dishes, any info on using?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-06 00:00:00 UTC
From: WebMonkey <demoman@rollanet.org>
Message-ID: <37FB81F9.2940@rollanet.org>
Source record: 66499

dr.dongle@juno.com wrote:
>
> I have several retired Primestar dishes and no tech info. Can any one
> point me to a URL for specifications for the dishes and LNB's? and
> possable uses other than the original one,like mountantopping, or
> easedropping on other satellits.
> thanks
> dr.d
>
i use one for watching the ku nbc feeds

> --
> Kiss Technologys
> The more complicated the plumbing
> the easer it is to stop up the pipes M. Scott
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

--
A.C. Curtis
KBï¿½WLF
53.45 and 442.45, 77.0Hz enc/dec [multi-cast repeater system]
mailto:demoman@rollanet.org
http://www.rollanet.org/~demoman

3250. Re: I2C <-> RS-485

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-06 00:00:00 UTC
From: Patrick Timlin <ptimlin@yahoo.com>
Message-ID: <7tgalkbpq1@nnrp1.deja.com>
Source record: 66500
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

First let me state, that I know nothing about the I2C bus system. I only downloaded and started looking at the spec the other day. So I will admit I am completely ignorant to the system and might be missing some subtle (or not so subtle) aspects of all this. But hey, never can pass up the chance to make an ass of myself...

> > I think that he meant only to use the RS485 driver/receiver level
> converter chips to go from TTL levels to RS485 levels.

"Jim Deas" <jdeas@jadsystems.com> replied:

> For I2C to Ack you need a passive pull-up that both the Xmit and
> Recvr can both pulldown. RS-485 is not a open collector driver.

No, not by themselves, but you can interface them to open collector circuitry on the "single ended" side which is where you would be interfacing to the I2C bus.

> The 9th bit must be pulled low by the slave not the master to ack the
> address. Maybe if you added some logic after the RS-485 drivers to
> multiplex the data line into a xmit and recv data line?

Ouch ouch, ok reached my limit on how this bus works, but it still seems like you can have a "I2C" front end that hooks to the bus, then instead of the information to and from that bus directly to a microprocessor or some such, instead it goes down a RS-485 bus to a micro or whatever. However, you would need two RS-485 buses, one for the data and one for the clock, so your RS-485 cable would have to be 4-wires, but a standard telephone card and RJ11 jacks take care of that.

--
Patrick Timlin --- ptimlin@yahoo.com
http://www.geocities.com/ptimlin/

Sent via Deja.com http://www.deja.com/
Before you buy.

3251. MRF237 Datasheet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-06 00:00:00 UTC
From: quinnja@my-deja.com
Message-ID: <7tgf5tfbu1@nnrp1.deja.com>
Source record: 66501

Does anyone know where I can find a PDF Datasheet (or even a paper one worst case) for the MRF237 transistor.

Sent via Deja.com http://www.deja.com/
Before you buy.

3252. Voltage regulation and fltering for mobile use

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-06 00:00:00 UTC
From: Paul.Iltchenko@yale.edu
Message-ID: <7tgc4g$61h$1@news.ycc.yale.edu>
Source record: 66502

Hi All,

Many years ago, in the 80's i built a simple voltage regulator that was designed to be used in mobile applications to eliminate vehicle interference on an HT. This article was published in 73. The unit put out a constant 12V and was built into a small die cast box. I used it with great success in a munber of cars and moved it from vehicle to vehicle. Regretfully I have lost the schematic and the source. I left the unit in Europe when I moved to the USA. I now have a use for such a device to filter noise from a motorcycle ignition and also stabilize the voltage. If anyone has a schematic for such a unit I would appreciate soem feedback. I need to draw a max of two amps (2) at 12-13.8V. Please email me direct or post to this news group
Thanks
Paul KF2XK radioham@4u.net

3253. Wanted: SPRAT magazines.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-06 00:00:00 UTC
From: Duncan Walters <tesla@cwcom.net>
Message-ID: <37FBBA50.27453CA6@cwcom.net>
Source record: 66503

Wanted: SPRAT (the journal of the G-QRP-Club), particularly issues 1 to
40 inclusive.
Can anyone out there help?
If you can help, please reply soon with details.
Any information will be greatly appreciated.

Best regards,
Duncan G4DFV.

3254. High power passband filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-06 00:00:00 UTC
From: Fidel Leon <fleon@bcg.es>
Message-ID: <7tfpi6ose1@diana.bcn.ttd.net>
Source record: 66504

I've been looking for passband filters for a multi-multi setup, and have checked Dunestar and ICE filters.

Unfortunately, both filters are rated 100W, and the contest setup requires "a little more" power hi!

I've been looking for schematics, designing software, and so on, to homebrew QRO passband filters.

Could anybody give me any advice? Thanks! 73,

Fidel Leon - EA3GIP
fleon@pobox.com

3255. 6 metre homebrew amplfier

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-06 00:00:00 UTC
From: "Roger W. Horne" <g4hba@6mdx.eurobell.co.uk>
Message-ID: <VylqVNAhB8+3Ew02@6mdx.eurobell.co.uk>
Source record: 66505

If you like 6 meters and you like to build your own equipment, take a look at http://www.6mdx.eurobell.co.uk

3256. Re: POW Camp Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-06 00:00:00 UTC
From: dialcover@webtv.net
Message-ID: <19842-37FBBD4B-49@storefull-125.bryant.webtv.net>
Source record: 66506

ONE EVENING, WHILE WORKING MASTER CONTROL AT AFN FRANKFURT, I GOT A CALL
FROM A LADY WHO WAS RECEIVING OUR SIGNAL ON HER KITCHEN STORE.
DISSIMILIAR METALS CREATED A JUNCTION, , , , ,

disregard caps, visual problem
Bill Turner WA0ABI
1117 Pike Street
Saint Charles, MO 63301
636-949-2210

3257. Re: POW Camp Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-06 00:00:00 UTC
From: dialcover@webtv.net
Message-ID: <19843-37FBBE7C-19@storefull-125.bryant.webtv.net>
Source record: 66507

ITS TOO BAD SOME OF YOU HAVE NO ACCESS TO A REASONABLR AM STATION.

disregard caps, visual problem
Bill Turner WA0ABI
1117 Pike Street
Saint Charles, MO 63301
636-949-2210

3258. Re: Source for Weller Iron?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-06 00:00:00 UTC
From: dialcover@webtv.net
Message-ID: <19842-37FBBEF1-51@storefull-125.bryant.webtv.net>
Source record: 66508

WE CALL THEM "TURNER BURNERS"

disregard caps, visual problem
Bill Turner WA0ABI
1117 Pike Street
Saint Charles, MO 63301
636-949-2210

3259. Re: I2C <-> RS-485

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-06 00:00:00 UTC
From: Steve Roe <Steve@roehouse.freeserve.co.uk>
Message-ID: <7tggii$e5o$1@news7.svr.pol.co.uk>
Source record: 66509
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Frederic,

I have done this using four 485 transmission signals over 15 metres.

Two output bits are used at the master for transmitting the current state of the master SCL and SDA lines to the slave. These signals drive open-collector transistors that connect to the relavent I2C lines on the master board. They also provide inputs to two RS485 drivers that connect to the slave system. The slave board receives these signals and uses them to drive two open-collector transistors that connect to the slave SDA and SCL lines in the normal way.

The state of the SDA and SCL on the slave device are used as input to two RS485 drivers that connect to the master system. The master receives these signals and uses them to drive drive two open-collector transistors that connect to the slave SDA and SCL lines in the normal way.

Two input bits are used by the master to monitor the state of the master I2C SDA and SCL lines.

The crucial feature is the splitting of the master I2C drive and monitor signals. Failure to do this will result in deadlock.

Normally I2C comms is written to use just two bits of a controller that behave as open collector lines. You would of course need to re-write the code so that output drive is asserted by the two output bits, but the line status is received via the two input bits.

You can only have one master with this system but you can have mutliple slaves both locally and remotely.

Cheers,
Steve.

p.s. A picture paints a thousand words - Contact me directly if you require more info.

3260. Re: POW Camp Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-06 00:00:00 UTC
From: "Al, N2NKB"
Message-ID: <7tgkiv$4hm$1@bgtnsc01.worldnet.att.net>
Source record: 66510

Would that be kitchen *stove*?
Al

Bill Turner wrote in message
<19842-37FBBD4B-49@storefull-125.bryant.webtv.net>...
ONE EVENING, WHILE WORKING MASTER CONTROL AT AFN FRANKFURT, I GOT A CALL
FROM A LADY WHO WAS RECEIVING OUR SIGNAL ON HER KITCHEN STORE.
DISSIMILIAR METALS CREATED A JUNCTION, , , , ,

disregard caps, visual problem
Bill Turner WA0ABI
1117 Pike Street
Saint Charles, MO 63301
636-949-2210

3261. Re: bottling lagers - a question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-06 00:00:00 UTC
From: William Summers <k8ibekc8eym@i-star.com>
Message-ID: <37FC0664.DE9527E6@i-star.com>
Source record: 66511

DOUG IF YOU CAN REMOVE THE CAPS FROM 807'S THEY PROVIDE A GOOD CONTAINER FOR YOUR HOMEBREW , THE ONLY THING YOU HAVE TO WATCH ,IS MAKE SURE YOU NEUTRALIZE THEM WHEN YOU REMOVE THE CAPS , AND DURING THE RECAPPING PROCESS. "ALUMNUS FROM TAP A KEG A DAY" BRUCE/K8IBE

Doug Smith wrote:

> Dan wrote:
> > I am considering trying to brew a lager beer in an extra dorm fridge we have
> > lying around, but am curious about what the consensus is on the best way to
> > bottle. Surprisingly, I can't find any information about it online.
>
> Actually I find it somewhat shocking that a UW student would not know
> how to brew beer<G>!
>
> (not really.. I drank plenty of it in my time on campus but never tried
> to make my own..)
> --
> Doug Smith W9WI
> Pleasant View (Nashville), TN EM66
> http://personal.bellsouth.net/~w9wi
>
> ## Due to excessive spam, messages ##
> ## with "angelfire.com" in the ##
> ## body are subject to automatic ##
> ## deletion from my mailbox. ##

----------== Posted via Newsfeeds.Com, Uncensored Usenet News ==----------
http://www.newsfeeds.com The Largest Usenet Servers in the World!
------== Over 73,000 Newsgroups - Including Dedicated Binaries Servers ==-----

3262. BEWARE

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-06 00:00:00 UTC
From: Irv Finkleman <finkirv@cadvision.com>
Message-ID: <37FBE575.14182C31@cadvision.com>
Source record: 66512

THE ATTATCHED FILE (HAPPY99.EXE) IS A VIRUS. DO NOT OPEN.

Irv VE6BP

madQ wrote:

> Name: Happy99.exe
> Happy99.exe Type: unspecified type (application/octet-stream)
> Encoding: x-uuencode

3263. Re: Primestar Dishes, any info on using?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-07 00:00:00 UTC
From: dr.dongle@juno.com
Message-ID: <7tgpq6$ms9$1@nnrp1.deja.com>
Source record: 66513

In article <37FB81F9.2940@rollanet.org>,
demoman@rollanet.org wrote:
> dr.dongle@juno.com wrote:
> >
> > I have several retired Primestar dishes and no tech info. Can any
one
> > point me to a URL for specifications for the dishes and LNB's? and
> > possable uses other than the original one,like mountantopping, or
> > easedropping on other satellits.
> > thanks
> > dr.d
> >
> i use one for watching the ku nbc feeds
>
> > --
> > Kiss Technologys
> > The more complicated the plumbing
> > the easer it is to stop up the pipes M. Scott
> >
> > Sent via Deja.com http://www.deja.com/
> > Before you buy.
>
> --
> A.C. Curtis
> KB WLF
> 53.45 and 442.45, 77.0Hz enc/dec [multi-cast repeater system]
> mailto:demoman@rollanet.org
> http://www.rollanet.org/~demoman
>
Can you provide any details?
dr.d
--
Kiss Technologys
The more complicated the plumbing
the easer it is to stop up the pipes M. Scott

Sent via Deja.com http://www.deja.com/
Before you buy.

3264. Re: High power passband filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-07 00:00:00 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <bzj8N+KuwFMOw7Ro9aTNcfe3YE=R@4ax.com>
Source record: 66514

On Wed, 6 Oct 1999 17:24:53 +0200, "Fidel Leon" <fleon@bcg.es> wrote:

> I've been looking for passband filters for a multi-multi setup, and have
>checked Dunestar and ICE filters.
>
> Unfortunately, both filters are rated 100W, and the contest setup
>requires "a little more" power hi!

I am not sure what exactly is your setup, but why don't you put the
filter between the rig and the linear amplifier ?

In this case the out of band phase noise and other spectral impurities
of synthesised rigs are filtered out before the linear amplifier and
thus do not get amplified and do not cause harm to other stations on
different bands on the same site.

On reception, the filter will keep out the strong fundamentals from
other transmitters from causing reciprocal mixing with the phase noise
of the own receiver local oscillator.

Provided that the linear amplifier is fed with a clean signal, the
main impurities generated by the linear amplifier are the 2x and 3x
harmonics, but these are quite far away and should be sufficiently
attenuated with low pass filtering. Of course, any spurious
oscillations or hum modulations etc. should be fixed and the amplifier
shouldn't be overdriven to take out the absolutely the last 0.5 dB of
power.

Paul OH3LWR

3265. Re: POW Camp Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-07 00:00:00 UTC
From: fixer <fixer@locl.net>
Message-ID: <gCYK3.723$oq.4993@newsfeed.slurp.net>
Source record: 66515

I have heard of something like that but it was the toilet that was the speaker.There was a head engineer at WOWO, that told me this story years ago. That he got a call from a lady and she was tired of her toilet play there music all the time.Well Mr.Wofle "think that was his name" was curious he sayed some he drove over and sure enough the toilet did produce the radio station. He sayed it was not that loud but you see the ring in the bowl. I never did understand why he did not fix the problem then and there. but he sayed that he left and later she call and was very angry and they must fix the problem that minute.He sayed that he had figured out that it was only lik a couple of full wave lengths from the transmitter antenna, this time when he got there you could heard very good out side of the bathroom. He sayed that it was pretty good sounding,but being a curious kind of preson he asked the lady why she changed her mind. Well the lady said it was ok at first she could hear it a little know and then when she was working around the house,but that morning when she was using the toilet, that was the last straw. He sayed that he did not need to ask the question because his face asked for him, she replied when it play you are my sunshine my only sunshine the radio playing toilet had to go. He found that problem easily, It had a copper soil pipe down to a cask iron pipe the corrision set up a di electric effect.
KC2FCR wrote in message <37fa1bf5.64354414@news.squonk.net>...
>On Tue, 05 Oct 1999 03:39:50 GMT, JW
><jdwalton@home.com> wrote:
>
>>A great post from Bournemouth!
>>
>>OK Ginger - now go back before Gilligan's Island - recall that the kid's novel
>>"Henry and Beezus" - (early '50's - there were a series of these books, same
>>vintage as "The Boy's Book of Electronics" by Morgan) same story with Henry
>>complaining to the dentist that he was hearing radio on his fillings.
>>
>Behind what used to be WPTR in Albany, a 50kW AM
>station, there was/is an old junkyard. Legend has
>it you could sometimes here the demodulated audio
>on the rusted metal parts.
>
>>> Don't forget that the clever writers of "Gilligans Island" featured an
>>> episode where Gilligan's tooth filling acted as an A.M detector.
>>> In fact, I see plenty of accidental detectors. In one case I have seen
>>> a metal fence located near a cell site that actually produced intermods that

>>> were degrading the system performance.
>>> Once I tried an experiment to see if two plants could communicate
>>> with each other. I attached a low noise amplifier and an o'scope
>>> between the soil and leaves of one plant, and stimulated the other
>>> plant across the room. I saw plenty of action on the o'scope,
>>> and it looked very intelligent. Turns out the my plant was detecting
>>> the local A.M. radio station.
>>> Al
>
>------
>Just random thoughts

3266. Re: bottling lagers - a question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-07 00:00:00 UTC
From: noone@nowhere.com
Message-ID: <37fdaa14.32837240@news.squonk.net>
Source record: 66516

On Mon, 04 Oct 1999 00:53:24 -0500, Doug Smith
<w9wi@bellsouth.net> wrote:

>Dan wrote:
>> I am considering trying to brew a lager beer in an extra dorm fridge we have
>> lying around, but am curious about what the consensus is on the best way to
>> bottle. Surprisingly, I can't find any information about it online.
>
>Actually I find it somewhat shocking that a UW student would not know
>how to brew beer<G>!
>
I don't know...I think beer is way to important to
be a hobby myself. What if you screw up? The
world doesn't need anymore bad beer....we produce
way too much of it in the US, especially now that
mircrobrewed bad beer has become so popular, as
well as bad beer with caramel coloring added.

What you need, again to quote Sam Kinison, is a
truck. You need to go to where the beer is, put
the beer in the truck, and drive back home. I
suggest an amphibious truck, as the best beer
exists in Ireland. This beer is has little signs
on it that read "Smithwicks", although the beer is
really called "Smiticks". (Who knows, those Irish
are a strange bunch.)

Drive carefully, as it is easy to become losl in
the North Atlantic.

Cheers,

KC2FCR

>(not really.. I drank plenty of it in my time on campus but never tried
>to make my own..)

Just random thoughts

3267. Multiband dipole array questions....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-07 00:00:00 UTC
From: rpemers@aol.com
Message-ID: <19991007123944.29124.00000076@ng-fq1.aol.com>
Source record: 66517

Hello all,

I am in the planning stages of constructing a multiband fanned diple array. Anyone who has biult one knows what I'm talking about. 3 dipoles cut for different bands fed by one feedline. Anyway, I want to cut the dipoles for 40, 20 amd 17 meters and will be able to erect them a maximum of 33 feet in the air. Not so great for the 40m antenna, but should be ok for 20 and 17. I would appreciate any info on spacing of the dipoles relative to each other and any other tips on construction, etc. The only thing I am aware of right now is that they will de-tune each other somewhat and it may be a challenge to tune them to resonance. Aside from that..I'm starting from scratch. Thanks in advance for any help offered!

73'
Ron
KB9E

3268. Re: MRF237 Datasheet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-07 00:00:00 UTC
From: jim@rst-engr.com
Message-ID: <37fcd28f.1852470@news.gv.net>
Source record: 66518

francine@xs4no1.nl (francine)
shared these priceless pearls of wisdom:

->NPN TO-39 Grounded emittor.
->Pin 0.25W - Pout 4W - 175 MHz - Max gain 12 dB - 12.5 Vdc.

And be careful, because the metal case is connected to the EMITTER and not the collector. OTOH, if you drill a hole in your PCB for the can and solder it to a large expanse of copper ground plane, you have made one hell of a good ground connection AND a heat sink at the same time.

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

3269. Re: Multiband dipole array questions....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-07 00:00:00 UTC
From: George Doster <jay@ceolasers.com>
Message-ID: <37FCF69E.83E40819@ceolasers.com>
Source record: 66519

I made one of these guys for 80, 40, 15, and 10. The secret is to cut
the wires for each band to a bit long for a standard dipole. Then trim
the longest (80 in my case 40 in yours) first. Then trim the shorter
ones. If you go the other way (shorter to longer) the 10m will not be
correct after you trim the 40 or 80 wires. I used this antenna for
about 2 years. Mostly 40m CW. Seemed to work fine. Bandwidth was a bit
narrow compared to a dipole. I had an inverted V type installation.
Apex at about 30 feet and the 80m legs were only 5 ft above the ground.
I had spreaders to keep the wires separated. Also used a balun. Was it
the best antenna ever? Don't think so, but hey it was way better than
the bed frame or gutter I had as an option!

As always YMMV!

73'
Jay
N0PMY

Rpemers wrote:
>
> Hello all,
>
> I am in the planning stages of constructing a multiband fanned diple array.
> Anyone who has biult one knows what I'm talking about. 3 dipoles cut for
> different bands fed by one feedline. Anyway, I want to cut the dipoles for
> 40, 20 amd 17 meters and will be able to erect them a maximum of 33 feet in the
> air. Not so great for the 40m antenna, but should be ok for 20 and 17. I
> would appreciate any info on spacing of the dipoles relative to each other and
> any other tips on construction, etc. The only thing I am aware of right now is
> that they will de-tune each other somewhat and it may be a challenge to tune
> them to resonance. Aside from that..I'm starting from scratch. Thanks in
> advance for any help offered!
>
> 73'
> Ron
> KB9E

3270. Re: Multiband dipole array questions....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-07 00:00:00 UTC
From: ignacy@num.ads.uga.edu
Message-ID: <37fd0c92$3$vtanpl$mr2ice@news.uga.edu>
Source record: 66520

Once I built a 20-17-15-12-10 parallel dipoles separatated by about 4 inches each. Resonances were way off and sharp, and adjusting individual wires changes all resonances. The antenna went down to the junk yeard. It is possibly that some problems were due to too many too close dipoles.

Ignacy, NO9E

3271. Re: POW Camp Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-07 00:00:00 UTC
From: Robert Beeman <auchstet@gate.net>
Message-ID: <Pine.A41.4.03.9910071642580.33256-100000@dakota.gate.net>
Source record: 66521

Sort of gives a new meaning to the term "Head Engineer", doesn't it?

Bob Beeman, K9PLH

On Thu, 7 Oct 1999, fixer wrote:

> I have heard of something like that but it was the toilet that was the
> speaker.There was a head engineer at WOWO, that told me this story years
> ago. That he got a call from a lady and she was tired of her toilet play
> there music all the time.Well Mr.Wofle "think that was his name" was curious
> he sayed some he drove over and sure enough the toilet did produce the radio
> station. He sayed it was not that loud but you see the ring in the bowl. I

3272. Re: bottling lagers - a question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-07 00:00:00 UTC
From: lreynolds@cyberportal.net
Message-ID: <MPG.1266d305da91948a989680@news.giganews.com>
Source record: 66522

In article <37fdaa14.32837240@news.squonk.net>, noone@nowhere.com says...
> exists in Ireland. This beer is has little signs
> on it that read "Smithwicks", although the beer is
> really called "Smiticks". (Who knows, those Irish
> are a strange bunch.)

You mean "Smedick's"!

3273. Re: High power passband filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-07 00:00:00 UTC
From: la8ak@online.no
Message-ID: <37fd1a20.362110580@news.online.no>
Source record: 66523

On Wed, 6 Oct 1999 17:24:53 +0200, "Fidel Leon" <fleon@bcg.es> wrote:

> I've been looking for passband filters for a multi-multi setup, and have
>checked Dunestar and ICE filters.
>
> Unfortunately, both filters are rated 100W, and the contest setup
>requires "a little more" power hi!
>
> I've been looking for schematics, designing software, and so on, to
>homebrew QRO passband filters.
>
> Could anybody give me any advice? Thanks! 73,
>
>Fidel Leon - EA3GIP
>fleon@pobox.com
>
>
>
>
was described some 100W filters in QST some 8-10 years ago, if you
need higher power you just choose heavier capacitors and inductors.
Design values were shown for 80, 40, 20, 15, 10m, but it is fairly
easy to find proper valiues for all HF bands.
Believe one would gain much by connecting the filter between
transceiver and PA, so why not try this first?

73 Jan-Martin LA8AK

3274. Re: High power passband filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-07 00:00:00 UTC
From: "Al, N2NKB"
Message-ID: <7tja34$3s4$1@bgtnsc03.worldnet.att.net>
Source record: 66524

J M Noeding wrote in message <37fd1a20.362110580@news.online.no>...
>On Wed, 6 Oct 1999 17:24:53 +0200, "Fidel Leon" <fleon@bcg.es> wrote:
>
>> I've been looking for passband filters for a multi-multi setup, and
have
>>checked Dunestar and ICE filters.
>>
>> Unfortunately, both filters are rated 100W, and the contest setup
>>requires "a little more" power hi!
>>
>> I've been looking for schematics, designing software, and so on, to
>>homebrew QRO passband filters.
>>
>> Could anybody give me any advice? Thanks! 73,
>>
>>Fidel Leon - EA3GIP
>>fleon@pobox.com
>>
>>
>>
>>
>was described some 100W filters in QST some 8-10 years ago, if you
>need higher power you just choose heavier capacitors and inductors.
>Design values were shown for 80, 40, 20, 15, 10m, but it is fairly
>easy to find proper valiues for all HF bands.
>Believe one would gain much by connecting the filter between
>transceiver and PA, so why not try this first?
>
>73 Jan-Martin LA8AK

And remember to account for the peak power. Your filter's internal
elements might have voltage multiplication because the impedance may
be higher than 50 ohms. So if you use the formula
E=square root of (P*R), the R might be 20 or 30 times more than 50 ohm
nominal impedance.
Al

3275. Re: Radio Amateur software for AMIGA ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-07 00:00:00 UTC
From: Rainer Redweik <Rainer.Redweik@t-online.de>
Message-ID: <7tldrg$8lj$1@news00.btx.dtag.de>
Source record: 66525
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,tw.bbs.rec.radio.amateur,uk.radio.amateur

Hei Geert,

please search in the AMINET after 'SCAN8800'.

Bye,
Rainer

Geert Pirens <geert.pirens@ping.be> schrieb in im Newsbeitrag:
7t3emvklq2@news3.Belgium.EU.net...
> Hello,
>
> I like to make a list about all available AMIGA software that is useble
for
> radio amateur purposes.
> So if you now some name, a link on the net, a address where to buy or
other?
> Please let me now by mailing me.
>
> I'll make the list vieweble for everyone at my homepage.
>
> All information is welcome!
>
> Thanks in advance.
>
> Geert - ON1DQD
>
>

3276. Re: Airport Security and homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-08 00:00:00 UTC
From: noone@nowhere.com
Message-ID: <37fe0e87.53952772@news.squonk.net>
Source record: 66435

I'd suggest:

a) check it in your luggage

b) use a camcorder style gel cell, if they x-ray
it, they'll have seen it before. security people
get confused with things that are new.

If it's a domestic flight I doubt you'll have any
problem at all. Show up an hour and a half early,
and be prepared to set it up in receive mode if
they ask.

On Fri, 8 Oct 1999 07:26:38 -0400, "Laszlo I.
Morocz" <kf4pv@SPAMMENOTlmorocz.com> wrote:

>Back in the dark ages, before they decided that a Boeing manufacturing/TWA
>maintenance error was actually a terrorist under every seat in the plane, I
>tried taking a Sinclair computer (remember those?) and some home-brewed
>accessories through airport security. This was long before laptops were
>common. The x-ray machines picked it up and I had to unpack everything and
>explain each component. I think what actually got me through was that they
>figured anyone who was that much of a nerd couldn't possibly be a bomber.
>
>My suggestion is that you call the local FAA field office (well before your
>trip) and explain the situation. Maybe even go in with the equipment,
>schematics and your license for a face-to-face and inspection. You might be
>able to get some kind of letter from them that'll ease your passage through
>security (though I'm sure they'll still want to inspect enough to make sure
>that you haven't slipped a bomb into it between the letter and the trip).
>Also, be prepared for a possible quibble about the lead-acid battery.
>Potential corrosives are not always welcome on an aluminum structure (though
>they do serve Budweiser in-flight). Good luck and let us know what kind of
>solution you find so we can use it on our trips, too.
>
>73 de KF4PV/3, Laszlo

Just random thoughts

3277. Impedance Analyzers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-08 00:00:00 UTC
From: Roland Cordesses <cordesse@opgc.univ-bpclermont.fr>
Message-ID: <37FDEC7F.1AFFD36B@opgc.univ-bpclermont.fr>
Source record: 66436
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Hello,

I'm considering purchasing an Impedance Analyzer. Could anyone send me
his comments (accuracy, mesurement range, etc..) about the following
equipments :
- Autek RF5
- AEA CIA
- MFJ MFJ-259B

73's

3278. Re: Airport Security and homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-08 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <7tkr31$3mn$1@autumn.news.rcn.net>
Source record: 66437

It depends a lot on who's on duty at the time. I've had security make me take the batteries out of my HT and ship separately and in one case I was escorted to the plane and the HT was given to the pilot (who handed it back as soon as the security guy left). The easiest thing to do is check it in the luggage. One time I was carrying some rather fragile lenses so I purchased a ticket for the box and strapped it into the seat beside me - you think I didn't get a hassle from the stewardess on that one!

<maddog@io.com> wrote in message news:37fd601d.2557750@news.io.com...
> Hi gang!
>
> Anybody have experience with homebrew electronics and airport
> security, especially the walk-thru security gates? I'd like to be
> able to carry a qrp rig and small lead-acid battery, but I'm
guessing
> that the red lights and sirens will go off when they see that, and
> I'll be detained while I try to explain to lotsa people what that
is.
>
> Just what are the rules about homemade electronics?
>
> 73,
> monty n5fc
>
>

3279. Re: Q: Airport Security and homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-08 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <37FE4082.8AF96997@bellsouth.net>
Source record: 66438

maddog@io.com wrote:
> Anybody have experience with homebrew electronics and airport
> security, especially the walk-thru security gates? I'd like to be
> able to carry a qrp rig and small lead-acid battery, but I'm guessing
> that the red lights and sirens will go off when they see that, and
> I'll be detained while I try to explain to lotsa people what that is.

My inclination would be to UPS it to your hotel...
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

Due to excessive spam, messages
with "angelfire.com" in the
body are subject to automatic
deletion from my mailbox.

3280. Re: Impedance Analyzers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-08 00:00:00 UTC
From: Lew McCoy <lewmccoy@uswest.net>
Message-ID: <37FE2B0F.5915250C@uswest.net>
Source record: 66439
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

I have tested the MFJ-259b (AND 259) and find it to be an outstanding device for testin antennas--I would recommedn it highly. Lew McCoy, W1ICP

Roland Cordesses wrote:

> Hello,
>
> I'm considering purchasing an Impedance Analyzer. Could anyone send me
> his comments (accuracy, mesurement range, etc..) about the following
> equipments :
> - Autek RF5
> - AEA CIA
> - MFJ MFJ-259B
>
> 73's

3281. Re: Airport Security and homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-08 00:00:00 UTC
From: ignacy@num.ads.uga.edu
Message-ID: <37fe0718$6$vtanpl$mr2ice@news.uga.edu>
Source record: 66440

Lately I carried TS-830 in a small roll-in as hand luggage through three flights in USA and Europe. As you probably know, TS-830 is a 30 lb transceiver with steel cabinet. I went through perhaps 5 different checks. Nobody has said anything. I often carry HT in my hand luggage for international flights, and very rarely I am asked any question.

>> Anybody have experience with homebrew electronics and airport
>> security, especially the walk-thru security gates? I'd like to be
>> able to carry a qrp rig and small lead-acid battery, but I'm
>guessing
>> that the red lights and sirens will go off when they see that, and
>> I'll be detained while I try to explain to lotsa people what that

Ignacy, NO9E

3282. Ft890 Homebrew cat ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-08 00:00:00 UTC
From: dave@omens.freeserve.co.uk
Message-ID: <N.100899.184043.24@q1d9h5>
Source record: 66441
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hi Thanks for reading,
can anyone tell me if there is any fino on the net tio build a homebrew
cat for my 890?
i know there are some kits but dont think they are available in the uk
...
thanks in advance de dave gw7pny....
--

3283. Re: WTB/WTT: tube pin straighteners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-08 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <37FE2EC6.149692F9@corecomm.net>
Source record: 66442

OvrReactor wrote:
> I want to buy tube straighteners for novars (9-pin) and compactrons (12-pin).
> If you're selling, I'm buying (or trading...what do you need?).
>
> Were these EVER MADE? I have plenty of 7/9 pin miniature straighteners, but
> I've never seen these anywhere.

Don't have any, but yes, they were made. Some even had a straightener for
nuvistors.

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

3284. Re: Impedance Analyzers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-08 00:00:00 UTC
From: ignacy@num.ads.uga.edu
Message-ID: <37fe493b7vtanpl$mr2ice@news.uga.edu>
Source record: 66443
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

RF-1
Very light, fairly accurate SWR and Z readings (one at a time) , tuning is touchy

MFJ-259B
Bulky, SWR and R and X readings are provided simultaneously, fairly precise tuning.

Whenever SWR reading is enough, I prefer RF-1. For matching with complex impedances (e.g., quads), MFJ 259B may save quite a bit of time. X readings have limited accuracy. For example, a resistor of 100 Ohms may show up as 100+j10.

Ignacy, NO9E

3285. Re: Impedance Analyzers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-08 00:00:00 UTC
From: Forrest Gehrke <fegehrke@worldnet.att.net>
Message-ID: <37FE099F.AF3375DF@worldnet.att.net>
Source record: 66444
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

ignacy@num.ads.uga.edu wrote:
>
>
> MFJ-259B
> Bulky, SWR and R and X readings are provided simultaneously, fairly
> precise tuning.
>
> Whenever SWR reading is enough, I prefer RF-1. For matching with complex
> impedances (e.g., quads), MFJ 259B may save quite a bit of time. X
> readings have limited accuracy. For example, a resistor of 100 Ohms may
> show up as 100+j10.
>
> Ignacy, NO9E

That may depend upon the frequency. If high enough that may be
the truth about some 100 ohm resistors. On the other hand
if your test frequency was 3.5 MHz I'd start being skeptical.
//
k2bt

3286. Re: Icom 207H mod

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-08 00:00:00 UTC
From: Mac <lollar@sonet.net>
Message-ID: <PtrL3.2085$oq.12403@newsfeed.slurp.net>
Source record: 66445
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Has any one tried this mod. I was trying to find a more descriptive way to identify the diodes. I have a jpg file of the board if someone has performed this mod I would like to correspond with them and get a verification on the diodes 2&3 locations.

remove the 4 screws attaching the bottom cover and remove the cover. (I had to use a small screwdriver to pry on the cover. It's made to fit tight) with face toward you and belly up look to far right of board and close to you locate a row of SMT diodes 3 on top then a shift to right and a few more. The three are in a PERFECT row top to bottom! count from the top of the row 1 2 3. Remove the # 2 & 3 diodes. Now continue looking down from there and you will see a resistor sticking up in the air (W14). Clip the lead off of the resistor. Reassemble the radio and perform a CPU reset by holding the Set and S.MW buttons while turning the radio on...(page 69 of manual).
You now will have :
118-135 RX (stock)
136-174 TX & RX
320-399 RX (hmmm what's there? I've heard a local radio station DJ at a remote location talking to the station)
400-479 TX & RX
849-950 RX

3287. mic for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-08 00:00:00 UTC
From: realtor-news <realtor@cdc.net>
Message-ID: <D5E8ADFBD8F24AFC.DF64C71115169E1E.2FDA956F5469932F@lp.airnews.net>
Source record: 66446

click here for more info
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=178071129

3288. Re: Download Ia.n.i.!!! It's free!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-08 00:00:00 UTC
From: la8ak@online.no
Message-ID: <37fe02ba.421665631@news.online.no>
Source record: 66447

On Fri, 8 Oct 1999 09:53:58 +0100, "Eamon Skelton"
<Xnospam@oceanfree.net> wrote:

>>
>> Download Ia.n.i. RemoteControlSystem 1.2 beta. It's free!!!
>> New site: HTTP://WWW.FORTUNECITY.COM/SKYSCRAPER/BYTE/517/
>>
>
>OK OK OK OK, We've got the message.
>
>Ed. EI9GQ
>
>
fb, but perhaps better to think before you write the subject?

LA8AK

3289. Re: Q: Airport Security and homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-08 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37FE8553.58916FDB@teleport.com>
Source record: 66448

I've carried a small homebrew transceiver, including connecting wires and accessories, in a carryon bag on a number of occasions. Only occasionally have I been asked about it. (Sometimes I think the problem is that it's too opaque to X-rays to let them see what's under or behind it.) I tossed in a screwdriver so I could pull the cover and show the innards, which was enough for even the most curious inspector. They might worry about your lead-acid battery because of the corrosive nature of its contents. You might want to play safe and use NiCd or alkaline cells for your trips, instead. I imagine that a worst case is that they'd confiscate the battery.

Their main concerns are weapons, explosives, and flammable or other dangerous liquids. (A number of times I've had an inspector open and sniff a bottle of scotch. They were perfectly happy once they smelled it.) Once you make it apparent that what you're carrying isn't in any of these categories you won't have a problem. It should go without saying that you should be completely cooperative and don't try to be funny.

I've carried an HT on many, many trips and am never asked about it. They seem used to 'em.

Roy Lewallen, W7EL

maddog@io.com wrote:
>
> Hi gang!
>
> Anybody have experience with homebrew electronics and airport
> security, especially the walk-thru security gates? I'd like to be
> able to carry a qrp rig and small lead-acid battery, but I'm guessing
> that the red lights and sirens will go off when they see that, and
> I'll be detained while I try to explain to lotsa people what that is.
>
> Just what are the rules about homemade electronics?
>
> 73,
> monty n5fc

3290. Re: Multiband dipole array questions....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-08 00:00:00 UTC
From: rsirois@stny.lrun.com
Message-ID: <37fe4a08.13191691@news-server>
Source record: 66526

On 07 Oct 1999 16:39:44 GMT, rpemers@aol.com (Rpemers) wrote:

>Hello all,
>
>I am in the planning stages of constructing a multiband fanned diple array.
>Anyone who has biult one knows what I'm talking about. 3 dipoles cut for
>different bands fed by one feedline. Anyway, I want to cut the dipoles for
>40, 20 amd 17 meters and will be able to erect them a maximum of 33 feet in the
>air. Not so great for the 40m antenna, but should be ok for 20 and 17. I
>would appreciate any info on spacing of the dipoles relative to each other and
>any other tips on construction, etc. The only thing I am aware of right now is
>that they will de-tune each other somewhat and it may be a challenge to tune
>them to resonance. Aside from that..I'm starting from scratch. Thanks in
>advance for any help offered!
>
>73'
>Ron
>KB9E

Ron,
I'm using a pair of co-fed inverted vees myself, cut for 80 and for 40
meters. The antennas are resonant (even without a tuner) on 80, 40, 20, 15
and 10 meters. May not be the best array out there, but it works. Feedpoint
here is about 40 feet up. Does the job just fine...

73 de
-==*>Ray - KG2QV<*==-

==========
"This year will go down in history. For the first time, a
civilized nation has full gun registration. Our streets will be safer, our
police more efficient, and the world will follow our lead into the future!"
Adolph Hitler 1935
==========

3291. Radio Shack WWVB RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-08 00:00:00 UTC
From: stoskopf@tri.NET
Message-ID: <37FD581B.F4CD4002@tri.net>
Source record: 66527

Bought the new WWVB clock from RS. $29.99. (Don't buy the old 10 MHz one discounted to the same price). Put the batterys in and in a minute had the correct time and date. Flaws are no 24 HR time and no GMT.

Anyone hack this yet to get a timing signal and to keep the RX on. The box is snap close, hard to open, but can be done.

N0UU

3292. Q: Airport Security and homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-08 00:00:00 UTC
From: maddog@io.com
Message-ID: <37fd601d.2557750@news.io.com>
Source record: 66528

Hi gang!

Anybody have experience with homebrew electronics and airport
security, especially the walk-thru security gates? I'd like to be
able to carry a qrp rig and small lead-acid battery, but I'm guessing
that the red lights and sirens will go off when they see that, and
I'll be detained while I try to explain to lotsa people what that is.

Just what are the rules about homemade electronics?

73,
monty n5fc

3293. Re: 16c73a programmer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-08 00:00:00 UTC
From: ipsilone@softhome.net
Message-ID: <SMfL3.22255$j6.205242@carnaval.risq.qc.ca>
Source record: 66529

You will find what you are looking for here:
http://www.geocities.com/SiliconValley/Peaks/9620/#PICALLWINSOFT

73's

In article <7rdsv5$6jn$1@newssrv.otenet.gr>, "orion" <orion@otenet.gr> wrote:
>Hi there
>im looking for a pic 16C73A microcontroller programmer?
>pls help:)
>
>Chris
>orion@otenet.gr

• Eric Merlen
• D•partement Math-Info
• Universit• du Qu•bec • Trois-Rivi•res
• ICQ 4651662 -Undernet Ipsilone- PGP on request

••••••

3294. WTB/WTT: tube pin straighteners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-08 00:00:00 UTC
From: ovrreactor@aol.com-nospam
Message-ID: <19991008022145.03801.00000340@ng-fb1.aol.com>
Source record: 66530

I want to buy tube straighteners for novars (9-pin) and compactrons (12-pin).
If you're selling, I'm buying (or trading...what do you need?).

Were these EVER MADE? I have plenty of 7/9 pin miniature straighteners, but
I've never seen these anywhere.

Please respond by email.

Regards,
Tom Mitchell
email - OvrReactor@aol.com

3295. Robotics and Electronics Clubs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-08 00:00:00 UTC
From: weyoun7@aol.com
Message-ID: <19991008025336.13197.00000445@ng-bh1.aol.com>
Source record: 66531

Hello,

The Robotics Club of Yahoo (TRCY) and Wires and Circuits of Yahoo have joined forces along with the Artificial Intelligence Group to create super club for hombrew guys and gals. Check out the TRCY website for more info on how to join and talk about ideas, projects or problems with our fantasic mix of members from all across the globe!

http://members.tripod.com/RoBoJRR

Very Best Regards,
-Justin R.
President of TRCY

3296. Re: Download Ia.n.i.!!! It's free!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-08 00:00:00 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <2kiL3.1774$r46.1120@news.indigo.ie>
Source record: 66532

>
> Download Ia.n.i. RemoteControlSystem 1.2 beta. It's free!!!
> New site: HTTP://WWW.FORTUNECITY.COM/SKYSCRAPER/BYTE/517/
>

OK OK OK OK, We've got the message.

Ed. EI9GQ

--

Remove 'X' to reply.

3297. Ham Radio and SWL URL

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-08 00:00:00 UTC
From: nw7us@hfradio.removethispart.org
Message-ID: <ApjL3.280$7J6.10671@sea-read.news.verio.net>
Source record: 66533
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hello,

I am inviting you to come visit http://hfradio.org - a site with many resources for Shortwave Radio and Utility Listeners, Ham Radio Hobbiests, and others who might be interested in this type of content.

So, come on by and check out my non-commercial SWLing/Ham Radio website. The URL is http://hfradio.org and features DX information, including QSL Route/Manager Lookups and Callbook Lookups; a Propagation Center including my eAlert service (allows you to sign up with your email address. Then the eAlert system will send you email propagation reports. I use this with my pager.); Equidistant Azimuth Map software (allows you to create maps of any QTH); Swap and Shop; Bookstore (I've hand-picked over a thousand book titles on radio, etc.); Free website space for YOU to create your own Ham or SWL site, and there's more. Easy to navigate. Open for suggestions.

If you feel up to it, after looking around the site, drop me a note (you'll find my address on the site) and share your thoughts.

73!

--

: World-Wide Communications via Amateur Radio : 122.93W : 47.67N :
: 10x56526 : CW/SSB - DX hunter : Brinnon, WA : Code Warrior #60 :
: visit http://hfradio.org/ :

3298. Re: Airport Security and homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-08 00:00:00 UTC
From: "Laszlo I. Morocz" <kf4pv@SPAMMENOTlmorocz.com>
Message-ID: <KEkL3.15777$WO4.13337@jump.innerx.net>
Source record: 66534

Back in the dark ages, before they decided that a Boeing manufacturing/TWA maintenance error was actually a terrorist under every seat in the plane, I tried taking a Sinclair computer (remember those?) and some home-brewed accessories through airport security. This was long before laptops were common. The x-ray machines picked it up and I had to unpack everything and explain each component. I think what actually got me through was that they figured anyone who was that much of a nerd couldn't possibly be a bomber.

My suggestion is that you call the local FAA field office (well before your trip) and explain the situation. Maybe even go in with the equipment, schematics and your license for a face-to-face and inspection. You might be able to get some kind of letter from them that'll ease your passage through security (though I'm sure they'll still want to inspect enough to make sure that you haven't slipped a bomb into it between the letter and the trip). Also, be prepared for a possible quibble about the lead-acid battery. Potential corrosives are not always welcome on an aluminum structure (though they do serve Budweiser in-flight). Good luck and let us know what kind of solution you find so we can use it on our trips, too.

73 de KF4PV/3, Laszlo

--
To reply, remove the text SPAMMENOT from the e-mail address.
maddog@io.com wrote in message <37fd601d.2557750@news.io.com>...
>Hi gang!
>
>Anybody have experience with homebrew electronics and airport
>security, especially the walk-thru security gates? I'd like to be
>able to carry a qrp rig and small lead-acid battery, but I'm guessing
>that the red lights and sirens will go off when they see that, and
>I'll be detained while I try to explain to lotsa people what that is.
>
>Just what are the rules about homemade electronics?
>
>73,
>monty n5fc
>
>

3299. Re: MRF237 Datasheet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-09 00:00:00 UTC
From: quinnja@my-deja.com
Message-ID: <7tlj5j$66s$1@newsource.ihug.co.nz>
Source record: 66449

Thanks for the information. This is a great help. I am going to use this
for a small Class C 144mhz amp and have no problem getting the parts....
just the data.

Many thanks.

Andrew

Jim Weir <jim@rst-engr.com> wrote in message
news:37fcd28f.1852470@news.gv.net...
> francine@xs4no1.nl (francine)
> shared these priceless pearls of wisdom:
>
> ->NPN TO-39 Grounded emittor.
> ->Pin 0.25W - Pout 4W - 175 MHz - Max gain 12 dB - 12.5 Vdc.
>
> And be careful, because the metal case is connected to the EMITTER and not
the
> collector. OTOH, if you drill a hole in your PCB for the can and solder
it to a
> large expanse of copper ground plane, you have made one hell of a good
ground
> connection AND a heat sink at the same time.
>
> Jim
> Jim Weir, VP Eng. RST Eng. WX6RST
> A&P, CFI, and other good alphabet soup

3300. Re: Ft890 Homebrew cat ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-09 00:00:00 UTC
From: Art Norman <Art6N9@yahoo.com>
Message-ID: <01bf11fc$69d8a620$0d1d3586@living-room>
Source record: 66450
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

A robotic CAT, homebrew or not, would not legally be able to get on the
air.
N2ERI

dave@omens.freeserve.co.uk wrote in article <N.100899.184043.24@q1d9h5>...
> Hi Thanks for reading,
> can anyone tell me if there is any fino on the net tio build a homebrew
> cat for my 890?
> i know there are some kits but dont think they are available in the uk
> ...
> thanks in advance de dave gw7pny....
> --
>
>
>

3301. Re: Impedance Analyzers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-09 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <7tm8sc$kl0$1@plutonium.btinternet.com>
Source record: 66451
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

For example, a resistor of 100 Ohms may
> show up as 100+j10.
==========
How long are the inductive connecting leads. I'd begin to get worried
with a reading of 100 - j10.

Reg.

3302. CB Web Site

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-09 00:00:00 UTC
From: jknope@aol.com
Message-ID: <19991009033637.27605.00000143@ng-fw1.aol.com>
Source record: 66452
Body handling: HTML body converted to readable text

Check out Big Mac's CB
Web Site
http://www.angelfire.com/fl/jknope/cb.html

3303. Re: Impedance Analyzers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-09 00:00:00 UTC
From: "Dennis C. O'Connor" <k8do@midmich.net>
Message-ID: <37FF472F.3E3CFD25@midmich.net>
Source record: 66453
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Not to be difficult, but why do you feel a resistor is automatically a J=0 device?

Denny

ignacy@num.ads.uga.edu wrote:

> RF-1
> Very light, fairly accurate SWR and Z readings (one at a time) , tuning is
> touchy
>
> MFJ-259B
> Bulky, SWR and R and X readings are provided simultaneously, fairly
> precise tuning.
>
> Whenever SWR reading is enough, I prefer RF-1. For matching with complex
> impedances (e.g., quads), MFJ 259B may save quite a bit of time. X
> readings have limited accuracy. For example, a resistor of 100 Ohms may
> show up as 100+j10.
>
> Ignacy, NO9E

3304. Re: Q: Airport Security and homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-09 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7tnjn1$e44$1@news1.fast.net>
Source record: 66454

-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

- --

Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI
Fellow, Radio Club of America
Senior Member, IEEE
Member, ARRL
Join NCI - Hams for the 21st Century!
Help modernize ham radio and assure its future survival!
http://www.nocode.org
> maddog@io.com wrote:
> >
> > Hi gang!
> >
> > Anybody have experience with homebrew electronics and airport
> > security, especially the walk-thru security gates? I'd like to be
> > able to carry a qrp rig and small lead-acid battery, but I'm
guessing
> > that the red lights and sirens will go off when they see that, and
> > I'll be detained while I try to explain to lotsa people what that
is.
> >
> > Just what are the rules about homemade electronics?
> >
> > 73,
> > monty n5fc

Last year I and a co-worker had to hand-carry some "homebrew"
gear (actually a lunch box sized proof of concept demo of a system
level chipset my group and I had designed), which was build using a
collection of off-the-shelf chips and a big FPGA, both to prove our
hardware/software design worked and demonstrate its features and
functionality to customers before the custom ASICs were even fab'ed.

This box had a clear plexiglass cover, so you could see all the stuff,
holes in the cover to allow pushing buttons on a keypad array with
a pencil eraser, a 6V gell cell battery about 1-1/2 times the size
of a box of 3-1/2" floppy disks, and an antenna, a couple of toggle
switches, and a pair of bananna jacks for power to charge the battery.

I would have been suspicious of this thing if I were an airport
security inspector!!!

I suspected that this thing's appearnce could easily cause problems,
so I got a very formal, *notarized* "The stuff this guy is carrying is
not a bomb." letter on my employer's letterhead, signed by the GM
of my business unit to show to the airport security folks, explaining
what it was and asking their cooperation in not unnecessarily
detaining
us or dismantling the equipment.

The letter worked fine ... and they didn't seem to have any concern
at all about sealed, gelled electrolite lead-acid batteries. (I'm sure
that
wet lead acid batteries would be a different matter.)

However, I'm not sure that the local FAA office will extend
such a courtesy,as someone has suggested, of pre-inspecting
your gear and isuing a letter. After all, you *could* theoretically
alter/substitute the gear after they inspected it and issued the
letter.

Fortunately, my company is one of the largest employers in the area,
so the airport folks know who we are and understand that the nature
of our business requires us to occasionally carry such equipment,
test equipment, etc. on board, so with a *notarized* letter and
proper identification I didn't have any problems.

Someone suggested checking in checked baggage. Depending
on its appearance, that may not be such a good idea either.
The bomb which brought down the Pan Am flight in Scotland
was in checked baggage, not carry on. I would think that anything
which x-rays as "suspicious" will either not be loaded in checked
baggage, might be forceably opened for inspection, or maybe worse.

If you carry on your stuff, at least you have the opportunity to
explain to people (who hopefully will be reasonable) what it
is, that it won't hurt anything, and that you won't be using or
activating it while in flight. (IOW, it will be OFF and will STAY
OFF while aboard the plane.) Also, if you carry it on, they
KNOW for sure that you're on the plane with it. The airlines
now have a complicated proceedure of checking who gets
on the plane against every bag in checked baggage. If they
can't verify to their satisfaction that you're on the plane, they'll
hold the flight and pull your checked baggage, pronto.

Good luck,

- --
Carl R. Stevenson - WA6VSE
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Director, NCI

Fellow, Radio Club of America
Senior Member, IEEE
Member, ARRL
Join NCI - Hams for the 21st Century!
Help modernize ham radio and assure its future survival!
http://www.nocode.org

-----BEGIN PGP SIGNATURE-----
Version: PGP for Personal Privacy 5.5.3

iQA/AwUBN/9Q05e+N6+q84HiEQIDIQCfSKWQyfKo2fzcrjti6xTWRcAujNUAnR4R
xfUi7zP6Jjc/C/LmaC1WOMYk
=K2+b
-----END PGP SIGNATURE-----

3305. FS 4-250A, 304TL Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-09 00:00:00 UTC
From: w8irq@aol.com
Message-ID: <19991009104255.07088.00000073@ng-fv1.aol.com>
Source record: 66455

Both tubes appear to be brand new . Will accept any reasonable offer for one, or both. Nick, W8IRQ

3306. Re: Q: Airport Security and homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-09 00:00:00 UTC
From: noone@nowhere.com
Message-ID: <37ff8dab.151270755@news.squonk.net>
Source record: 66456

On Sat, 9 Oct 1999 10:27:34 -0400, "Carl R.
Stevenson" <wa6vse@fast.net> wrote:

>
>Last year I and a co-worker had to hand-carry some "homebrew"
>gear (actually a lunch box sized proof of concept demo of a system
>level chipset my group and I had designed), which was build using a
>collection of off-the-shelf chips and a big FPGA, both to prove our
>hardware/software design worked and demonstrate its features and
>functionality to customers before the custom ASICs were even fab'ed.
>
>This box had a clear plexiglass cover, so you could see all the stuff,
>holes in the cover to allow pushing buttons on a keypad array with
>a pencil eraser, a 6V gell cell battery about 1-1/2 times the size
>of a box of 3-1/2" floppy disks, and an antenna, a couple of toggle
>switches, and a pair of bananna jacks for power to charge the battery.
>
>*I* would have been suspicious of this thing if I were an airport
>security inspector!!!
>
>I suspected that this thing's appearnce could easily cause problems,
>so I got a very formal, *notarized* "The stuff this guy is carrying is
>not a bomb." letter on my employer's letterhead, signed by the GM
>of my business unit to show to the airport security folks, explaining
>what it was and asking their cooperation in not unnecessarily
>detaining
>us or dismantling the equipment.
>
>The letter worked fine ... and they didn't seem to have any concern
>at all about sealed, gelled electrolite lead-acid batteries. (I'm sure
>that
>wet lead acid batteries would be a different matter.)
>
>However, I'm not sure that the local FAA office will extend
>such a courtesy,as someone has suggested, of pre-inspecting
>your gear and isuing a letter. After all, you *could* theoretically
>alter/substitute the gear after they inspected it and issued the
>letter.

I'd have to believe that having an FCC issued
license, as we all do, as well as being able to
demonstrate reception of "something", would work
as well. Your custom project would have been
harder to demonstrate, naturally.
>

>Fortunately, my company is one of the largest employers in the area,
>so the airport folks know who we are and understand that the nature
>of our business requires us to occasionally carry such equipment,
>test equipment, etc. on board, so with a *notarized* letter and
>proper identification I didn't have any problems.
>
>
>Someone suggested checking in checked baggage. Depending
>on its appearance, that may not be such a good idea either.
>The bomb which brought down the Pan Am flight in Scotland
>was in checked baggage, not carry on. I would think that anything
>which x-rays as "suspicious" will either not be loaded in checked
>baggage, might be forceably opened for inspection, or maybe worse.

I'd agree for international flights. But domestic
inspection has to be less severe, and you can
check things you can't carry on. As an example,
domestically you can transport firearms and
ammunition, as long as you declare it at check in.
Not a good idea to try carry on. :) I'd have to
believe that a homebrew radio would look like just
another piece of consumer electronics under xray.
Maybe laid out differently, but the components are
close to the same.

>
>If you carry on your stuff, at least you have the opportunity to
>explain to people (who hopefully will be reasonable) what it
>is, that it won't hurt anything, and that you won't be using or
>activating it while in flight. (IOW, it will be OFF and will STAY
>OFF while aboard the plane.) Also, if you carry it on, they
>KNOW for sure that you're on the plane with it. The airlines
>now have a complicated proceedure of checking who gets
>on the plane against every bag in checked baggage. If they
>can't verify to their satisfaction that you're on the plane, they'll
>hold the flight and pull your checked baggage, pronto.

Worse case they hold you up - again as long as
you're in the US.
>
>Good luck,
>
>- --
The sad part is that they check for all of this
crap in the first place. Legislation driven by
opinion polls, driven by irrational fears, driven
by tv "news" programs, driven by a desire to make
money selling cars, which kill far more people
than all of the sensational stories combined.

Five thousand years of civilization and people
still live in fear of demons and superstition.

Just random thoughts

3307. Re: Impedance Analyzers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-09 00:00:00 UTC
From: "Al, N2NKB"
Message-ID: <7tnrqjhpt1@bgtnsc01.worldnet.att.net>
Source record: 66457
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Especially a wirewound resistor.
Al

Dennis C. O'Connor wrote in message <37FF472F.3E3CFD25@midmich.net>...
>Not to be difficult, but why do you feel a resistor is automatically a J=0
>device?
>
>Denny
>
>ignacy@num.ads.uga.edu wrote:
>
>> RF-1
>> Very light, fairly accurate SWR and Z readings (one at a time) , tuning
is
>> touchy
>>
>> MFJ-259B
>> Bulky, SWR and R and X readings are provided simultaneously, fairly
>> precise tuning.
>>
>> Whenever SWR reading is enough, I prefer RF-1. For matching with complex
>> impedances (e.g., quads), MFJ 259B may save quite a bit of time. X
>> readings have limited accuracy. For example, a resistor of 100 Ohms may
>> show up as 100+j10.
>>
>> Ignacy, NO9E
>

3308. Re: Impedance Analyzers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-09 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19991009003714704 32@zetnet.co.uk>
Source record: 66458

> Whenever SWR reading is enough, I prefer RF-1. For matching with complex
> impedances (e.g., quads), MFJ 259B may save quite a bit of time. X
> readings have limited accuracy. For example, a resistor of 100 Ohms may
> show up as 100+j10.
> Ignacy, NO9E
==========
Not surprising ,it's probably a wire-wound (inductive)
resistor.....seems an excellent instrument !

Frank GM0CSZ / KN6WH

3309. Re: Impedance Analyzers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-09 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <7to4s8$m8i@dfw-ixnews3.ix.netcom.com>
Source record: 66459
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Denny:

Maybe it is one of those IEEE Dictionary defined "dynamic resistors"!

Anybody ever hear of an FDNR, frequency dependent negative resistor?

Peter AB4BC

Dennis C. O'Connor <k8do@midmich.net> wrote in message
news:37FF472F.3E3CFD25@midmich.net...
> Not to be difficult, but why do you feel a resistor is automatically a J=0
> device?
>
> Denny
>
> ignacy@num.ads.uga.edu wrote:
>
> > RF-1
> > Very light, fairly accurate SWR and Z readings (one at a time) , tuning
is
> > touchy
> >
> > MFJ-259B
> > Bulky, SWR and R and X readings are provided simultaneously, fairly
> > precise tuning.
> >
> > Whenever SWR reading is enough, I prefer RF-1. For matching with complex
> > impedances (e.g., quads), MFJ 259B may save quite a bit of time. X
> > readings have limited accuracy. For example, a resistor of 100 Ohms may
> > show up as 100+j10.
> >
> > Ignacy, NO9E
>

3310. Re: Impedance Analyzers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-09 00:00:00 UTC
From: la8ak@online.no
Message-ID: <37ff8f1a.523153765@news.online.no>
Source record: 66460

On Sat, 9 Oct 1999 00:37:14 +0100, Frank Dinger
<frank.dinger@zetnet.co.uk> wrote:

>> Whenever SWR reading is enough, I prefer RF-1. For matching with complex
>> impedances (e.g., quads), MFJ 259B may save quite a bit of time. X
>> readings have limited accuracy. For example, a resistor of 100 Ohms may
>> show up as 100+j10.
>> Ignacy, NO9E
>=======================
>Not surprising ,it's probably a wire-wound (inductive)
>resistor.........
probably NOT

3311. Re: POW Camp Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-09 00:00:00 UTC
From: Terry Sanford <tsanford@roadrunner.nf.net>
Message-ID: <37FFDC64.2483@roadrunner.nf.net>
Source record: 66461

"Sure there is - CBC is still AM here (690). It beats most of what you
can find on FM around here."

Dave
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Right on Dave.

CBC "one" (what an uninspired name!) is on 640 kilohertz here in the
easternmost part of this province
of Canada.

Terrys S. Torbay, Newfoundland, Canada.

3312. pulling a crystal off frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-09 00:00:00 UTC
From: inagaddadavida@webtv.net
Message-ID: <12267-38001473-129@storefull-115.iap.bryant.webtv.net>
Source record: 66462

several years ago i built a crystal converter from a plan in radio electronics magazine. it was for listening to shortwave on an am car radio. now i have a newer car with a digital radio. it steps in even steps that are too large to get some sw stations tuned in well. i wonder if i could draw the various crystals off frequency with a variable cap in parallel with them. does anyone know about this? will a crystal pull off frequency enough to help this problem? how much capacitance is required? 50pf? 100pf? if this would work then i could use the variable cap like a fine tune control to get between the 10khz steps. on another angle, will two crystals oscillate together in the same circuit? could i use a 5khz crystal with the other ones to get the frequency offset that i need? will they work together or will i need another mixer circuit to combine them? (a pre-mixer mixer?) are there any other ways to skin this cat? any input is welcome

3313. KVG filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-09 00:00:00 UTC
From: alforo <alforo@megisnet.com>
Message-ID: <ukcM3.2612$Av5.195585@news.corecomm.net>
Source record: 66463

Looking for reprint of KVG filter review in Dec 1975 QST. Will pay copying fee and postage.

73, AL, w6wqc. alforo@megsinet.net

3314. Re: Impedance Analyzers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-10 00:00:00 UTC
From: n7ws@arrl.net
Message-ID: <3800109e.33614331@news.azstarnet.com>
Source record: 66464
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On Sat, 9 Oct 1999 14:26:19 -0500, "Peter O. Brackett" <ab4bc@ix.netcom.com>
wrote:

>Denny:
>
>Maybe it is one of those IEEE Dictionary defined "dynamic resistors"!
>
>Anybody ever hear of an FDNR, frequency dependent negative resistor?

Yes. For instance, IMPATT diodes have the property.

N7WS
>
> Peter AB4BC
>

3315. Re: Q: Airport Security and homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-10 00:00:00 UTC
From: David Snyder Hale <david@isi9.mtwilson.edu>
Message-ID: <7tpdlgbbb1@agate-ether.berkeley.edu>
Source record: 66465

I've carried a number of crazy things on board. No one has ever batted an eye at an HT in a carry-on. Here are things I have carried that did get noticed. In every single case though, I simply told them what it was, and they let me through. The short story is that I sincereley doubt that you'd have any trouble with your QRP rig.

A homebrew power supply; this was huge, mounted on a plate with no enclosure and big capacitors and exposed wiring -- certainly looks enough like a bomb. I just said, "It's a power supply; you know, to convert 120VAC to 12VDC."

Breadboards; big ones, too. 6x8 inches, with lots of ICs and wiring. I think I just told them something crazy like, "It's a computer that I'm building." In reality it was a project for a college class that I didn't want to explain.

Oscilliscope. This gave me the biggest trouble of all. It took about 3 guys to decide I could go on. No one knew what an oscilloscope was.

Once, for work, I had to carry some delicate optics. They were mounted in machined aluminum cubes, actually somewhat more rectangular than cubical, and these six shiny Al blocks were mounted in cut-a-way foam in a special metal suitcase. It was very James Bond like. (All I needed was to have it handcuffed to me.) As I started explaining what they were and how they were used on the telescope, etc., etc., their eyes glossed over and they let me through.

--
Dave * N3WTK (DM04xf) * http://isi9.mtwilson.edu * n3wtk@arrl.net

3316. Re: pulling a crystal off frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-10 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <XXWL3.13481$mR5.360411@news6.giganews.com>
Source record: 66466

You probably won't be able to pull the crystal far enough to hear any
difference in tuning. Back in the early 50s there was a product made by
Sonar that pulled a crystal a long way I think. It was called a VFX-680 but
I don't know how they did it.

What you are trying to do isn't impossible but it isn't simple either.

73, Bob K6DDX

3317. Re: POW Camp Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-10 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <38006505.9DDFD823@bellsouth.net>
Source record: 66467

Dave Martindale wrote:
> Sure there is - CBC is still AM here (690). It beats most of what you
> can find on FM around here.

Since you're in Canada... can you talk your MPs into leaving some Radio 1 stations on AM??

73 Doug

(who recently returned from a week's trip in the Dakotas, where the Radio 1 stations in Sask. and Manitoba bomb in. I really miss them down here in Tennessee! - Radio 1 seems easier to get on FM on E-skip than on AM these days...)

3318. Re: pulling a crystal off frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-10 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <7tq2sdri1@nnrp1.deja.com>
Source record: 66468

In article <12267-38001473-129@storefull-115.iap.bryant.webtv.net>,
inagaddadavida@webtv.net (Jim) wrote:
> several years ago i built a crystal converter from a plan in radio
> electronics magazine. it was for listening to shortwave on an am car
> radio. now i have a newer car with a digital radio. it steps in even
> steps that are too large to get some sw stations tuned in well. i
wonder
> if i could draw the various crystals off frequency with a variable cap
> in parallel with them. does anyone know about this? will a crystal
pull
> off frequency enough to help this problem? how much capacitance is
> required? 50pf? 100pf? if this would work then i could use the
variable
> cap like a fine tune control to get between the 10khz steps. on
another
> angle, will two crystals oscillate together in the same circuit?
could
> i use a 5khz crystal with the other ones to get the frequency offset
> that i need? will they work together or will i need another mixer
> circuit to combine them? (a pre-mixer mixer?) are there any other ways
> to skin this cat? any input is welcome
>
>
Dear Jim, you probably need a VXO (Variable Crystal Oscillator).
If you enter this word on AltaVista, for instance, you will get MANY
info on it. Specially the QST issues of november, 1983 and december,
1878, have good articles on it.
Using some components besides the crystal itself, it is possible to
control its frequency without much stability decreasing. It is also
possible to use varactors to get a VCXO (Voltage Controlled Crystal
Oscillator). A many KHz/Mhz adjusting range is easly got with common
crystals.
--
Greetings,

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Before you buy.

3319. DSW kit or Ten-Tec QRP

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-10 00:00:00 UTC
From: claimer@primenet.com
Message-ID: <7tq5jn$al7$1@nnrp02.primenet.com>
Source record: 66469

I am looking at buying a QRP kit I like both the Ten-Tec and the Small Wonder Lab DSW kit. Any comments at which kit to get would be great. This is my first qrp kit. Any pros and cons for the kits ?

Thanks
Bob N7LQT

3320. Re: Impedance Analyzers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-10 00:00:00 UTC
From: la8ak@online.no
Message-ID: <37ffcaed.538470739@news.online.no>
Source record: 66470
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On Sat, 9 Oct 1999 14:26:19 -0500, "Peter O. Brackett"
<ab4bc@ix.netcom.com> wrote:

>Denny:
>
>Maybe it is one of those IEEE Dictionary defined "dynamic resistors"!
>
>Anybody ever hear of an FDNR, frequency dependent negative resistor?
>
or measured it with MFJ259....?

73 LA8AK

3321. FS: Radio Engineer's Handbook, by Terman.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-10 00:00:00 UTC
From: Ed Sieb <va3es@rac.ca>
Message-ID: <TQ1M3.6167$up3.6524@news21.bellglobal.com>
Source record: 66471

Hi All,

I have for sale, Radio Engineer's Handbook, by Frederick Terman, 1943.
This copy is in good condition, 7.5 out of 10. Binding is very good,
covers are very good,
but there is "softness" on the corners of the covers (slightly dog-eared).
I'm asking $15.,
including shipping in North America.

73,

Ed
VA3ES
~~~~~~
Ed Sieb, VA3ES va3es@rac.ca
P. O. Box 8377, Ottawa Terminal, Ottawa, Ontario, K1G 3H8
613-738-8924
AMI #529 Canadian Division Director.
Member - Radio Club of America, QCWA, AWA
Net Manager - Canadian Boat Anchor Net (3745 Kcs)
~~~~~~

3322. WTB "Broken" HF amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-10 00:00:00 UTC
From: Matt Erickson <kk5dr@hotmail.com>
Message-ID: <3800B20F.91BD4D09@hotmail.com>
Source record: 66472

I'm still looking for a winter project, I want a HF console amp, or a 2 piece unit, that is broken, burnt-out, "zapped", etc. ie. Henry, BTI, DrakeL7, LK-550, etc.
Send me a message, let me know what you have, we'll work a deal.

3323. Re: Q: Airport Security and homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-10 00:00:00 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <jJ4M3.18527$Od.70728@news.rdc1.il.home.com>
Source record: 66473

> Oscilliscope. This gave me the biggest trouble of all. It took about 3
> guys to decide I could go on. No one knew what an oscilloscope was.

I had a security goon ask me to dis-assemble a scope once..
I had to escalate to the second layer of security people before I got loose
of that one.

3324. Re: DSW kit or Ten-Tec QRP

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-10 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <3800EC57.41C6@eece.maine.edu>
Source record: 66474

Bob wrote:
>
>
> I am looking at buying a QRP kit I like both the Ten-Tec and the
> Small Wonder Lab DSW kit. Any comments at which kit to get would be
> great. This is my first qrp kit. Any pros and cons for the kits ?
>
> Thanks
> Bob N7LQT

I can't talk about the Small Wonders kit (although I'd love to buy one and build it), I can talk about the Ten Tec kit. Nice kit, but some flaws:

It's kinda current hungry, not a problem for home operation but a consideration for backpacking (it's also rather large).

Only has 70kHz of tuning; the Small Wonders DSW should have full band coverage.

The Ten Tec kit has no reverse battery protection: important to add if you're a klutz like me!

Also, the kit inludes solid strand wire for building; I broke 'em several times while building and finally replaced all the wire in the kit with some cheapo mulitstranded wire (for wiring the power switch, speaker, etc).

Other than that, I can't really comment on either kit. Any feedback on the Small Wonders kit?
--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

3325. NYE VIKING F/S CHEAP

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-10 00:00:00 UTC
From: ts950sdx@aol.com
Message-ID: <19991010155514.04350.00000307@ng-ce1.aol.com>
Source record: 66475

NYE VIKING MB 4A 3KW TUNER
FOR SELL
SAME TUNER AS THE MB 5A
MINUS ANT SWITCH
HAS BALUM FOR WIRE/LADDER LINE AND COAX OUTOUT
2 METERS SWR AND 300 3000
WATTS
WORKS AS A 10 LOOKS AS A
9.3!!!!

$225 SHIPPED CONUS

THANKS JOE KF4TOH-------------------------

3326. Re: DSW kit or Ten-Tec QRP

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-10 00:00:00 UTC
From: nielsen@primenet.com
Message-ID: <slrn801sa9.qaj.nielsen@bob.localnet>
Source record: 66476

On Sun, 10 Oct 1999 15:43:19 -0400, Shawn Upton wrote:
>Bob wrote:
>>
>>
>> I am looking at buying a QRP kit I like both the Ten-Tec and the
>> Small Wonder Lab DSW kit. Any comments at which kit to get would be
>> great. This is my first qrp kit. Any pros and cons for the kits ?
>>
>> Thanks
>> Bob N7LQT
>
>I can't talk about the Small Wonders kit (although I'd love to buy one
>and build it), I can talk about the Ten Tec kit. Nice kit, but some
>flaws:
>
>It's kinda current hungry, not a problem for home operation but a
>consideration for backpacking (it's also rather large).
>
>Only has 70kHz of tuning; the Small Wonders DSW should have full band
>coverage.

It does.

>The Ten Tec kit has no reverse battery protection: important to add if
>you're a klutz like me!

The DSW has a series diode on the DC input for reverse-polarity
protection.

>
>Also, the kit inludes solid strand wire for building; I broke 'em
>several times while building and finally replaced all the wire in the
>kit with some cheapo mulitstranded wire (for wiring the power switch,
>speaker, etc).
>
>Other than that, I can't really comment on either kit. Any feedback on
>the Small Wonders kit?

The DSW has a built-in iambic keyer and morse readout of the frequency.
There are ribbon cables (which plug into the board) for the connections.

Bob, W6SWE

--
Bob Nielsen Internet: nielsen@primenet.com
Tucson, AZ AMPRnet: w6swe@w6swe.ampr.org

DM42nh http://www.primenet.com/~nielsen

3327. Re: Info Req: Elector Magazine

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-10 00:00:00 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <OJ7M3.2155$r46.1296@news.indigo.ie>
Source record: 66477

Levent Sasmazel <levent@netlabs.net> wrote in message
news:7tqbtffji1@news.monmouth.com...
> Hi,
>
> I wonder if any one knows about old electronic magazine "ELECTOR".
<snip>

I have seen it in the newsagents recently. They had a web site at:

http://ourworld.compuserve.com/homepages/elektor_uk

I haven't checked this link for a long time so it may be broken.

73, Ed.

--
EI9GQ homebrew radio page http://www.qsl.net/ei9gq

Remove 'X' to reply

3328. Re: Looking for CK722 projects/Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-10 00:00:00 UTC
From: Tony Hwang <2810311762@home.com>
Message-ID: <3801064F.96680CB2@home.com>
Source record: 66478

Hi,
You guys make me count my ages and now I am sad realizing I am so old,
hi. Isn't that one of the original x-sistor(Ge type)?
Must be collectors item by now. At least I recognized it! Yet I don't
belong to a senior citizen's club, hi.
Now 2N2222 is about 5 cents a piece?
73,
Tony, VE6CGX

"Michael St. Angelo" wrote:
>
> Lynn, Jack,
>
> I do remember the GE 2N107 and it's npn cpunterpart, the 2N170.
> I bought mine in the early 1960's from theLafayette store in Jamaica,
> Queens.
> The price was very reasonable.
>
> I have a 1966 Lafayette catalog, and I see the price of the transistors
> were 55 and 75 cents. They are classified entertainment grade
> an are cheaper than a Texas Instruments 2n2222 at $3.97
> or a "Minuteman Series" DTL SN337A flip flop at $70.00.
>
> I also built a one transistor crystal radio using fahnestock clips.
>
> Lafayette later moved to Syosset, Long Island.
>
> I still have the transistors in the origional boxes.
>
> Mike St. Angelo N2MS
>
> Lynn Coffelt wrote in message <37E3F4F2.217D1704@sos.net>...
> >Jack!
> > > Great idea for a web site! When I talk to contemporaries about the
> >CK722, the usual response is a blank stare. One did remember, but was a
> >fan of some others- - - 2N106 (or 107?).
> >>

3329. How find out Power Transformer Information

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-10 00:00:00 UTC
From: Ricky Scott <kf7qz@yahoo.com>
Message-ID: <38013A8D.C66ECE88@yahoo.com>
Source record: 66479

I have an older stereo that has a bad channel. Well since I have a new stereo I thought I would put the components to good use. Lots of nice stuff in here. Any way has nice bridge rectifier and caps So I thought Neat. Second Power supply. The transformer is as big as My Kenwood PS-30.

SO How would I find out about the Transformer.

Its the following on it

BANDO
ATT 683
0-BE11-ZLR

And below stamped

ANF-926.

DId a web search but came up empty

Thanks
Rick KF7QZ

3330. Re: Q: Airport Security and homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-10 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <3801597A.78B05708@teleport.com>
Source record: 66480

I once carried a scope all over the East Coast, demonstrating it to various potential customers, and didn't have any trouble at all. (I may have had to plug it in a time or two to show that it worked, but don't recall for sure.) Just goes to show that your mileage may vary.

Roy Lewallen, W7EL

Dave VanHorn wrote:
>
> > Oscilliscope. This gave me the biggest trouble of all. It took about 3
> > guys to decide I could go on. No one knew what an oscilloscope was.
>
> I had a security goon ask me to dis-assemble a scope once..
> I had to escalate to the second layer of security people before I got loose
> of that one.

3331. Need Air Variable caps

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-11 00:00:00 UTC
From: bpn518@aol.com
Message-ID: <19991011100719.12176.00000037@ng-fx1.aol.com>
Source record: 66385

Hi and thanks for reading.

I am looking for the following air variables:
Johnson #154-11, which is a 9~38pf 3kv or higher variable
Johnson #154-1, which is a 12~244 pf.

Could be reasonable subs.

Thanks,
Bennett ko2ok in NJ

3332. Re: Impedance Analyzers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-11 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <7tt1q4$67d$0@208.207.71.137>
Source record: 66386
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Al, N2NKB wrote:
>
> Especially a wirewound resistor.
> Al
>

Many of which do not appear to be wirewound until you
break them open.

Dick

3333. Re: Q: Airport Security and homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-11 00:00:00 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <%lpM3.19678$Od.76154@news.rdc1.il.home.com>
Source record: 66387

Roy Lewallen <w7el@teleport.com> wrote in message
news:3801597A.78B05708@teleport.com...
> I once carried a scope all over the East Coast, demonstrating it to
> various potential customers, and didn't have any trouble at all. (I may
> have had to plug it in a time or two to show that it worked, but don't
> recall for sure.) Just goes to show that your mileage may vary.

Most of the time it was no problem for me, even on international flights.

Probably the most exasperating one was flying out of indianapolis a week after TWA 800 went down. I was in fact connecting to TWA 800 to Paris. When they xrayed my briefcase, they went to a hand search, disorganized all my notes, riffled through everything in the bottom, and told me to go on. I stood there for a while putting everything back in order, and happened to open one of the two pencil compartments built into the case. The security fellow commented "I thought I saw something in there, but I didn't know what it was".... ISNT THAT THE WHOLE POINT???

They had already cleared me though, and I could just as well have been carrying bricks of C4 in there for all they knew. They saw something "suspicious" in my bag, but let me go with it anyway!...

If they're going to put me through the inconvenience, I'd appreciate it if they took it seriously. China Air would never have done that. They damn well would have made sure they understood what it was, and that it was harmless.

I don't mind the inspections, just the stupidity.
I've carried a lot of prototypes through a lot of airports.

3334. MPS6560

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-11 00:00:00 UTC
From: Fidel Leon <fleon@bcg.es>
Message-ID: <7tt463$f9g$1@diana.bcn.ttd.net>
Source record: 66388

Hi, looking for a possible equivalence to the Motorola transistor
MPS6560....

73,

Fidel Leon - EA3GIP

3335. Re: Q: Airport Security and homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-11 00:00:00 UTC
From: noone@nowhere.com
Message-ID: <3802695c.338204202@news.squonk.net>
Source record: 66389

On Mon, 11 Oct 1999 17:44:27 GMT, "Dave VanHorn"
<dvanhorn@cedar.net> wrote:

>
>Roy Lewallen <w7el@teleport.com> wrote in message
>news:3801597A.78B05708@teleport.com...
>> I once carried a scope all over the East Coast, demonstrating it to
>> various potential customers, and didn't have any trouble at all. (I may
>> have had to plug it in a time or two to show that it worked, but don't
>> recall for sure.) Just goes to show that your mileage may vary.
>
>Most of the time it was no problem for me, even on international flights.
>
>Probably the most exasperating one was flying out of indianapolis a week
>after TWA 800 went down. I was in fact connecting to TWA 800 to Paris.
>When they xrayed my briefcase, they went to a hand search, disorganized all
>my notes, riffled through everything in the bottom, and told me to go on. I
>stood there for a while putting everything back in order, and happened to
>open one of the two pencil compartments built into the case. The security
>fellow commented "I thought I saw something in there, but I didn't know what
>it was".... ISNT THAT THE WHOLE POINT???
>
>They had already cleared me though, and I could just as well have been
>carrying bricks of C4 in there for all they knew. They saw something
>"suspicious" in my bag, but let me go with it anyway!...
>
>If they're going to put me through the inconvenience, I'd appreciate it if
>they took it seriously. China Air would never have done that. They damn
>well would have made sure they understood what it was, and that it was
>harmless.
>
>I don't mind the inspections, just the stupidity.
>I've carried a lot of prototypes through a lot of airports.
>
That's probably the norm. I'd be willing to bet
that the security people at nearly all US airports
are paid just the same as a security guy at a
discount store - not very much. You get what you
pay for, and you can't substitute technology for
intelligence.

Just random thoughts

3336. Re: Info Req: Elector Magazine

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-11 00:00:00 UTC
From: Bram de Ridder <bramrid@cistron.nl>
Message-ID: <7ttifc$sh8$1@enterprise.cistron.net>
Source record: 66390

In Holland we have a magazine called 'Elektuur'. It started sometime in the sixties. If that is what you mean, then check out www.elektuur.nl
Once a year they publish the 'Semiconductor guide', which contains some 100+ electronic designs about all kinds of different gadgets. They publish at least in Dutch, English, German and French.

Success with the hunt, Bram de Ridder

Levent Sasmazel <levent@netlabs.net> schreef in berichtnieuws 7tqbtffji1@news.monmouth.com...
> Hi,
>
> I wonder if any one knows about old electronic magazine "ELECTOR". I
> think they were based in Holland. Are they still in business? How can I
> find some old issues?
>
> Thanks for the info.
>
> Levent Sasmazel
>
>
>
>
>

3337. Question: Decoupling and RF Power Amp.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-11 00:00:00 UTC
From: rjburden@bigpond.com
Message-ID: <3801e493.584564@news.bigpond.com>
Source record: 66391

Hi,

here's a question I hope someone can help me with! I have a homebrew 20W HF Amp running off 14 volts. When I transmit a 2 tone signal (or any signal for that matter), should I see evidence of that signal across the power supply?

Measurements done with the amplifier terminated in a dummy load show 1v peak to peak of the 2 tone signal across the power supply terminals.

Regards,
Richard VK5OO

"Nothing better than home-brew, except perhaps an absence of Spam"

3338. Re: Need Air Variable caps

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-11 00:00:00 UTC
From: la8ak@online.no
Message-ID: <38024d20.702898142@news.online.no>
Source record: 66392

On 11 Oct 1999 14:07:19 GMT, bpn518@aol.com (Bpn518) wrote:

>Hi and thanks for reading.
>
>I am looking for the following air variables:
>Johnson #154-11, which is a 9~38pf 3kv or higher variable
>Johnson #154-1, which is a 12~244 pf.
>
>Could be reasonable subs.
>
>Thanks,
>Bennett ko2ok in NJ

I rec'd this info, perhaps it will help?

From: Remigijus <r.vaicius@omnitel.net>
To: amps@contesting.com <amps@contesting.com>;
vhf-dx-discuss@blacksheep.org <vhf-dx-discuss@blacksheep.org>;
vushf@sk7do.te.hik.se <vushf@sk7do.te.hik.se>
Date: 1. oktober 1999 18:20
subject: VHFDX: parts for sale

Hello Power World,

I have some parts for sale :

1. Tube GS-35b, 70USD ;
2. Tube GU-47b, 95USD;
3. Vacuum variable capacitor 3-50pF x 25kV - 60USD;
4. Vacuum variable capacitor 5-250pF x 5kV - 60USD;
5. Vacuum variable capacitors 4-100pF x 5kV - 55USD;
6. Vacuum variable capacitors 20-1000pF x 10kV, with original
izolators and counters - 120USD.

All prices above are WITHOUT shipping price.

Regards,

Remi LY2MW
r.vaicius@omnitel.net

3339. Tentec RX-320

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-11 00:00:00 UTC
From: Rocci <rocci@att.net>
Message-ID: <38027869.914253C0@att.net>
Source record: 66393

Has anyone disassembled the DSP firmware in the RX-320 receiver? It seems that this little gem is a treasure trove of potential waiting for third party developers to get into it and add functions. I know that Tentec has opened the control interface, but this only let's you get so far. It would be great if the memory map and firmware source were available.

Joe
WA3CMQ

3340. Re: Question: Decoupling and RF Power Amp.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-11 00:00:00 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <38027F5C.8E6F2AE9@dialpoint.net>
Source record: 66394

You should not see any signal on the power supply. It should be almost pure DC. You are probably either picking the signal up with the measuring device or the supply is loosing regulation. Maybe it just needs a bigger or more bypassing of the output.

rjburden@bigpond.com wrote:
>
> Hi,
>
> here's a question I hope someone can help me with! I have a homebrew
> 20W HF Amp running off 14 volts. When I transmit a 2 tone signal (or
> any signal for that matter), should I see evidence of that signal
> across the power supply?
>
> Measurements done with the amplifier terminated in a dummy load show
> 1v peak to peak of the 2 tone signal across the power supply
> terminals.
>
> ----------
> Regards,
> Richard VK5OO
>
> "Nothing better than home-brew, except perhaps an absence of Spam"

3341. Re: How find out Power Transformer Information

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-11 00:00:00 UTC
From: "William F. Hagen" <whagen@inreach.com>
Message-ID: <38028BD8.18517C92@inreach.com>
Source record: 66395

I had an older reciever with a bad channel too, took it to the local
repair guy, he replaced a 50 cent transister in a preamp stage, and I
now have a great 250 watt pioneer stereo.
Before you trash it, find what is fried, it might be worth repairing.
You can always sell it when you are done.

Ricky Scott wrote:
>
> I have an older stereo that has a bad channel. Well since I have a new
> stereo I thought I would put the components to good use. Lots of nice
> stuff in here. Any way has nice bridge rectifier and caps So I thought
> Neat. Second Power supply. The transformer is as big as My Kenwood
> PS-30.
>
> SO How would I find out about the Transformer.
>
> Its the following on it
>
> BANDO
> ATT 683
> 0-BE11-ZLR
>
> And below stamped
>
> ANF-926.
>
> DId a web search but came up empty
>
> Thanks
> Rick KF7QZ

--
Please remove the word 'NOREPLY' from the email address, sorry for the
inconvenience, but it helps keep down the spam.

3342. Re: Question: Decoupling and RF Power Amp.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-11 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <jfzM3.934$s4.49840@news6.giganews.com>
Source record: 66396

That amount of signal on the power supply isn't too bad. It would be better if it were down to, say, 0.1 V p-p, which you should be able to achieve with careful lead dress and shielding of the power supply, as well as filtering at both the power supply and load connections of the 14 Volts.

73, Bob K6DDX

3343. Re: Info Req: Elector Magazine

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-11 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <7tvop2$3td@dfw-ixnews4.ix.netcom.com>
Source record: 66397

In article <OJ7M3.2155$r46.1296@news.indigo.ie>,
Eamon Skelton <Xnospam@oceanfree.net> wrote:
>Levent Sasmazel <levent@netlabs.net> wrote in message
>news:7tqbtffji1@news.monmouth.com...
>> Hi,
>> I wonder if any one knows about old electronic magazine "ELECTOR".
><snip>
>
>I have seen it in the newsagents recently. They had a web site at:
>
>http://ourworld.compuserve.com/homepages/elektor_uk
>
>I haven't checked this link for a long time so it may be broken.

The URL in this months issue is http://www.elektor-electronics.co.uk

The email address for subscriptions (and back issues) is
wws.subscription@virgin.net

Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

3344. Info Req: Elector Magazine

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-11 00:00:00 UTC
From: Levent Sasmazel <levent@netlabs.net>
Message-ID: <7tqbtffji1@news.monmouth.com>
Source record: 66481

Hi,

I wonder if any one knows about old electronic magazine ELECTOR. I think they were based in Holland. Are they still in business? How can I find some old issues?

Thanks for the info.

Levent Sasmazel

3345. Homebrew Voting Unit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-11 00:00:00 UTC
From: n3tuk@my-deja.com
Message-ID: <7trd9usrm1@nnrp1.deja.com>
Source record: 66482

Hi,
Wondering if anyone have a diagram for a Voting Receiver Unit?

LV
n3tuk@netkonnect.net

Sent via Deja.com http://www.deja.com/
Before you buy.

3346. Jones Plug for Metron amp ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-11 00:00:00 UTC
From: Philip de Cadenet <BigMobile@invest.fsbusiness.co.uk>
Message-ID: <lPZ3RDAUJaA4EwcB@invest.fsbusiness.co.uk>
Source record: 66483

I'm looking for a source of Jones plug's.

I need one to make up a remote head unit for a Metron solid state HF amp.

I've had no joy with my search engines on the net.

Can anyone suggest a possible source?

Mny tnx

Phil

3347. Re: pulling a crystal off frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-11 00:00:00 UTC
From: douglas dwyer <doug@ddwyer.demon.co.uk>
Message-ID: <Lt7pNFAJvcA4Ew6W@ddwyer.demon.co.uk>
Source record: 66484

In article <12267-38001473-129@storefull-115.iap.bryant.webtv.net>, Jim
<inagaddadavida@webtv.net> writes
>several years ago i built a crystal converter from a plan in radio
>electronics magazine. it was for listening to shortwave on an am car
>radio. now i have a newer car with a digital radio. it steps in even
>steps that are too large to get some sw stations tuned in well. i wonder
>if i could draw the various crystals off frequency with a variable cap
>in parallel with them. does anyone know about this? will a crystal pull
>off frequency enough to help this problem? how much capacitance is
>required? 50pf? 100pf? if this would work then i could use the variable
>cap like a fine tune control to get between the 10khz steps. on another
>angle, will two crystals oscillate together in the same circuit? could
>i use a 5khz crystal with the other ones to get the frequency offset
>that i need? will they work together or will i need another mixer
>circuit to combine them? (a pre-mixer mixer?) are there any other ways
>to skin this cat? any input is welcome
>
Depen the frequency of the crystal assume 15MHz then a 5 to 25pF varicap
in series crystal will pull perhaps 70ppm = 1kHz your problem you need
to pull +-5kHz. If you are careful with the design and tune out some of
the static capacitance across the crystal you could approach 1000ppm ie
10kHz.
Note overtone ie xtals over 20mhz wont pull this much.
Also crystals that are small and under 5MHZ also wont pull.
Ceramic resonators will pull a lot more but are not so stable.
--
douglas dwyer

3348. TRADE: Telex headset

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-12 00:00:00 UTC
From: Ron Angle K6KYJ <k6kyj@hotmail.com>
Message-ID: <d1BM3.211$RA.1973@news2.randori.com>
Source record: 66398

Am looking to trade a new (10 hours use) Telex Contester headset/boom mike for a similar headset with a high impedance audio output (50K) mic element. Will trade for an older, used headset if it still has good audio quality.

If anyone has any experience adapting a low impedance headset for high K inputs (e.g. Kenwood TS-820), please email.

Email to: K6KYJ@hotmail.com or address on header. Would like to get this resolved by the ARRL 10m contest.

K6KYJ...Colusa Co. for the 1999 CQ-P

3349. Re: Q: Airport Security and homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-12 00:00:00 UTC
From: spam@nospam.com
Message-ID: <3802ffb5.7208441@news.lin.foa.se>
Source record: 66399

Some years ago we visited the land of hope and glory, USA.

Except for the usual stuff, electronic gadgets, I brough with me a soft-ball bat. My friend had a number of ceramic coffee mugs.....

OK so we come to the security gate and wow what a reation, when I put the bat on the conveyor belt the security guy reacted just as if I had hit him on the head!!! "Hey whats this? A base-ball bat??"
"GUARD!!!!!"
The guard came and picked me and my bat up and after the usual explenation (to big to be checked luggage), I was forced to make a gate check in, handling the bat to the stuardess. This was on the domestic flight from Boston to NYC. Changing to international i NYC I expected the very same thing to happen, and yes the security guy reacted almost as the one before, with the exception, instead of yelling for the guards, he asked me for my flight number. When I revealed it was SKxxx he said " Oh what the heck take it and leave!" I wonder what the reaction would have been if I had said EL-AL???

My friend with the mugs? Oh they though it was hand-grenades.... big confusion for a short moment..... BIG fun!

My second fight with security was during the Iraqi-conflict, and I was travelling from Munich Germany. I had brought a hobby 12 volt miniture hacksaw. I also had my small Minox camera. As usual my bag was shockfull with components and other junk as well. Passing security, they DEMANDED that I took my miniature Minox apart and removed the film (SIC), they x-rayed my bags and was shocked to see the saw. "Run it" they said. "I can not" I replied and pointed to the box which said battery operated hack saw. Well they gave me an ulitmatum: Either you show that the thing operates or throw it away OR leave the queue and send it home with normal mail. Having spent 50 DM on the darn thing I leaft and went to the post office. This set me back another 30 DM.... upon returning to the queue I once again had to open my miniature camera..... So whats my complaint? Well security IS GOOD if it works! I could have brought any "detonator" made up with my electronic junk in my bag! I could take any transistor radio (think of Lockerbie) as long as it did operate .... I found the whole geman security process a joke!!!

Finally, a few years ago visiting London I was fortunately enough to win a nice LogiKey CW keyer. This went into my checked luggage (Germany still in fresh memory), and when checking-in the desk clerk asked me if there was any electronic stuff in my bags, and I replied with yes. A guard was called and he carried my luggage to a special x-ray machine, gave it a hard look, carried it back again and with a

smile wished me a happy journey! What a difference....

Cheers

On Mon, 11 Oct 1999 22:52:14 GMT, noone@nowhere.com (KC2FCR) wrote:

>On Mon, 11 Oct 1999 17:44:27 GMT, "Dave VanHorn"
><dvanhorn@cedar.net> wrote:
>
>>
>>Roy Lewallen <w7el@teleport.com> wrote in message
>>news:3801597A.78B05708@teleport.com...
>>> I once carried a scope all over the East Coast, demonstrating it to
>>> various potential customers, and didn't have any trouble at all. (I may
>>> have had to plug it in a time or two to show that it worked, but don't
>>> recall for sure.) Just goes to show that your mileage may vary.
>>
>>Most of the time it was no problem for me, even on international flights.
>>
>>Probably the most exasperating one was flying out of indianapolis a week
>>after TWA 800 went down. I was in fact connecting to TWA 800 to Paris.
>>When they xrayed my briefcase, they went to a hand search, disorganized all
>>my notes, riffled through everything in the bottom, and told me to go on. I
>>stood there for a while putting everything back in order, and happened to
>>open one of the two pencil compartments built into the case. The security
>>fellow commented "I thought I saw something in there, but I didn't know what
>>it was".... ISNT THAT THE WHOLE POINT???
>>
>>They had already cleared me though, and I could just as well have been
>>carrying bricks of C4 in there for all they knew. They saw something
>>"suspicious" in my bag, but let me go with it anyway!...
>>
>>If they're going to put me through the inconvenience, I'd appreciate it if
>>they took it seriously. China Air would never have done that. They damn
>>well would have made sure they understood what it was, and that it was
>>harmless.
>>
>>I don't mind the inspections, just the stupidity.
>>I've carried a lot of prototypes through a lot of airports.
>>
>That's probably the norm. I'd be willing to bet
>that the security people at nearly all US airports
>are paid just the same as a security guy at a
>discount store - not very much. You get what you
>pay for, and you can't substitute technology for
>intelligence.
>
>
>
>------
>Just random thoughts

3350. Homebrew paradise

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-12 00:00:00 UTC
From: Harry - SM0VPO <harryvpo@hotmail.com>
Message-ID: <38030862.E354F325@hotmail.com>
Source record: 66400
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave,uk.radio.amateur,uk.rec.radio.cb

Harry's Homebrew Homepage is lcated at:

http://sm0vpo.8m.com/
http://www.geocities.com/SiliconValley/3569/
http://hem2.passagen.se/sm0vpo
http://members.xoom.com/sm0vpo

There you will find loads of projects documented projects including antennas, transmitters, receivers, PSUs and many many usefull circuits. PCB foil patterns are included for many projects and there are even photograph illustrations of the more recent projects.

I have recently included loads of freeware and shareware software packages for PCB drafting in the DOWNLOADS section. All the more recent PCB component layouts and PCB-foils are in BMP format so that everyone can read and print them (they are zipped).

Amongst the more recent projects added to the page are:
- TBA120 NBFM receiver - 100KHz to 100MHz, change two coils & crystal.
- Simple 4-watt AF amplifier - much better than the LM380.
- Extending the Balcony Antenna using Fractal & Meander principles.
- VHF digital direction finding system.

The site is well worth a visit. I hope you have fun - Harry SM0VPO

3351. Download problems

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-12 00:00:00 UTC
From: Harry - SM0VPO <harryvpo@hotmail.com>
Message-ID: <38030B03.C86B0ABA@hotmail.com>
Source record: 66401
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave,uk.radio.amateur,uk.rec.radio.cb

I have had loads of E-mail because the DOWNLOAD pages frequently give the error message FORBIDDEN when trying to get a ZIPped PCB foil pattern or datasheet from my homepage. Harry's Homebrew Homepage is lcated at:

http://sm0vpo.8m.com/
http://www.geocities.com/SiliconValley/3569/
http://hem2.passagen.se/sm0vpo
http://members.xoom.com/sm0vpo

The Passagen and Xoom sites (for Europe and the far East) have recently added banners to the INDEX file. When you click on another site (example http://sm0vpo.8m.com) then these servers import the files to their own server. Great! it's all free, but if you try to download a PCB foil pattern ZIP file you are accessing the site from an external site! This results in the message FORBIDDEN!!

If you want the PCB foils then copy (Ctrl+C) the URL and paste into the ADDRESS panel of your browser (Ctrl+V) and it will load the original site. You can then download to your hearts content.

I hope you have fun - Harry SM0VPO

3352. Re: Jones Plug for Metron amp ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-12 00:00:00 UTC
From: Don <w8ns@tir.com>
Message-ID: <380314A7.570B41C1@tir.com>
Source record: 66402

Phil,try Fair Radio near Toledo,Oh....They have a web page,but I do not have it...I am sure they can help you...I tried to find their phone number,no luck...I am sure they can help you..Don

Philip de Cadenet wrote:

> I'm looking for a source of Jones plug's.
>
> I need one to make up a remote head unit for a Metron solid state HF
> amp.
>
> I've had no joy with my search engines on the net.
>
> Can anyone suggest a possible source?
>
> Mny tnx
>
> Phil

3353. Triplett 3490 Transistor Analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-12 00:00:00 UTC
From: caerleon_YOUR_PANTS_@pldi.net
Message-ID: <38031ca5.115125999@news.pldi.net>
Source record: 66403

Dear Newsgroup,

I have recently come across a Triplett Model 3490 Transistor Analyzer.
This is a fascinating peice of equipment that I do not plan on
selling. It appears to be in working order with only minor cosmetic
flaws. However, If anyone has any information on what the value might
be for insurance purposes, or any information on different uses for
this equipment, I would really appreciate it.

Thanks,
Mark

Please remove _YOUR_PANTS_ before attempting to email me.

3354. Coils - sockets - Denco?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-12 00:00:00 UTC
From: Harry - SM0VPO <harryvpo@hotmail.com>
Message-ID: <38032B5C.8340D142@hotmail.com>
Source record: 66404

Hi,

I have produced a few constructional kits but have avoided coils like the plague, mainly because they cost the earth. this means that I have had to stay clear of HF projects. I can make coil formers dead-easy myself, but if someone else wants a kit they don't want to bugger around with sawing their way through plastic tubes and using copious quantities of superglue.

Does anyone know of a good CHEAP source of ready-made plug-in coil formers? What I need is something that is cheaply available I can use to fit a custom-designed a PCB. There used to be a source of DENCO plug-in coils but I cannot find them anymore. I know that DENCO products were taken over by another company who produced the same ready-wound coils, but even they have dissapeared into antiquity.

Best regards from Harry - SM0VPO

Harry's Homebrew Homepage is located at:
http://sm0vpo.8m.com/
http://www.geocities.com/SiliconValley/3569/

3355. Who needed empty FT-243 holders?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-12 00:00:00 UTC
From: k5dh@raytheon.com
Message-ID: <X9GM3.63$HI1.2758@dfw-service2.ext.raytheon.com>
Source record: 66405
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

A while back, I heard that someone, perhaps on the west coast, was looking for FT-243 crystal holders. The fellow was making new elements for them for the ham bands, but he needed more of the empty holders. I have a whole bag of them (probably 2 or 3 dozen) that I will part with. Anyone know who that guy was???

73,
Dean / K5DH

3356. Re: How find out Power Transformer Information

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-12 00:00:00 UTC
From: Harry - SM0VPO <harryvpo@hotmail.com>
Message-ID: <38032F06.5E6099A2@hotmail.com>
Source record: 66406

If you want to cannibalise the set and use the transformer, then take a moment to identify the mains input terminals. Easy to follow from the mains wiring. Stuff a few volts of low-frequency AF into that winding and look at the other windings with an oscilloscope. Measurements with an ohm-meter will identify windings and the scope will give you an indication of the output voltages.

Finally, connect the AF source to the largest secondary and repeat. If you get almost the same figures then you have confirmation. If the figures are widely different then the transformer could be stuffed. Connect it to the mains in series with a mains light-bulb, if you want to go-ahead, just in case it is the transformer that was really knackered. if the bulf lights up then either throw the transformer away, use the former for winding your own transformer or send it to me.

Measure the mains leakage to the secondaries, reverse the primary connections and measure the leakage again. Many old radio sets are left outside or in damp sheds where the transformers become nicely moist and which can cause dangerous leakage between primary and secondaries. If there is bad leakage, then either throw the transformer away, use the former for winding your own transformer or send it to me.

Best regards from Harry - SM0VPO

Ricky Scott wrote:

> I have an older stereo that has a bad channel. Well since I have a new
> stereo I thought I would put the components to good use. Lots of nice
> stuff in here. Any way has nice bridge rectifier and caps So I thought
> Neat. Second Power supply. The transformer is as big as My Kenwood
> PS-30.
>
> SO How would I find out about the Transformer.
>
> Its the following on it
>
> BANDO
> ATT 683
> 0-BE11-ZLR
>
> And below stamped
>
> ANF-926.
>
> DId a web search but came up empty
>

> Thanks
> Rick KF7QZ

3357. Re: pulling a crystal off frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-12 00:00:00 UTC
From: Harry - SM0VPO <harryvpo@hotmail.com>
Message-ID: <38033456.7FEC4E@hotmail.com>
Source record: 66407

Not as much as you want - If you take a basic crystal-colpits oscillator at, say, 7MHz then adding parallel or series capacitance would probably lower or increase the frequency by +/- 5KHz.

If you were to insert a large inductor (30-turns) and a capacitor (100pf) in series with the crystal then you would be able to pull the crystal by up to 20KHz or more. The practical limit is where the oscillator either stops or the stabalising effect of the crystal is destroyed. this occurs with too much inductance and mazimum capacitance (all in series). this technique was used by MIZUHO who manufactured a VHF SSB rig many years ago. Each band covered a 200KHz section of the 144-145MHz band.

Another technique is to multiply the "pulled" crystal (eg. 8KHz as above) by, say, 18 so the output is in the VHF spectrum. Then heterodyne the result with another multiplied crystal oscillator pulled in the opposite direction. This could give you a dual crystal HF VFO with a shift of up to 300KHz or more.

Yet another technique is to use two similar crystals spaced apart in frequency by, say, 10KHz; the two crystals in parallel and in series with a 33pf variable capacitor. Providing the two crystals have aproximately identical activity then you can get a larger pulling effect.

I also read that an Australian chap used two high-HF band fundamental crystals of quite different frequencies which both oscilated in the same single-transistor circuit. By pulling one of the crystals the heterodyne changed, more than just a single low-HF band crystal.

Ok then Jim, there are a few ideas for you to begin experimenting with. I hope that you will post your findings here if you should have any positive results as this is quite an interesting homebrew subject.

very best regards from Harry - SM0VPO
http://sm0vpo.8m.com

Jim wrote:

> several years ago i built a crystal converter from a plan in radio
> electronics magazine. it was for listening to shortwave on an am car
> radio. now i have a newer car with a digital radio. it steps in even
> steps that are too large to get some sw stations tuned in well. i wonder
> if i could draw the various crystals off frequency with a variable cap
> in parallel with them. does anyone know about this? will a crystal pull
> off frequency enough to help this problem? how much capacitance is
> required? 50pf? 100pf? if this would work then i could use the variable
> cap like a fine tune control to get between the 10khz steps. on another
> angle, will two crystals oscillate together in the same circuit? could

> i use a 5khz crystal with the other ones to get the frequency offset
> that i need? will they work together or will i need another mixer
> circuit to combine them? (a pre-mixer mixer?) are there any other ways
> to skin this cat? any input is welcome

3358. Re: Q: Airport Security and homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-12 00:00:00 UTC
From: Harry - SM0VPO <harryvpo@hotmail.com>
Message-ID: <3803365D.40EBEF69@hotmail.com>
Source record: 66408

I once went to Saudi from Thiefrowe (UK) with an inverter. Gave 220-volts AC out for 12-volts in. It was only 50-watts to power my CD player and a few other small items. Problem was, the transformer was a torroidal jobbie for efficiency. This transformer was bound in that brown-varnished tape and the wires were neatly soldered to a PCB. No case, box or cabinet, just laying flat in my briefcase.

I had a hell of a job getting through the X-ray. They shut down one of the machines, made me open the case myself and put the thing in the machine. Did you know that they can blow the picture right up so that you can see all the windings?

Harry - SM0VPO

maddog@io.com wrote:

> Hi gang!
>
> Anybody have experience with homebrew electronics and airport
> security, especially the walk-thru security gates? I'd like to be
> able to carry a qrp rig and small lead-acid battery, but I'm guessing
> that the red lights and sirens will go off when they see that, and
> I'll be detained while I try to explain to lotsa people what that is.
>
> Just what are the rules about homemade electronics?
>
> 73,
> monty n5fc

3359. autopatch audio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-12 00:00:00 UTC
From: rgable@cancom.net
Message-ID: <QMGM3.2902$QI5.155584@monger.newsread.com>
Source record: 66409

****** Please reply by e-mail *********
I have an autopatch that I am trying to get working. I had been using it for some time but noticed that, while all rigs could access the patch, very few rigs' DTMF were recpgnized by the phone company for dialing. I played with the audio levels and adjustements to no avail.

I have been using the audio from the speaker jack up to now, but I heard that I should be using the audio from the demod before it has been de-emphasized. OK, so I have that avail, but there is no squelch and there is a LOT of high freq. audio hash as well (besides the sig. level is too low as well).

I need an authoritative answer as to how to connect my autopatch to the rig so that it works. I am using an IC-28A (ICOM) xcvr and a Teleconnect 851 autopatch.

Thanks in advance.

********** Please reply by e-mail **********

Ralph

3360. Re: Homebrew paradise

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-12 00:00:00 UTC
From: K0HB <K0HB@arrl.org>
Message-ID: <7tvj89$sc5$1@nnrp1.deja.com>
Source record: 66410
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Harry - SM0VPO wrote:

> Harry's Homebrew Homepage is lcated at:

> http://www.geocities.com/SiliconValley/3569/
> http://hem2.passagen.se/sm0vpo
> http://members.xoom.com/sm0vpo

> The site is well worth a visit. I hope you have fun - Harry SM0VPO

Great site Harry! Thanks!

Every ham should bookmark this one. Homebrewers of all stripes
will find something here of interest.

73, Hans, K0HB
Lord High Liberator of the Electric Smoke

Sent via Deja.com http://www.deja.com/
Before you buy.

3361. Re: Jones Plug for Metron amp ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-12 00:00:00 UTC
From: PS <Phil@invest.fsbusiness.co.uk>
Message-ID: <ogNEaaBES1A4EwPZ@invest.fsbusiness.co.uk>
Source record: 66411

Tnx Don,

I've had several replies and now have 3-4 possible sources.

Thanks again.

Phil
>Phil,try Fair Radio near Toledo,Oh....They have a web page,but I do not
>have it...I am sure they can help you...I tried to find their phone
>number,no luck...I am sure they can help you..Don
>
>Philip de Cadenet wrote:
>
>> I'm looking for a source of Jones plug's.
>>
>> I need one to make up a remote head unit for a Metron solid state HF
>> amp.
>>
>> I've had no joy with my search engines on the net.
>>
>> Can anyone suggest a possible source?
>>
>> Mny tnx
>>
>> Phil
>

3362. (Help) Signalcrafter Model 30 Pwr Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-12 00:00:00 UTC
From: W5IDX <W5IDX@worldnet.att.net>
Message-ID: <7tvndc$7bh$1@bgtnsc02.worldnet.att.net>
Source record: 66412
Cross-posted to: alt.ham-radio.marketplace,rec.ham-radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I Picked Up A Signalcrafter Model 30 At A Local Swapmeet Several Years Back.
Does Anybody Have Any Info On This Unit.
Does It Use An RF Coupler ? Etc.
Thanks W5IDX

--
W5IDX@worldnet.att.net

3363. Need Tube Sockets, 4 and 5 pin

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-12 00:00:00 UTC
From: JMcAulay <john@mcaulay.net>
Message-ID: <3803776b.0@news.qnet.com>
Source record: 66413

Ten 5-pins, six 4-pins. Phenolic or wafer is okay, except
at least some of the five-pins ought to be ceramic.

Please email WA6QPL@amsat.org if you can help.

Money cheerfully offered. Well...willingly, anyway.

73
John

3364. Re: need rs-232 radio interface plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-12 00:00:00 UTC
From: Ron Trepka <w8ron@stratos.net>
Message-ID: <380390B2.16593A04@stratos.net>
Source record: 66414

Go to the Maxim pages.....maxim-ic.
There you will find data sheets and application notes.

Ron

Derf wrote:

> Hello,
>
> Does anyone have plans to build a RS-232 interface for Kenwood using
> the MAX-231 chip? Or have you seen the plans somewhere and can tell me
> where to get them?
>
> thanks
> Derf
> KE4ROS@hotmail.com
>
> Sent via Deja.com http://www.deja.com/
> Share what you know. Learn what you don't.

3365. Re: Need Tube Sockets, 4 and 5 pin

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-12 00:00:00 UTC
From: "Daniel J. Nelson" <djn@goodnet.com>
Message-ID: <38039798.32BD@goodnet.com>
Source record: 66415

John:

AES in tempe AZ has tons of sockets...
--
Daniel J. Nelson
djn@goodnet.com
<:)

JMcAulay wrote:
>
> Ten 5-pins, six 4-pins. Phenolic or wafer is okay, except
> at least some of the five-pins ought to be ceramic.
>
> Please email WA6QPL@amsat.org if you can help.
>
> Money cheerfully offered. Well...willingly, anyway.
>
> 73
> John

3366. Re: Info Req: Elector Magazine

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-12 00:00:00 UTC
From: la8ak@online.no
Message-ID: <38026ac3.710486939@news.online.no>
Source record: 66416

On Mon, 11 Oct 1999 22:48:08 +0200, "Bram de Ridder"
<bramrid@cistron.nl> wrote:

>In Holland we have a magazine called 'Elektuur'. It started sometime in the
>sixties. If that is what you mean, then check out www.elektuur.nl
>Once a year they publish the 'Semiconductor guide', which contains some 100+
>electronic designs about all kinds of different gadgets. They publish at
>least in Dutch, English, German and French.
>
>Success with the hunt, Bram de Ridder
>
and the subscrition rate for the Dutch or other issues? Since it does
not matter so much if it is Dutch, English or German I would choose
the cheapest

Jan-Martin LA8AK

3367. Is YOUR Amateur Radio Site listed???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-12 00:00:00 UTC
From: sabbatai_zvi@hotmail.com
Message-ID: <38031495.3464742@news.earthlink.net>
Source record: 66417
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.antennas,rec.radio.swap

This could be the world's largest FREE Directory of Ham Radio Web Sites on-line!!

Is YOUR Amateur Radio Site listed???

Take a look - find almost ANY amateur radio site. Search by name, callsign etc.

http://www.geocities.com/CapeCanaveral/Hall/8701/hamlynx/hammisc.htm

Thousands of amazingly helpful links, organized by alphanumeric callsigns and by categories!

Add traffic to your site by getting listed if you are not already there!

3368. New! Electronic Simulation & Synthesis on Every Desktop

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-12 00:00:00 UTC
From: Kathy Goerg <kgoerg@webblabs.com>
Message-ID: <3803A86A.8823E9C7@webblabs.com>
Source record: 66418
Cross-posted to: rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,alt.ham-radio,alt.ham-radio.vhf-uhf,rec.ham-radio.misc,aus.radio.amateur.misc

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Sales & Marketing Manager

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sitewide@webblabs.com

3369. Re: Who needed empty FT-243 holders?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-12 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19991012214409704 32@zetnet.co.uk>
Source record: 66419

> A while back, I heard that someone, perhaps on the west coast,
> was looking for FT-243 crystal holders. The fellow was making
> new elements for them for the ham bands, but he needed more of
> the empty holders. I have a whole bag of them (probably 2 or 3
> dozen) that I will part with. Anyone know who that guy was???
> 73, Dean / K5DH
==========
As FT-243 holder you can also use 2 pcs banana plug socket

73 Frank GM0CSZ / KN6WH

Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland UK
e-mail : gm0csz.kn6wh@ukrs.org

3370. "Homebrew" stuff for senior/disabled hams...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-12 00:00:00 UTC
From: wn8mea <wn8mea@hotmail.com>
Message-ID: <5TPM3.8693$%62.147882@c01read02-admin.service.talkway.com>
Source record: 66420

One of the main reasons I started DWM Communications over a decade ago, was because of several disabled and senior citizen hams who approached me and asked me to build simple projects for them. Some told me they had poor eyesight or arthritis. Others told me that the nursing home or the family they were living with wouldn't allow them to use soldering irons.

So I came out with a little sideline business to sell ASSEMBLED "homebrew" products at VERY inexpensive prices. In fact, many of the devices are cheaper than most kits!

If you're interested in checking out some active antennas, antenna tuners, QRP xmitters, etc., I invite you to my new website at:

http://www.qth.com/dwm

73, Bill
WA8MEA
--
Posted via Talkway - http://www.talkway.com
Exchange ideas on practically anything (tm).

3371. ** FLEA at MIT ** Sunday October 17th Cambridge MA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-12 00:00:00 UTC
From: w1gsl@mit.edu
Message-ID: <7u0hkq$76k@senator-bedfellow.MIT.EDU>
Source record: 66421
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc,rec.radio.info,sci.electronics.misc,ne.forsale,ne.general,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Subject: ** FLEA at MIT ** Sunday August 15th Cambridge MA
Summary: Buy Sell SWAP Ham Radio Electronics Computers 9AM - 2PM

This coming Sunday ... The Seasons LAST...

*** !!!! In our Traditional GARAGE and lot !!!! ****
so come rain or shine or super heat the Flea is on !!!

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FLEA all SUMMER at MIT
Sunday, October 17th 1999
9AM-2PM

Come to the city for a great flea - plenty of free parking.

MIT's electronics and ham radio flea will take
place on the third Sunday of each month this summer,
April thru October.

There is tailgate space for over 600 sellers and
free, off-street parking for >2000 cars!

Buyers admission is $4 (you get $1 off if
you're lucky enough to have a copy of our ad)
and sellers spaces are $10.00-each at the gate.

The flea will be held at the corner of Albany and
Main streets in Cambridge; right in the Kendall
Square area from 9AM to 2PM, with sellers set-up
time starting at 7AM.

*** Attention Sellers ***
Prepaid vendors.. Season Pass or monthly,
will be admitted FIRST.
Separate lines will form prior to gate opening
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!! RAIN or SHINE !! Have no fear of rain, a covered
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MIT Radio Society (W1MX)
Harvard Wireless Club (W1AF)

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****
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PO Box 82 MIT Br Cambridge MA 02139-7082 617 258 3754
****

3372. Re: cascode rf amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-12 00:00:00 UTC
From: "Al, N2NKB"
Message-ID: <7u0q5tdic1@bgtnsc01.worldnet.att.net>
Source record: 66422

Paul wrote in message <380490AB.235020A2@bright.net>...
>I've been playing around with an old circuit and wondered if anyone
>could give me a ball park noise figure. I have no way to measure it.
>It's a 2 FET (J310) cascode (Wallman configuration). The first half is a
>neutralized common source and the last a common gate. Gain at 50 Mhz is
>35 db at 13.6 volts. This configuration was popular in the '60s. Any
>ideas?
>pmartin@bright.net

If you live near me, I would be glad to take it into work and measure
the noise figure for you. Perhaps others will offer the same if
you tell them where you are located.
Al Madison, NJ

3373. Re: Homebrew paradise

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-12 00:00:00 UTC
From: Brian Denley <bdenley@erols.com>
Message-ID: <7u0rbghfj1@autumn.news.rcn.net>
Source record: 66423
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave,uk.radio.amateur,uk.rec.radio.cb

What a terrific website!
Thanks
Brian Denley

--
"There are only two ways to live your life: One is as though nothing is a miracle. The other is as if everything is." - Albert Einstein

3374. Re: DSW kit or Ten-Tec QRP

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-12 00:00:00 UTC
From: Sam Daniel <daniel@netcom.com>
Message-ID: <380427F0.9BAFBF43@netcom.com>
Source record: 66424

Bob wrote:

>
> I am looking at buying a QRP kit I like both the Ten-Tec and the
> Small Wonder Lab DSW kit. Any comments at which kit to get would be
> great. This is my first qrp kit. Any pros and cons for the kits ?
>

On the QRP-ARCI list, the DSW is the winner, no questions asked.

It's an excellent value, relatively easy to build, and a top performer.

Sam

--
Sam Daniel -- daniel@netcom.com --
**
Windows is like playing in a closet.
Linux is like playing outdoors.

3375. Re: Dial String

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-13 00:00:00 UTC
From: Harry SM0VPO <harryvpo@hotmail.com>
Message-ID: <7u20se$hdh@newstoo.ericsson.se>
Source record: 66335

They have it in stock at Antique Electronic Supply Co. You can order it
dire&#65533;ct on-line or view their catalogue at http://www.tubesandmore.com

best regards from Harry
http://sm0vpo.8m.com

andy walton wrote in message <38048523.9786A5F2@hotmail.com>...
>Does anyone have any recommendations for replacement dial string or
>twine?
>

3376. Re: Dial String

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-13 00:00:00 UTC
From: troglodite@aol.com
Message-ID: <19991013101257.00512.00000774@ng-ch1.aol.com>
Source record: 66336

>
>Does anyone have any recommendations for replacement dial string or
>twine?
>

Yes. Go to your local sporting goods store and look for woven dacron fishing line. I use Gudebrod #518 almost universally. If you only need enough for one project, send me your address and I'll mail you some - no charge. (The normal pack is 100 yards for about $5.00, so you get enough to last for years.)

Doug Moore

3377. Re: Help with fixing computer monitor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-13 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <3804DF6C.C60B0296@bellsouth.net>
Source record: 66337

Lasse wrote:
> I just found a scrapped NEC Multisync 3FG, a great monitor when it
> works...
>
> The monitor gives excellent picture at 640x480.
> Switching to 800x600 gives either loss of sync or a dark picture that
> is half the size of normal. Tweaking sync adjustment shows that
> something happens but only way to get sync back is to switch monitor
> off/on. Picture is still small when sync is lost.

No specifics but...

my bet would be on a bad electrolytic capacitor.

Does the monitor make clicking noises when you switch resolutions?
(does it sound like there's a relay involved?) If so, I would find the
relay on the circuit board & start with capacitors located near the
relay. A capacitor checker would be VERY valuable (borrow one if you
have to) as often I've seen electrolytics lose most of their value with
no externally visible symptoms. (the first time I measured a 100uF cap
and saw 230pF on the meter, I thought I didn't know how to operate the
meter!)
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

3378. WTB: SBL-3 DBM Mini Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-13 00:00:00 UTC
From: okieman <okieman@innocent.com>
Message-ID: <Fr1N3.12895$UG5.770993@typ11.nn.bcandid.com>
Source record: 66338

I would like to buy only one or two of these.Thanks if you can tell me where to buy in small quanity.

3379. Re: Need Tube Sockets, 4 and 5 pin

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-13 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <7u2e3kvvn1@nnrp1.deja.com>
Source record: 66339

In article <3803776b.0@news.qnet.com>,
"JMcAulay" <john@mcaulay.net> wrote:
> Ten 5-pins, six 4-pins. Phenolic or wafer is okay, except
> at least some of the five-pins ought to be ceramic.
>
> Please email WA6QPL@amsat.org if you can help.
>
> Money cheerfully offered. Well...willingly, anyway.
>
> 73
> John
>
>

Enter:
http://www.apexjr.com/miscellaneous.html#Sockets
http://www.tubesandmore.com/sockets.html
http://www.surplussales.com/Tubes-Sock-Acc/TubeSktsmain.html

You will find what you want and much more!
--
Greetings,

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Before you buy.

3380. High-rate capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-13 00:00:00 UTC
From: Fidel Leon <fleon@bcg.es>
Message-ID: <7u2a5nacv1@diana.bcn.ttd.net>
Source record: 66340

Well, in order to homebrew my own high-power filters, I'm looking for
good sources of high-power capacitors.

Thanks in advance! 73,

Fidel Leon - EA3GIP
fleon@bcg.es

3381. High-rate capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-13 00:00:00 UTC
From: Fidel Leon <fleon@bcg.es>
Message-ID: <7u2adcajj1@diana.bcn.ttd.net>
Source record: 66341

Well, in order to homebrew my own high-power filters, I'm looking for
good sources of high-power capacitors.

Thanks in advance! 73,

Fidel Leon - EA3GIP
fleon@bcg.es

3382. HP 8410C/8412B/8411A For Sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-13 00:00:00 UTC
From: Del Schier <dels@optimaudio.com>
Message-ID: <3804D816.994E3990@optimaudio.com>
Source record: 66342
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.repair,misc.industry.electronics.marketplace,sci.electronics.equipment,rec.radio.swap,sci.electronics.misc

Hello all,

I have Hewlett Packard 8410C/8412B/8411A opt. 018 Vector Network Analyzer systems for sale. These are late model, in excellent condition and are functionally checked and appear to be in calibration. There are no cables or accessories but I will include part of the operating section of the 8410B manual.

I have already sold several of these and could provide references to the condition of these units from happy customers.

I am asking $650 plus shipping which is about 1/10 of what Tucker sells them for. They are tested so it is not like buying at a flea market; you don't get a current calibration sticker though.

I also have some older 8410B/8412A/8411A which would be less expensive. I also have some that have cosmetic damage but are working and I would take less for one of these. Tell me what your are interested in.

If you get back to me quickly with a verbal commitment I can throw in a 8750A storage normalizer
tested but no interface cable.

Thanks for reading this.

Del Schier
K1UHF

http://www.optimaudio.com
http://www.qsl.net/k1uhf

3383. Re: Tentec RX-320

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-13 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <3804CE26.13FE9731@teleport.com>
Source record: 66343

Software falls under copyright law, so whether or not you disassemble
it, you can't legally copy, sell, or distribute it.

Why not develop your own DSP package on your own time?

Roy Lewallen, W7EL

Joe Jesson wrote:
>
> At Dayton, I tried to convince the president and sales manager to publish
> the DSP code as open source. They politely said no, they would not publish
> the DSP source. I tried appealing to their business sense and should package
> the open source with a DSP tutorial - a new sales channel. Nope. Maybe I
> will try again and suggest I take the financial risk and mkt this as a
> seperate DSP hands-on tutorial similar to the old heathkits but integrated
> with a DSP course...
>
> Not sure if disassembly is an option as many software packages have the
> legal "do not disassemble..." clause. Ideas??
>
> Joe

3384. Re: Dial String

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-13 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <3804CEB4.84D12A@teleport.com>
Source record: 66344

You might also want to pick up a small piece of beeswax at a sewing supply store. It makes the Dacron line less slippery if that becomes a problem.

Roy Lewallen, W7EL

Troglodite wrote:
>
> >
> >Does anyone have any recommendations for replacement dial string or
> >twine?
> >
>
> Yes. Go to your local sporting goods store and look for woven dacron fishing
> line. I use Gudebrod #518 almost universally. If you only need enough for one
> project, send me your address and I'll mail you some - no charge. (The normal
> pack is 100 yards for about $5.00, so you get enough to last for years.)
>
> Doug Moore

3385. Re: Dial String

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-13 00:00:00 UTC
From: Larry Gauthier <larryg@ismi.net>
Message-ID: <3804d33e@news.ismi.net>
Source record: 66345

I've used dental floss with great success... the color and flavor does not matter ;-)

-larry
wb8bgo
Harry SM0VPO wrote in message <7u20se$hdh@newstoo.ericsson.se>...
>They have it in stock at Antique Electronic Supply Co. You can order it
>dire�ct on-line or view their catalogue at http://www.tubesandmore.com
>
>best regards from Harry
>http://sm0vpo.8m.com
>
>andy walton wrote in message <38048523.9786A5F2@hotmail.com>...
>>Does anyone have any recommendations for replacement dial string or
>>twine?
>>
>
>

3386. Re: cascode rf amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-13 00:00:00 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3804DBDE.80EF3B52@dialpoint.net>
Source record: 66346

The J310 has a noise figure of around 1.5 to 2 db in the 6 meter band depending on the device and IF it matched (mismatched may be moer like it) to the antenna. Don't recall the gain in anything but one fet in the grounded gate mode, but it is around 10 to 15 DB so your 35 for the two in the cascode circuit is probalby in the ballpark.

Not to discourage the expirmenting,but the newer gasfets are capabile of under 1 db at 6 meters and up to 432 mhz in simple circuits with gains of 20 db or more. Look at a Motorola MRF 966 gasfet and the designs inthe ARRL handbook. They are just about as cheap as two of the j310s.

Paul wrote:
>
> I've been playing around with an old circuit and wondered if anyone
> could give me a ball park noise figure. I have no way to measure it.
> It's a 2 FET (J310) cascode (Wallman configuration). The first half is a
> neutralized common source and the last a common gate. Gain at 50 Mhz is
> 35 db at 13.6 volts. This configuration was popular in the '60s. Any
> ideas?
> pmartin@bright.net

3387. Need oddball IF transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-13 00:00:00 UTC
From: Steve Robertson <robertsons@saic.com>
Message-ID: <38047507.268A6A5D@saic.com>
Source record: 66347

I am looking for 1600kc IF transformer, Miller 612-W4 or equivalent for a homebrew regenerative superhet project.

Name your price. I also like to trade. I've got lots of tubes and some old radios.

Thanks for the read!!

Steve Robertson
robertsons@saic.com

3388. wtb 8930

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-13 00:00:00 UTC
From: JCM <w9jcm@ix.netcom.com>
Message-ID: <7u2s8m$k4g@dfw-ixnews6.ix.netcom.com>
Source record: 66348

wtb 8930 tube chimmny and anode clamp

w9jcm

3389. Re: Dial String

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-13 00:00:00 UTC
From: "Al, N2NKB"
Message-ID: <7u31nd$n2p$1@bgtnsc03.worldnet.att.net>
Source record: 66349

Troglodite wrote in message
<19991013101257.00512.00000774@ng-ch1.aol.com>...
>>
>>Does anyone have any recommendations for replacement dial string or
>>twine?
>>
>
>Yes. Go to your local sporting goods store and look for woven dacron
fishing
>line.

Of course, fishing line and boat anchors go perfect together!
Oooops, wrong group. :-)
Al

3390. Re: Looking for CK722 projects/Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-13 00:00:00 UTC
From: "Hap, WA3PTG" <hhurst@delaware.infi.net>
Message-ID: <7u32o1$66o$1@nw003t.infi.net>
Source record: 66350

My personal favorite in 60s transistors that I could afford was the 2N170.
You could actually get these babies to oscillate at 1.5 Mhz.

CK722s.
I had a few of these when I was a kid. I don't miss 'em. They were noisy
and expensive compared to the cheapest device available now.
Ditto the 2N107.

When we wanted to build something that would work, we used dual triodes from
old computer modules. They were pin compatible with 12AX7 and 12AU7. They
were just about free, and worked a whole lot better than the "hobby"
transistors I could obtain.

This old guy doesn't miss the "good old days."

3391. Re: High-rate capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-13 00:00:00 UTC
From: rick@area.com
Message-ID: <7u3drv$8hr$1@vax.area.com>
Source record: 66351

In article <7u2adcajj1@diana.bcn.ttd.net>, Fidel Leon <fleon@bcg.es> wrote:
> Well, in order to homebrew my own high-power filters, I'm looking for
>good sources of high-power capacitors.
>
> Thanks in advance! 73,
>
>Fidel Leon - EA3GIP
>fleon@bcg.es

Here in the states, you can get power mica caps from RF parts, which
advertises in the ham magazines.

Rick N6RK

3392. Re: Power door locks

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-13 00:00:00 UTC
From: Woody White <woody.white@att.net>
Message-ID: <38054799.73B65C25@att.net>
Source record: 66352

Hi Eric,

Many keyless entrance devices use about 300 MHz.

Check:

ming-micro.com
MING Engineering

Distributor - Digi-Key at 1-800-344-4539
or digikey.com

73, Woody

Eric Fowler wrote:
>
> A repost from rec.radio.amateur.equip:
>
> I see people unlocking car doors from a distance ... gee, must be radio!
>
> Where can I get some?
>
> Translation : I am looking for a low cost, short range RF data channel,
> and can't seem to find the chips out on the Net. Where should I be
> looking?
>
> If you thought of buying a car, taking out the radio, and throwing the
> rest away, thanks, but someone beat you to it.
> --
> Vivez sans temps mort!
> -Situationist International

--

----------- de Woody, WB4QXE -----------

Ham Homebrew/ATV Circuits -*- Scanning Electron
Microscope Images

http://www.geocities.com/capecanaveral/3722

3393. Re: Power door locks

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-13 00:00:00 UTC
From: Will Sparks <willy@home.com>
Message-ID: <7u3hvo$s0b@journal.concentric.net>
Source record: 66353

My experience has been that most of the car remotes are RF at around 400MHz. There are chipsets for 300,400 and 900Mhz bands from quite a few vendors. RF Microdevices, Linx (www.linx.com), and a few others that I can't readily remember. Linx sells complete modules, ready for an antenna and data input/output.

Will

Eric Fowler <eric.fowler@c-cube.com> wrote in message news:38053CB9.201BDAED@c-cube.com...
> Hmmm ... but there are cheapo chips that transmit digital data in the 900 mHz range, are
> there not? I hear of sprinkler control systems and pool monitors and suchlike that
> *interfere* with radio, so I assume they are transmitting.
>
> "Christopher W. Buckley" wrote:
>
> > I think that most of the remote door devices are Infra-Red devices. At least I know
> > the ones on the jeep grand cherokee are... Not as long range as radio, but it seems
> > to work pretty good for what it is used for. You might want to look into getting an
> > extra transmitter for a remote start kit, or a power door kit, and popping it open.
> > It would cost a bit more, but you could probably produce en masse after you get the
> > numbers off of the IC's..
> >
> > On Thu, 14 Oct 1999 00:28:42 GMT , Eric spewed forth to rec.radio.amateur.homebrew:
> > :EF>This is a multi-part message in MIME format.
> > :EF>--------------E4B9C48A1F9FD1B1DCC825D5
> > :EF>Content-Type: text/plain; charset=us-ascii
> > :EF>Content-Transfer-Encoding: 7bit
> >
> > :EF>A repost from rec.radio.amateur.equip:
> >
> > :EF>I see people unlocking car doors from a distance ... gee, must be radio!
> >
> > :EF>Where can I get some?
> >
> > :EF>Translation : I am looking for a low cost, short range RF data

channel,
> > :EF>and can't seem to find the chips out on the Net. Where should I be
> > :EF>looking?
> >
> > :EF>If you thought of buying a car, taking out the radio, and throwing
the
> > :EF>rest away, thanks, but someone beat you to it.
> > :EF>--
> > :EF>Vivez sans temps mort!
> > :EF> -Situationist International
> >
> > :EF>--------------E4B9C48A1F9FD1B1DCC825D5
> > :EF>Content-Type: text/x-vcard; charset=us-ascii;
> > :EF> name="eric.fowler.vcf"
> > :EF>Content-Transfer-Encoding: 7bit
> > :EF>Content-Description: Card for Eric Fowler
> > :EF>Content-Disposition: attachment;
> > :EF> filename="eric.fowler.vcf"
> >
> > :EF>begin:vcard
> > :EF>n:Fowler;Eric
> > :EF>tel;work:(408)490-8727
> > :EF>x-mozilla-html:TRUE
> > :EF>url:www.c-cube.com
> > :EF>org:C-Cube Microsystems
> > :EF>adr:;;1778 McCarthy Blvd;Milpitas;CA;95035;usa
> > :EF>version:2.1
> > :EF>email;internet:eric.fowler@c-cube.com
> > :EF>title:Senior Software Developer
> > :EF>fn:Eric Fowler
> > :EF>end:vcard
> >
> > :EF>--------------E4B9C48A1F9FD1B1DCC825D5--
> >
> > --
> > ---- ---- ---- ---- ---- ----
> > Chris Buckley -- KC0DBY
> > Vice President / Treasurer
> > Husky Amateur Radio Club -- W8YY (906)487-1303
> > Computational Mathematics Consultant
> > MTU Math Science Department (906)487-3406
> > Electrical Engineering Undergraduate
> > Michigan Technological University
> > cwbuckle@mtu.edu @ Da House -- (906)482-8662
> > ---- ---- ---- ---- ---- ----
> >
> > Job Security:
> >
> > The ability to create a system that
> > is extremely vital to operation, and

> > at the same time is so complicated
> > that only you could hope to ever begin
> > to understand it.
>
> --
> Vivez sans temps mort!
> -Situationist International
>
>

3394. Re: Power door locks

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-13 00:00:00 UTC
From: Jeff <djep@ix.netcom.com>
Message-ID: <38055582.99052DAD@ix.netcom.com>
Source record: 66354

RFM makes some modules, 303.875 and 315 MHz are typical for this application... Thier ASH receiver is prone to blockage by signals on adjacent channels... They may have overcome that problem by now.. These are just the RF parts, you supply the encoding/decoding. Both parts run off of 3VDC.

Eric Fowler wrote:

> A repost from rec.radio.amateur.equip:
>
> I see people unlocking car doors from a distance ... gee, must be radio!
>
> Where can I get some?
>
> Translation : I am looking for a low cost, short range RF data channel,
> and can't seem to find the chips out on the Net. Where should I be
> looking?
>
> If you thought of buying a car, taking out the radio, and throwing the
> rest away, thanks, but someone beat you to it.
> --
> Vivez sans temps mort!
> -Situationist International

3395. Re: Need oddball IF transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-13 00:00:00 UTC
From: blackm00@cam.org
Message-ID: <blackm00-1310992348030001@dialup-520.hip.cam.org>
Source record: 66355

In article <38047507.268A6A5D@saic.com>, Steve Robertson
<robertsons@saic.com> wrote:

> I am looking for 1600kc IF transformer, Miller 612-W4 or equivalent for
> a homebrew regenerative superhet project.
>
> Name your price. I also like to trade. I've got lots of tubes and some
> old radios.
>
> Thanks for the read!!
>
> Steve Robertson
> robertsons@saic.com

But can't you get by with something homemade?

A toroid and a trimmer should work fine, and a toroid is self-shielding.

Or dig up an old IF transformer and put your own coil in it. Old tube
era transformers have the advantage of plenty of room, but people have
rewound 10.7MHz If transformers for other points in the HF spectrum.
The core might not be too useable that much lower. Maybe a 4.5MHz
transformer, from a TV set, might have a more adaptable core. If
you just use the IF transformer case, you could use some other coil
and fit in a trimmer capacitor to get it exactly on frequency.

Another possibility might be the oscillator coil from an AM broadcast band
radio. They must be around the right frequency. Some of them at least
have a few turn secondary winding for coupling into it. You could
pull it out of any "transistor radio".

Michael VE2BVW

3396. Re: UHF FM using Single Chip (MC13175)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-13 00:00:00 UTC
From: Bahremu <bahremu@yahoo.com>
Message-ID: <380553E3.A2B02B67@yahoo.com>
Source record: 66356

Moses Clark wrote:
> Greetings,
> I am thinking to build low power UHF radio using MC13175.
> Has anyone had a chance to evaluate this chip.
> Brian,
> UHF FM/AM SINGLE CHIP TRANSMITTER USING THE MC13175(From MOTOROLA APP NOTE)
> A Single chip, crystal controlled, AM or FM transmitter in the frequency
> range of 260 to 470 MHz for the MC13175.
> The power output is +10dbm.
> The MC13175 uses Fo=8 x Fref.

I've been looking for a single chip radio to build for a while. Please build the trasmiter and update hte newsgroup on how it worked.

Bahremu

3397. Re: Looking for CK722 projects/Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-13 00:00:00 UTC
From: xxxpjock@gte.net
Message-ID: <b2QM3.607$ul3.31711@dfiatx1-snr1.gtei.net>
Source record: 66425

Gosh, what a bunch of old guys!

Well, I used to buy CK722's in that world famous dark blue case too,
but I don't remember what they sold for in the early '60's. Seems to
me it was in the $3 range (a fortune for my budget as I recall.)

I tried to dig out the ceramic around the leads I broke off in order
to solder in a replacment. It sort of worked, sometimes, if no
further stress was put on the lead (meaning no more using it in
more than one project.)

By the way, just have to mention, I have a brand new, never been
used RCA 2N34 in the paper bag with the built in snap closer.
I never used a 2N34, but came across this one about 30 years ago
in some surplus/junk bag buy. Might need it someday...

73,

Phil (probably older than you) N4GWV

In article <19990915223832.02692.00000854@ng-cd1.aol.com>,
wardwardj@aol.com says...
>
>Hello,
>
>I've been doing research on the classic CK722 germanium transistor fro
>m the
>1950's/60's. You can find details at:
>
>http://www.geocities.com/~ck722transistor/
>
>i'm always looking for CK722's to add to the collection. Also, if you
> have any
>homebrew projects that were built with the CK722, I'd like to know abo
>ut it.
>
>Thanks
>
>Jack W
>wardwardj@aol.com

3398. cascode rf amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-13 00:00:00 UTC
From: Paul <pmartin@bright.net>
Message-ID: <380490AB.235020A2@bright.net>
Source record: 66426

I've been playing around with an old circuit and wondered if anyone could give me a ball park noise figure. I have no way to measure it. It's a 2 FET (J310) cascode (Wallman configuration). The first half is a neutralized common source and the last a common gate. Gain at 50 Mhz is 35 db at 13.6 volts. This configuration was popular in the '60s. Any ideas?
pmartin@bright.net

3399. ** FLEA at MIT ** Sunday October 17th Cambridge MA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-13 00:00:00 UTC
From: w1gsl@mit.edu
Message-ID: <7u14e3$ijj@senator-bedfellow.MIT.EDU>
Source record: 66427
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc,rec.radio.info,sci.electronics.misc,ne.forsale,ne.general,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Subject: ** FLEA at MIT ** Sunday October 17th Cambridge MA
Summary: Buy Sell SWAP Ham Radio Electronics Computers 9AM - 2PM

This coming Sunday ... The Seasons LAST....

*** !!!! In our Traditional GARAGE and lot !!!! ****
so come rain or shine or super heat the Flea is on !!!

********* $1 buyers discount with hardcopy of this notice ********

COMPUTERS - ELECTRONICS - HAM RADIO - COMPUTERS - ELECTRONICS - HAM RADIO

FLEA all SUMMER at MIT
Sunday, October 17th 1999
9AM-2PM

Come to the city for a great flea - plenty of free parking.

MIT's electronics and ham radio flea will take
place on the third Sunday of each month this summer,
April thru October.

There is tailgate space for over 600 sellers and
free, off-street parking for >2000 cars!

Buyers admission is $4 (you get $1 off if
you're lucky enough to have a copy of our ad)
and sellers spaces are $10.00-each at the gate.

The flea will be held at the corner of Albany and
Main streets in Cambridge; right in the Kendall
Square area from 9AM to 2PM, with sellers set-up
time starting at 7AM.

*** Attention Sellers ***
Prepaid vendors.. Season Pass or monthly,
will be admitted FIRST.
Separate lines will form prior to gate opening
for prepaid and nonprepaid vendors

!! RAIN or SHINE !! Have no fear of rain, a covered
well illuminated tailgate area is available for all
sellers (6'8" clearance).

Talk-in: 146.52 and W1XM/R-449.725/444.725 (PL 114.8/2A).

Sponsors: MIT Electronics Research Society
MIT UHF Repeater Association (W1XM)
MIT Radio Society (W1MX)
Harvard Wireless Club (W1AF)

For more info / advanced reservations 617 253 3776

********** $1 buyers discount with hard copy of this notice ************

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Name..... Call.....

Address..... Phone.....

City..... State..... Zip.....

E-Mail .....

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___ Aug ____ Sept ___ Oct

Total Monthly spaces @ $9/ Space = $ ..... CK # .....

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For .....

By ..... Stamp

Enclose SASE for return by mail.

****
Steve Finberg W1GSL w1gsl@mit.edu
PO Box 82 MIT Br Cambridge MA 02139-7082 617 258 3754
****

3400. Help with fixing computer monitor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-13 00:00:00 UTC
From: lasse.moell@swipnet.se
Message-ID: <380439af.1178425@news.lin.foa.se>
Source record: 66428

HI
I just found a scrapped NEC Multisync 3FG, a great monitor when it works...

The monitor gives excellent picture at 640x480.
Switching to 800x600 gives either loss of sync or a dark picture that is half the size of normal. Tweaking sync adjustment shows that something happens but only way to get sync back is to switch monitor off/on. Picture is still small when sync is lost.

If anyone have an idea what to look for please let me know.... have no schematics

/Lasse SM5GLC

3401. Re: Wanted: SPRAT magazines.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-13 00:00:00 UTC
From: Sam Daniel <daniel@netcom.com>
Message-ID: <38042F46.8D77A293@netcom.com>
Source record: 66429

Duncan Walters wrote:

> Wanted: SPRAT (the journal of the G-QRP-Club), particularly issues 1 to
> 40 inclusive.
>

You can get them in the US at http://www.bright.net/~kanga/kanga/
Cost comes out to about $1 an issue or so.

Sam

--
Sam Daniel -- daniel@netcom.com --
**
Windows is like playing in a closet.
Linux is like playing outdoors.

3402. Re: Q: Airport Security and homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-13 00:00:00 UTC
From: "Robert M. Ganter" <hb9dnn@gmx.net>
Message-ID: <7u1hu9$93v$1@ascomax.hasler.ascom.ch>
Source record: 66430

On Tue, 12 Oct 1999 10:09:37 GMT, spam@nospam.com (Spammer) wrote:

<< lots of FUN (?!?) stuff deleted >>

Two years ago I took my Kenwood TS711 (2m allmode station) with me to work /MM on a sailing trip.
In Zurich they simply used a GC to search for nitrogene, a painless two minute procedure.
On the way back we checked in in Athens, Greece. The whole thing was just a big joke. I put my rig on the X-ray machine and observed the security guard who dozed behind his screen. When the rig came across he suddenly woke up, turned the machine to maximum to get through all the metal (there's quite a lot in the TS711...) and -- continued dozing. I did not have to prove it worked, nothing.
Right after that I could get a look at the screenshot he took from the rig: the mains transformer was just a black donut, all the rest was more or less transparent.
I am shure, that it would be an easy job to replace the iron core with an iron ring filled with explosives, some work, ok, but nobody would notice later on the airport, except they search for nitorgene, as in Zurich. The guy in Athens simply did not care and *this* is IMO the main problem. If security is not taken serious (and this also means well trained and well paid staff), all that security stuff is worthless.
IMHO the only secure way is to use the (still rather expensive) GCs I have seen in Zurich (and Frankfurt, LAX). This would also make it an easy job to carry homebrew equipment with You. If they don't find nitrogene, there is no explosive in it and they should be happy.

73

Robert

--

Robert M. Ganter HB9DNN

3403. Re: Tentec RX-320

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-13 00:00:00 UTC
From: Joe Jesson <jjesson@ais.net>
Message-ID: <5IZM3.1$iv1.95@news.ais.net>
Source record: 66431

At Dayton, I tried to convince the president and sales manager to publish the DSP code as open source. They politely said no, they would not publish the DSP source. I tried appealing to their business sense and should package the open source with a DSP tutorial - a new sales channel. Nope. Maybe I will try again and suggest I take the financial risk and mkt this as a seperate DSP hands-on tutorial similar to the old heathkits but integrated with a DSP course...

Not sure if disassembly is an option as many software packages have the legal "do not disassemble..." clause. Ideas??

Joe

3404. Re: Wanted: SPRAT magazines.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-13 00:00:00 UTC
From: "Robert M. Ganter" <hb9dnn@gmx.net>
Message-ID: <7u1tmofic1@ascomax.hasler.ascom.ch>
Source record: 66432

On Wed, 13 Oct 1999 00:05:42 -0700, Sam Daniel <daniel@netcom.com>
wrote:

> Duncan Walters wrote:

> > Wanted: SPRAT (the journal of the G-QRP-Club), particularly issues 1 to
> > 40 inclusive.
> >

> You can get them in the US at http://www.bright.net/~kanga/kanga/
> Cost comes out to about $1 an issue or so.

or You can order a CD-ROM from www.funkamateur.de with all issues from
1..100. I haven't received it yet and can't say anything about the
quality of the scanned documents, though. But it looks like a good
idea.

Normally signatures should not be quoted, I know. But the following
sneeks up quite often and might become a major problem, if nobody
complains. Don't take it personal, but as food for thoughts for
everybody in that newsgroup.

> --
> Sam Daniel -- daniel@netcom.com --
> **
> Windows is like playing in a closet.
> Linux is like playing outdoors.

Hmm, I don't want to be impertinent, but why do You follow the bad
ideas of Windoze software, if You prefer a *real (TM)* OS?

1. Not a severe problem, but: Your signature is not separated
correctly. It should be "-- ", i.e. the space is missing. This is the
only correct signature delimiter and every newsreader should be able
to process it. Surprisingly my newsreader recognizes it as a
signature, although this is not correct.

2.
> <!doctype html public "-//w3c//dtd html 4.0 transitional//en">
Maybe I am too paranoid about that, but You just added 595 bytes of
completely redundant data. This means, adding the same information a
second time and adding completely useless gimmicks like colour or font
information to a Usenet posting is simply a waste of bandwidth.
Although Microsoft et al. want to redefine the world again and again,
this is not, what Usenet is made for. Apart from binary newsgroups,
discussion is done using plain ASCII (and this for good reason!). So
please switch this off. You won't make a lot of people happy with HTML

in Usenet.

3. Again, don't take it too personal, I have just seen this bad habit sneeking up more and more in the last weeks and thought it might be time to complain now.

73

Robert

--

Robert M. Ganter HB9DNN

3405. Re: cascode rf amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-13 00:00:00 UTC
From: Tom McDermott <Tom.Mcdermott@usa.alcatel.com>
Message-ID: <3804800A.E4290FC8@usa.alcatel.com>
Source record: 66433

The cascode amplifier was originally devised to help extend the frequency response of the input stage. The Miller-effect dramatically decreases the bandwidth of an amplifier due to multiplied gate-drain capacitance. (or grid-plate, or base-collector capacitance). By loading down the grounded source gain stage with a low-moderate impedance (the common-gate stage) the voltage swing on the input stage is reduced, and the Miller-effect
is significantly reduced. The output stage then transforms that impedance up to a higher value adding voltage gain. This can be done such that the DC supply current is shared in series between the two stages (to minimize power dissipation).

At 6 meters, the J310 has plenty of bandwidth when arranged in most amplifier topologies so that the Cascode circuit is providing no practical benefit due to bandwidth increase. Gate inductance can critically limit bandwidth in common-gate amplifiers. The U310 is the same die as the J310, but with a metal package, it's gate lead is bonded to the metal

can. This allows soldering the can directly to ground for common-gate configurations. It sounds like you have plenty of gain, so your circuit configuration must be OK.

The input stage must be designed and matched to the J310's lowest-noise input load reflection point, which is not the same as the maximum gain point. The J310 should have fairly low noise in the 6 meter band. It's necessary to design the input matching circuit for best noise figure, and the spec sheet for low-noise devices usually includes noise contours indicating the NF versus the operating parameters of the device. I am streching back 20 years here, so take the following with some haze and lack of accuracy, but I recall the U310 in the common gate configuration having lowest noise when the input was matched to 75 ohms, and I think it was less than 2 dB. In the gounded-source configuration this

will all be different, of course. You need to get the datasheet for the J310
to determine the best input matching configuration.

A quick-and-dirty way to test noise is to use a 50-ohm resistor at room temperature as a noise source. If connecting it causes the noise to increase,
then you are in the ballpark of 3 dB or better noise figure.

-- Tom, N5EG

Paul wrote:

> I've been playing around with an old circuit and wondered if anyone
> could give me a ball park noise figure. I have no way to measure it.
> It's a 2 FET (J310) cascode (Wallman configuration). The first half is a
> neutralized common source and the last a common gate. Gain at 50 Mhz is
> 35 db at 13.6 volts. This configuration was popular in the '60s. Any
> ideas?
> pmartin@bright.net

--

Tom McDermott
Tom.Mcdermott@usa.alcatel.com

3406. Dial String

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-13 00:00:00 UTC
From: andy walton <aswalton@hotmail.com>
Message-ID: <38048523.9786A5F2@hotmail.com>
Source record: 66434

Does anyone have any recommendations for replacement dial string or twine?

3407. Power door locks

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-14 00:00:00 UTC
From: Eric Fowler <eric.fowler@c-cube.com>
Message-ID: <380523FE.5143543F@c-cube.com>
Source record: 66357
Body handling: Binary attachment payload not displayed: eric.fowler.vcf

A repost from rec.radio.amateur.equip:

I see people unlocking car doors from a distance ... gee, must be radio!

Where can I get some?

Translation : I am looking for a low cost, short range RF data channel,
and can't seem to find the chips out on the Net. Where should I be
looking?

If you thought of buying a car, taking out the radio, and throwing the
rest away, thanks, but someone beat you to it.
--
Vivez sans temps mort!
-Situationist International

[One or more binary attachments are retained only in the source text.]

3408. Re: Power door locks

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-14 00:00:00 UTC
From: "Christopher W. Buckley" <cwbuckle@mtu.edu>
Message-ID: <7u396nldo1@campus3.mtu.edu>
Source record: 66358

I think that most of the remote door devices are Infra-Red devices. At least I know the ones on the jeep grand cherokee are... Not as long range as radio, but it seems to work pretty good for what it is used for. You might want to look into getting an extra transmitter for a remote start kit, or a power door kit, and popping it open. It would cost a bit more, but you could probably produce en masse after you get the numbers off of the IC's..

On Thu, 14 Oct 1999 00:28:42 GMT , Eric spewed forth to rec.radio.amateur.homebrew:
:EF>This is a multi-part message in MIME format.
:EF>--------------E4B9C48A1F9FD1B1DCC825D5
:EF>Content-Type: text/plain; charset=us-ascii
:EF>Content-Transfer-Encoding: 7bit

:EF>A repost from rec.radio.amateur.equip:

:EF>I see people unlocking car doors from a distance ... gee, must be radio!

:EF>Where can I get some?

:EF>Translation : I am looking for a low cost, short range RF data channel,
:EF>and can't seem to find the chips out on the Net. Where should I be
:EF>looking?

:EF>If you thought of buying a car, taking out the radio, and throwing the
:EF>rest away, thanks, but someone beat you to it.
:EF>--
:EF>Vivez sans temps mort!
:EF> -Situationist International

:EF>--------------E4B9C48A1F9FD1B1DCC825D5
:EF>Content-Type: text/x-vcard; charset=us-ascii;
:EF> name="eric.fowler.vcf"
:EF>Content-Transfer-Encoding: 7bit
:EF>Content-Description: Card for Eric Fowler
:EF>Content-Disposition: attachment;
:EF> filename="eric.fowler.vcf"

:EF>begin:vcard
:EF>n:Fowler;Eric
:EF>tel;work:(408)490-8727
:EF>x-mozilla-html:TRUE
:EF>url:www.c-cube.com
:EF>org:C-Cube Microsystems
:EF>adr:;;1778 McCarthy Blvd;Milpitas;CA;95035;usa
:EF>version:2.1
:EF>email;internet:eric.fowler@c-cube.com
:EF>title:Senior Software Developer

:EF>fn:Eric Fowler
:EF>end:vcard

:EF>--------------E4B9C48A1F9FD1B1DCC825D5--

--
---- ---- ---- ---- ---- ----
Chris Buckley -- KC0DBY
Vice President / Treasurer
Husky Amateur Radio Club -- W8YY (906)487-1303
Computational Mathematics Consultant
MTU Math Science Department (906)487-3406
Electrical Engineering Undergraduate
Michigan Technological University
cwbuckle@mtu.edu @ Da House -- (906)482-8662
---- ---- ---- ---- ---- ----

Job Security:

The ability to create a system that
is extremely vital to operation, and
at the same time is so complicated
that only you could hope to ever begin
to understand it.

3409. Re: Power door locks

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-14 00:00:00 UTC
From: Eric Fowler <eric.fowler@c-cube.com>
Message-ID: <38053CB9.201BDAED@c-cube.com>
Source record: 66359
Body handling: Binary attachment payload not displayed: eric.fowler.vcf

Hmmm ... but there are cheapo chips that transmit digital data in the 900 mHz range, are there not? I hear of sprinkler control systems and pool monitors and suchlike that *interfere* with radio, so I assume they are transmitting.

"Christopher W. Buckley" wrote:

> I think that most of the remote door devices are Infra-Red devices. At least I know
> the ones on the jeep grand cherokee are... Not as long range as radio, but it seems
> to work pretty good for what it is used for. You might want to look into getting an
> extra transmitter for a remote start kit, or a power door kit, and popping it open.
> It would cost a bit more, but you could probably produce en masse after you get the
> numbers off of the IC's..
>
> On Thu, 14 Oct 1999 00:28:42 GMT , Eric spewed forth to rec.radio.amateur.homebrew:
> :EF>This is a multi-part message in MIME format.
> :EF>--------------E4B9C48A1F9FD1B1DCC825D5
> :EF>Content-Type: text/plain; charset=us-ascii
> :EF>Content-Transfer-Encoding: 7bit
>
> :EF>A repost from rec.radio.amateur.equip:
>
> :EF>I see people unlocking car doors from a distance ... gee, must be radio!
>
> :EF>Where can I get some?
>
> :EF>Translation : I am looking for a low cost, short range RF data channel,
> :EF>and can't seem to find the chips out on the Net. Where should I be
> :EF>looking?
>
> :EF>If you thought of buying a car, taking out the radio, and throwing the
> :EF>rest away, thanks, but someone beat you to it.
> :EF>--
> :EF>Vivez sans temps mort!
> :EF> -Situationist International
>
> :EF>--------------E4B9C48A1F9FD1B1DCC825D5
> :EF>Content-Type: text/x-vcard; charset=us-ascii;
> :EF> name="eric.fowler.vcf"
> :EF>Content-Transfer-Encoding: 7bit
> :EF>Content-Description: Card for Eric Fowler
> :EF>Content-Disposition: attachment;
> :EF> filename="eric.fowler.vcf"
>
> :EF>begin:vcard

> :EF>n:Fowler;Eric
> :EF>tel;work:(408)490-8727
> :EF>x-mozilla-html:TRUE
> :EF>url:www.c-cube.com
> :EF>org:C-Cube Microsystems
> :EF>adr:;;1778 McCarthy Blvd;Milpitas;CA;95035;usa
> :EF>version:2.1
> :EF>email;internet:eric.fowler@c-cube.com
> :EF>title:Senior Software Developer
> :EF>fn:Eric Fowler
> :EF>end:vcard
>
> :EF>--------------E4B9C48A1F9FD1B1DCC825D5--
>
> --
> ---- ---- ---- ---- ---- ----
> Chris Buckley -- KC0DBY
> Vice President / Treasurer
> Husky Amateur Radio Club -- W8YY (906)487-1303
> Computational Mathematics Consultant
> MTU Math Science Department (906)487-3406
> Electrical Engineering Undergraduate
> Michigan Technological University
> cwbuckle@mtu.edu @ Da House -- (906)482-8662
> ---- ---- ---- ---- ---- ----
>
> Job Security:
>
> The ability to create a system that
> is extremely vital to operation, and
> at the same time is so complicated
> that only you could hope to ever begin
> to understand it.

--
Vivez sans temps mort!
-Situationist International

[One or more binary attachments are retained only in the source text.]

3410. hi Steve

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-14 00:00:00 UTC
From: john hurst <hurstjsj@gte.net>
Message-ID: <38055385.11F53D81@gte.net>
Source record: 66360

Steve! How did you miss this?

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=177179616

BTW I found a bunch of new 1.2 V Nickel Metal Hydride rechargable cells that they were chucking out at work (they were in for welding evaluation). They are "4/5A" size, 80% as long as an A cell but a little bigger in dia. Can you use any?

3411. SERIOUS THREAT TO HAM RADIO -- READ!!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-14 00:00:00 UTC
From: Seeking Wisdom <cliffkot@interaccess.com>
Message-ID: <s0ap4j85hu237@corp.supernews.com>
Source record: 66361

I just heard on the HCJB Ham Radio program that a new home computer networking technology that operates 3-30 mHz has been approved and that manufacturers expect 75% market saturation within 3 years. It will obliterate the ENTIRE HF spectrum with noise!

Also the telephone companies plan to send the same system down the telephone lines so that they will be able to send video to subscribers.

Cliff

WA9YXG

3412. Storage scan converter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-14 00:00:00 UTC
From: craiggib@deathtojunkmail.icon.co.za
Message-ID: <3805c5c5.9404086@news.icon.co.za>
Source record: 66362

Hi all

I got a copy of the digital scan converter for Meteosat images article (VHF communications 1/83) from a friend and it is exactly what I need. I know that a PC can do it through a sound card etc etc but I want a dedicated box that just sits on the shelf and receives. I was wondering though, has anyone seen anything more up to date? I see some shortcuts were taken (eg. lower resolution) due to memory prices etc etc but memory these days is a lot cheaper and have far more capacity.

While I am about it, does anyone know where I can get detailed HRPT info? I found some sites with decoder schematics using FPGA's, but I am the type of person who wants to know whats "inside" :)

Kind Regards
Craig Gibson
ZR6CG

3413. Ham Radio Swap

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-14 00:00:00 UTC
From: "Danny (ko6oy) OR Linda (ad6lt)" <ko6oy@jetlink.net>
Message-ID: <3805CD2A.94FED967@jetlink.net>
Source record: 66363

Ham Radio Swap !!!
Buy, Sell, Trade & Wants......
All Personal Ham Radio Related Ads Posted FREE !!

http://www.jetlink.net/~ko6oy/swapage4.htm

Hi, if you haven't been here in a while, Stop back by for a visit.....
We have lots of new updates and an easier loading page.

73 Danny ko6oy

3414. Re: Power door locks

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-14 00:00:00 UTC
From: "Laszlo I. Morocz" <kf4pv@SPAMMENOTlmorocz.com>
Message-ID: <5okN3.17911$WO4.17143@jump.innerx.net>
Source record: 66364

Ming makes some units that I've used. They're 300 MHz with a superregenerative receiver. They also include a digital encoding/decoding system. There's several form factors -a fixed receiver board, a fixed transmitter board and a key fob transmitter. The fixed boards have the capacity to have an external antenna, while the fob uses a PC trace. The fixed units have DIP switch programmable IDs, while the fob requires trace cutting to set its ID.

As to how well they work, the documentation claimed a reliable range of 10 ft for the fob/receiver combination. By putting a tuned, matched groundplane antenna (5 pieces of coat hanger wire) 10 feet up in my wooden garage, I was able to get the key fob unit to work reliably from 128 ft open air, 60 ft with the keys in the ignition. 3-element yagis on both the transmitter and receiver gave me a very reliable 1/4 mile (this was a remote light switch to turn off the neighbor's security light when I was using my telescope).

I bought mine from Marlin P. Jones (http://www.mpja.com). The downside is that the Ming units do not have FCC approval for commercial use.

73 de KF4PV/3 Laszlo

--
To reply, remove the text SPAMMENOT from the e-mail address.
Eric Fowler wrote in message <380523FE.5143543F@c-cube.com>...
>A repost from rec.radio.amateur.equip:
>
>I see people unlocking car doors from a distance ... gee, must be radio!
>
>Where can I get some?
>
>Translation : I am looking for a low cost, short range RF data channel,
>and can't seem to find the chips out on the Net. Where should I be
>looking?
>
>If you thought of buying a car, taking out the radio, and throwing the
>rest away, thanks, but someone beat you to it.
>--
>Vivez sans temps mort!
> -Situationist International
>
>

3415. Cirkit still in buisness??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-14 00:00:00 UTC
From: lasse.moell@swipnet.se
Message-ID: <3805e398.22440039@news.lin.foa.se>
Source record: 66365

Tried to phone and fax Cirkit UK but no answer....
The web-site seems to be outdated.

Anyone with information on the current status??

/Lasse SM5GLC

3416. FET switches

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-14 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <3805DD73.41C6@eece.maine.edu>
Source record: 66366

I'm thinking of doing some homebrew in the future (or I wouldn't be writing here now would I?), maybe a bandswitched design, something to fool around with. Anyhow, could I use FET switches to switch RF signals? I think the CD4000 series of chips have a few chips where I could wire up a voltage controlled switch (like what they use for switched capacitor designs). Is this feasible, or is the RF signal through the FETS going to be badly attenuated/distorted?

I suppose I could model it in SPICE first, which leads to a second question, I suppose. I have RedHat 5.0 (or 5.2, I forget), which has some version of spice. It's not the same one as I use at school, which leads to problems--I can't get it to work at home, and there is no documentation! Anybody have an idea on how to get spice to read in a netlist? [Here at school I use spice -b <netlist.spc> > out.out to run sims; at home the computer does not recognize -b and just sits there.]

Thanks.
--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

3417. Re: Power door locks

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-14 00:00:00 UTC
From: Lyle Koehler <lyle@mlecmn.net>
Message-ID: <3805E733.A726B23B@mlecmn.net>
Source record: 66367

Eric Fowler wrote:
>
> A repost from rec.radio.amateur.equip:
>
> I see people unlocking car doors from a distance ... gee, must be radio!
>
> Where can I get some?
>
> Translation : I am looking for a low cost, short range RF data channel,
> and can't seem to find the chips out on the Net. Where should I be
> looking?
>

Try page 70 of the 1999 RadioShack.com (formerly TechAmerica) catalog.
They have UHF transmitter and receiver modules for under 10 bucks each.
Unfortunately, they operate at 433.92 MHz, which might make you
unpopular with 70 cm enthusiasts in your area.

--
Lyle, K0LR

http://www.computerpro.com/~lyle

3418. Re: FET switches

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-14 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7u4v9cqga1@nnrp1.deja.com>
Source record: 66368

In article <3805DD73.41C6@eece.maine.edu>,
Shawn Upton <supton@eece.maine.edu> wrote:

> I'm thinking of doing some homebrew in the future (or I wouldn't be
> writing here now would I?), maybe a bandswitched design, something to
> fool around with. Anyhow, could I use FET switches to switch RF
> signals? I think the CD4000 series of chips have a few chips where I
> could wire up a voltage controlled switch (like what they use for
> switched capacitor designs). Is this feasible, or is the RF signal
> through the FETS going to be badly attenuated/distorted?
> (snip...)

Yes. There are published designs that do this, like the Norcal QRP
Club's 38 Special.

These switches are fast enough that they make nice mixers.
Both at AF (see S53MV's zero-IF designs, for example), and at
RF. I've built radios that use a 74HC4066 as a switching
mixer, and they work very nicely. The faster bus switches
(e.g. FST3125) work even better.
--
Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte
Satellite: VA3SFL on AO-16, UO-22, KO-23, KO-25

Sent via Deja.com http://www.deja.com/
Before you buy.

3419. FA: Eimac 3CX-2500F3 Triode

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-14 00:00:00 UTC
From: wb9gkz@aol.com
Message-ID: <19991014111019.15014.00000034@ng-fj1.aol.com>
Source record: 66369

On eBay.....item # 177776763

or search for 3CX-2500F3 and it will pop up.

Big power triode, great for experimenters, like-new, guarranteed 10-day satisfaction for full output. Needs no socket, has pig-tail leads for filament and grid.

Pat WB9GKZ

3420. ISO IFR 1000 Service Manual for Low Serial number Unit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-14 00:00:00 UTC
From: "Donald E. Smith" <desmith@innercite.com>
Message-ID: <3805FB3F.CF8963A4@innercite.com>
Source record: 66370
Cross-posted to:
rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.misc,rec.radio.swap,rec.radio.amateur.homebrew

Does anybody out there have a Service Manual for an IFR 1000 Service Monitor with a serial number lower than 200 or so. I have an original one that I purchased but it is from a unit with a high number and many of the parts are different. Will gladly trade or will purchase the older unit manual. Will also be happy with copies of the different areas.
Please let me know if you can help via E-Mail. Thanks and 73's Don KB6GQA

3421. Re: Looking for CK722 projects/Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-14 00:00:00 UTC
From: Jonesy <jonz@rmi.nospam.net>
Message-ID: <DenN3.15$nE1.720@den-news1.rmi.net>
Source record: 66371

Hap, WA3PTG <hhurst@delaware.infi.net> wrote:

> CK722s.
> I had a few of these when I was a kid. I don't miss 'em. They were noisy
> and expensive compared to the cheapest device available now.
> Ditto the 2N107.

I haven't seen anyone mention the CK768.
In the 50's, as a Jr. High School geek, I built a 3 or 4 xistor
radio using the CK768 for the RF amp, a 1N34A for the detector,
and 2 or 3 CK722's for the AF amp. I built it in a plastic,
see-through, compartmented box -- and I still remember the
"GEE, WOW - but why would anybody want one?" reactions from
many of my peers...

Jonesy W3DHJ
--
Marvin L. Jones jonz<AT>rmi.net
Gunnison, Colorado
78 days to go until the Year 2000 -- So what!
444 days to go until the 3rd Millennium of the C.E.

3422. Minitor tuning help.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-14 00:00:00 UTC
From: Randy/Dee/Robin <dc@citynet.net>
Message-ID: <38061243_6@news5.newsfeeds.com>
Source record: 66372
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

Anyone have instructions/schematics for re-crystalling a Minitor pager? Just looking for info on tuning it up and location of adjustments.
thanks,
Randy

----------== Posted via Newsfeeds.Com, Uncensored Usenet News ==----------
http://www.newsfeeds.com The Largest Usenet Servers in the World!
------== Over 73,000 Newsgroups - Including Dedicated Binaries Servers ==-----

3423. NiCads

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-14 00:00:00 UTC
From: drmarc@wwa.com
Message-ID: <oMoN3.2378$Jd2.5961@ord-read.news.verio.net>
Source record: 66373

I seem to remember a couple of years ago I read that modern Nicads do not have the memory effect problem.

My questions is:

I have a 15 year old Kenwood HT TR 2500 and got a brand new battery for it three years ago. Would that battery have the new technology of nicads if there is a new nicad technology?

Marc Schneider, Psy.D.
e-mail to: <drmarc@wwa.com>
(call sign: W4NVY)

3424. Re: FET switches

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-14 00:00:00 UTC
From: "Robert M. Ganter" <hb9dnn@gmx.net>
Message-ID: <7u57jg$7vd$1@ascomax.hasler.ascom.ch>
Source record: 66374

On Thu, 14 Oct 1999 09:41:07 -0400, Shawn Upton
<supton@eece.maine.edu> wrote:

> I'm thinking of doing some homebrew in the future (or I wouldn't be
> writing here now would I?), maybe a bandswitched design, something to
> fool around with. Anyhow, could I use FET switches to switch RF
> signals? I think the CD4000 series of chips have a few chips where I
> could wire up a voltage controlled switch (like what they use for
> switched capacitor designs). Is this feasible, or is the RF signal
> through the FETS going to be badly attenuated/distorted?

The 4000 series is not fast enough. There are plenty of CMOS switches
around, however, which can switch RF signals. Have a look e.g. at
Maxim (www.maxim-ic.com). Another fine project is the Tayloe mixer,
which showed up some time ago. Dan Tayloe used a very fast bus switch
to build a quadrature down converter.
If You can live with lower frequencies, You might try the 74HC series.

73/72

Robert
--

Robert M. Ganter HB9DNN

3425. Weather radio "cube" on 2 meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-14 00:00:00 UTC
From: douglas931@aol.comnospam
Message-ID: <19991014172541.15174.00000077@ng-bj1.aol.com>
Source record: 66375

Anyone have any info on this oldy project? I know, why ruin a perfectly good weather radio. Or perhaps someone can recommend a very cheap 2M receiver project. TIA

3426. John Brewer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-14 00:00:00 UTC
From: james fisher <k4gf@worldnet.att.net>
Message-ID: <7u5ll6$hn2$1@bgtnsc02.worldnet.att.net>
Source record: 66376

The other day I was browsing and found a really nice one or two page essay by one John Brewer. It contained a bit of nostalgia about radio since the early days. I thought it was a John Brewer here in Florida, but not so, and I cannot find the URL again. Anyone help? Thanks, k4gf@worldnet.att.net

3427. Re: Weather radio "cube" on 2 meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-14 00:00:00 UTC
From: blackm00@cam.org
Message-ID: <blackm00-1410992257550001@dialup-645.hip.cam.org>
Source record: 66377

In article <19991014221020.07085.00000188@ng-ce1.aol.com>, wb4lnm@aol.com (WB4LNM) wrote:

> >Anyone have any info on this oldy project? I know, why ruin a perfectly good
> >weather radio. Or perhaps someone can recommend a very cheap 2M receiver
> >project. TIA
>
> Yes. This modification was covered years ago in a QST article. Check the ARRL
> web site for a listing.
>
> John...
> John H. Klingelhoeffer
> WB4LNMxx@aol.com (remove xx for real address)

Are we talking about the Weathercube from thirty years ago? If so, there was a modification for it in QST in 1971, April, May or June. It was part of an article about cheap methods for receiving 2M FM, more an idea article than real specifics.

A few years later, I bought a portable Weather radio from Radio Shack, intending to convert it to 2Meters. It was varactor tuned, and it was easy to get it onto 2Meters, though I can't remember whether I rewound the coil(s) or padded them down. It did not work very well.

The circuitry explained it. I assume the original Weathercube had a similar circuit. I think there was no RF amplifier, and the IF strip was at 10.7MHz and looking nearly identical to what was in an FM broadcast radio of the time. Perhaps the transfomrers were tuned up so it was somewhat narrrower, but there was no ceramic filter for good selectivity, and the limiter was feeble or non-existent.

Maybe Radio Shack had more recent, and better Weathercubes, and the above is irrelevant. I did pick up some hand held CB sets at a hamfest (for a dollar each, I should have bought them all)a few years ago, and they had built in reception of the Weather Service transmissions. But the Weather section wasn't much better than that old RS Weather radio. It was crystal controlled, but the IF was oddball because I sure couldn't figure out a combination of that crystal that would give a 10.7MHz IF. The IF strip was just IF transformers and discret transistors. It sure wasn't anything special.

I am left curious about the present-day Weather radios at Radio Shack. It would be nice to find that they are in fact double conversion receivers with ceramic filters at 10.7MHz and 455KHz, as seen in a lot of consumer equipment nowadays. That would make for a decent receiver, and would

require only a new crystal and some readjustment of the front end tuning circuits. But I'm not prepared to spend the money on such a radio just to see if it uses a good design.

Michael VE2BVW

3428. Re: Weather radio "cube" on 2 meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-14 00:00:00 UTC
From: blackm00@cam.org
Message-ID: <blackm00-14109923145100001@dialup-645.hip.cam.org>
Source record: 66378

In article <3809b8ab.268160602@news.squonk.net>, noone@nowhere.com wrote:

> A long time ago, I built a single channel, crystal
> based, single conversion 27 MHz AM receiver w/
> ceramic filter. Was cheap and worked pretty well.
>
>
> Seems like there should be plans somewhere for
> something similar in VHF. It would be a nice
> project for somebody that just wanted to listen to
> the local repeater.
>
> Of course, picking up an old bearcat at a hamfest
> could be cheaper & simpler, but what's the fun in
> that?
>
It does seem unfortunate that this sort of thing is no longer commonly seen in the magazines and handbooks. Like a lot of things, it's easier to find information when a topic is new, and then later when it becomes common it gets covered in less detail.

Of course, single frequency FM receivers in the 2Meter range are relatively common. I was at a garage sale a few years ago, and the guy had boxes of old pagers for a dollar each. I assumed the were superregenerative, and bought only two. It was awful when I got home and opened them up to find what must be decent receivers with crystal filters in them. The real trick would have been figuring out how to bypass the tone decoding, and I couldn't be bothered with those.

The 49MHz superhet walkie talkies have a nice dual conversion IF strip in them complete with ceramic filters. I suppose one could muck with the front end to move it to 2Meters, but I think the easiest thing would be to bypass the front end, and build your own. Something of that complexity were common in the old days, in the form of 2M converters and even complete

They might need a little more extracting, but cordless telephones often have 10.7Mhz/455Khz double conversion IF strips of similar quality to the walkie talkies (and a lot of scanners I gather). Though don't spend a lot on it, since some are single conversion to 455KHz. The cordless phones, at least of recent vintage, actually have two of these IF strips, one in the handset and the other in the base.

Cellphones have nice IF strips, though I think they all have a first IF much higher than 10.7MHz.

And I imagine it's easy to find narrowband FM receivers of barious origins
at hamfests. Even at the puny (compared to Rochester) local hamfest I've
found such boards, and they go for practically nothing since few are
interested (though older 2Meter rigs carry a still hefty price, surprising
until you consider that they may better handle strong RF). One could either
track down data on them, or simply salvage the filters and identifiable
IF ICs, and build something using those parts.

Michael VE2BVW

> On 14 Oct 1999 21:25:41 GMT,
> douglas931@aol.comnospam (Douglas931) wrote:
>
> >Anyone have any info on this oldy project? I know, why ruin a perfectly good
> >weather radio. Or perhaps someone can recommend a very cheap 2M receiver
> >project. TIA
>
> ------
> Just random thoughts

3429. FS: Microdyne 1100 Telemetry rcvr and Bitsync

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-14 00:00:00 UTC
From: Norman Gillaspie <norman@pcseng.com>
Message-ID: <KWxN3.514$ws.34608@typhoon-sf.snfc21.pbi.net>
Source record: 66379
Cross-posted to: misc.industry.electronics.marketplace,sci.electronics.equipment,rec.radio.swap,rec.radio.amateur.homebrew

I have a Microdyne telemetry receiver forsale on ebay
for best offer.

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=179335661

I also have a variable rate bit sync forsale used for signal intelligence.

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=179332553

If you wish to be notified when I have thing likie this forsale
send a message to:

norman@pcseng.com and request to be added to the Microwave Receiver list

3430. FS: 24GHZ antenna with feed and mount best offer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-14 00:00:00 UTC
From: Norman Gillaspie <norman@pcseng.com>
Message-ID: <KYxN3.515$ws.34483@typhoon-sf.snfc21.pbi.net>
Source record: 66380
Cross-posted to: misc.industry.electronics.marketplace,sci.electronics.equipment,rec.radio.swap,rec.radio.amateur.homebrew

Forsale best offer 24 GHZ microwave antenna and mount

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=179356059

norman@pcseng.com

3431. Re: FET switches

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-15 00:00:00 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <7u6edk$3aq@nnrp2.farm.idt.net>
Source record: 66235

Robert M. Ganter <hb9dnn@gmx.net> wrote in message
news:7u57jg$7vd$1@ascomax.hasler.ascom.ch...
> On Thu, 14 Oct 1999 09:41:07 -0400, Shawn Upton
> <supton@eece.maine.edu> wrote:
>
> > I'm thinking of doing some homebrew in the future (or I wouldn't be
> > writing here now would I?), maybe a bandswitched design, something to
> > fool around with. Anyhow, could I use FET switches to switch RF
> > signals? I think the CD4000 series of chips have a few chips where I
> > could wire up a voltage controlled switch (like what they use for
> > switched capacitor designs). Is this feasible, or is the RF signal
> > through the FETS going to be badly attenuated/distorted?
>
> The 4000 series is not fast enough. There are plenty of CMOS switches
> around, however, which can switch RF signals. Have a look e.g. at
> Maxim (www.maxim-ic.com). Another fine project is the Tayloe mixer,
> which showed up some time ago. Dan Tayloe used a very fast bus switch
> to build a quadrature down converter.
> If You can live with lower frequencies, You might try the 74HC series.

If I understand his question correctly he is looking for a FET switch to switch RF to different circuit sections, not operating the switch at RF speed. I would think that the CD4066 series would work through HF for that application. When using the CD4066 you must use a split supply, i.e. +/- 7.5 volts, if the RF signal voltage goes negative relative to ground. The RF signal amplitude should be limited to not more than +/- 5 volts in this case.

--
73,

Leland C. Scott
KC8LDO

ARRL member
NCI member

"You ask what Morse Code is good for? I'll tell you. Morse
Code is used exclusively by Electronics Based life forms to
communicate amongst themselves using advanced Organic
Digital Signal Processors, running state of the art Artificial
Intelligence Software, to perform the highly complex
transmit encryption, receive decryption and error correction
functions."

3432. Ham Radio and SWL URL

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-15 00:00:00 UTC
From: nw7us@hfradio.removethispart.org
Message-ID: <w3DN3.246$bB1.5170@sea-read.news.verio.net>
Source record: 66236
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hello,

Check out http://hfradio.org - a site with many resources for Shortwave Radio and Utility Listeners, Ham Radio Hobbiests, and others who might be interested in this type of content.

So, come on by and check out my non-commercial SWLing/Ham Radio website. The URL is http://hfradio.org and features DX information, including QSL Route/Manager Lookups and Callbook Lookups; a Propagation Center including my eAlert service (allows you to sign up with your email address. Then the eAlert system will send you email propagation reports. I use this with my pager.); Equidistant Azimuth Map software (allows you to create maps of any QTH); Swap and Shop; Bookstore (I've hand-picked over a thousand book titles on radio, etc.); Free website space for YOU to create your own Ham or SWL site, and there's more. Easy to navigate. Open for suggestions.

If you feel up to it, after looking around the site, drop me a note (you'll find my address on the site) and share your thoughts.

73!

--

: World-Wide Communications via Amateur Radio : 122.93W : 47.67N :
: 10x56526 : CW/SSB - DX hunter : Brinnon, WA : Code Warrior #60 :
: visit http://hfradio.org/ :

3433. Re: Tentec RX-320

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-15 00:00:00 UTC
From: Joe Jesson <jjesson@ais.net>
Message-ID: <eVDN3.1$yp4.47@news.ais.net>
Source record: 66237

I have been developing a add-on DSP last IF for any receiver which supports 10.7
and 455KHz IF. The driving idea is to offer a FFT-based spectrum display as a
DSP educational tool. I have taken a 15 KHz last IF from a WJ receiver and input
this signal into a sound card in order to see the modulation and bandlimited spectrum.

I have developed code to offer a 44.1 KHz sample (22 KHz displayed FFT) and hardware to mix and amplify the IF to a 15 KHz last so the SB card can handle.
What a fantastic tool! Especially when combined with a swept spectrum display to
see a broader spectrum window.

Zoom Mode:
<= 22 KHz modulation and signal strength window use an FFT run on standard PC

Spectrum Analyzer Mode
>22KHz use swept receiver model

Would anyone be interested in participating in a mailing list, new newsgroup,
or collaborative web site on the "DSP Receiver" topic? Think we could get enough votes to launch a comp.dsp.receiver newsgroup?

Thanks, Joe Jesson, KB9LZB

3434. Re: Cirkit still in buisness??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-15 00:00:00 UTC
From: pls@no.spam
Message-ID: <7u78b9$ke4$1@zharh00t.europe.nortel.com>
Source record: 66238

In article <3805e398.22440039@news.lin.foa.se>, lasse.moell@swipnet.se (Lasse) wrote:
>Tried to phone and fax Cirkit UK but no answer....
>The web-site seems to be outdated.
>
>Anyone with information on the current status??
>
>/Lasse SM5GLC

AFAIK, they have been taken over by Roxbourough (sp).
I do not yet know what changes will take place.

Gerry O'Rourke
Nortel Networks (IRL) Ltd
E-mail (remove the #'s) gigxr01#@nortel#networks.com

3435. Ten-Tec 1220 and Ramsey FX146 mods

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-15 00:00:00 UTC
From: Mike Rettig <rettig@cct.infi.net>
Message-ID: <3807264C.4E4C6962@cct.infi.net>
Source record: 66239

Has anyone modified a 1220 for DTMF or an FX146 for continuous tuning?
Any other
mods for either of these models? I'm thinking about buying one or the
other and don't really want to re-invent the wheel!!
Mike N3STJ

3436. ANNUAL PACIFICON SWAP MEET THIS SATURDAY OCT 16

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-15 00:00:00 UTC
From: Rudi Wiedemann <wiedemann@home.com>
Message-ID: <bzHN3.1569$R4.23215@news1.frmt1.sfba.home.com>
Source record: 66240
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.swap

WHERE: Sheraton Hotel at the Concord Airport

WHEN: Saturday, October 16th from 0600 to 1530

COST: Sellers: $10 per space (20ft x 20ft)
Buyers: FRE

CONTACT: Syd Furman, w6qwk@wco.com

FREQ: 147.060MHz. (PL 100)

*** Snack Bar and restrooms on site

*** Major manufacturer's exhibits closeby

3437. Re: Tentec RX-320

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-15 00:00:00 UTC
From: "Robert M. Ganter" <hb9dnn@gmx.net>
Message-ID: <7u7h5qfcf1@ascomax.hasler.ascom.ch>
Source record: 66241

On Fri, 15 Oct 99 11:06:56 GMT, "Joe Jesson" <jjesson@ais.net> wrote:

<< interesting DSP receiver experiment >>

Joe,

I would certainly participate in a mailing list for DSP-receiver
discussion.
I would prefer a mailing list to a newsgroup, S/N ratio is by far
better.

73

Robert
--

Robert M. Ganter HB9DNN

3438. Re: Power door locks

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-15 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@bellsouth.net>
Message-ID: <%1IN3.407$eU1.3848@news4.mia>
Source record: 66242

Microchip www.microchip.com makes something to do with this.

3439. Need Heathkit SA-5010 schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-15 00:00:00 UTC
From: DEP <dep@hstviseu.min-saude.pt>
Message-ID: <38075E6C.5C3F9EC2@hstviseu.min-saude.pt>
Source record: 66243

Looking badly for that schematic, umatic keyer from Heathkit, model SA-5010.
e-mail; filipeferreira@mail.telepac.pt
I pay costs.
Thankyou
CT1DDW - Filip

3440. Re: ANNUAL PACIFICON SWAP MEET THIS SATURDAY OCT 16

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-15 00:00:00 UTC
From: Bill Rodgers <Bill@nospam.com>
Message-ID: <MWIN3.132$GG1.16374@news.uswest.net>
Source record: 66244
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.swap

What city? What state?

Rudi Wiedemann <wiedemann@home.com> wrote in message
news:bzHN3.1569$R4.23215@news1.frmt1.sfba.home.com...
> WHERE: Sheraton Hotel at the Concord Airport
>
> WHEN: Saturday, October 16th from 0600 to 1530
>
> COST: Sellers: $10 per space (20ft x 20ft)
> Buyers: FRE
>
> CONTACT: Syd Furman, w6qwk@wco.com
>
> FREQ: 147.060MHz. (PL 100)
>
> *** Snack Bar and restrooms on site
>
> *** Major manufacturer's exhibits closeby
>
>

3441. Re: FET switches

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-15 00:00:00 UTC
From: blackm00@cam.org
Message-ID: <blackm00-1510991255530001@dialup-534.hip.cam.org>
Source record: 66245

In article <7u6edk$3aq@nnrp2.farm.idt.net>, "Leland C. Scott"
<no-spam@junk-mail.net> wrote:

> Robert M. Ganter <hb9dnn@gmx.net> wrote in message
> news:7u57jg$7vd$1@ascomax.hasler.ascom.ch...
> > On Thu, 14 Oct 1999 09:41:07 -0400, Shawn Upton
> > <supton@eece.maine.edu> wrote:
> >
> > > I'm thinking of doing some homebrew in the future (or I wouldn't be
> > > writing here now would I?), maybe a bandswitched design, something to
> > > fool around with. Anyhow, could I use FET switches to switch RF
> > > signals? I think the CD4000 series of chips have a few chips where I
> > > could wire up a voltage controlled switch (like what they use for
> > > switched capacitor designs). Is this feasible, or is the RF signal
> > > through the FETS going to be badly attenuated/distorted?
> >
> > The 4000 series is not fast enough. There are plenty of CMOS switches
> > around, however, which can switch RF signals. Have a look e.g. at
> > Maxim (www.maxim-ic.com). Another fine project is the Tayloe mixer,
> > which showed up some time ago. Dan Tayloe used a very fast bus switch
> > to build a quadrature down converter.
> > If You can live with lower frequencies, You might try the 74HC series.
>
> If I understand his question correctly he is looking for a FET switch to
> switch RF to different circuit sections, not operating the switch at RF
> speed. I would think that the CD4066 series would work through HF for that
> application. When using the CD4066 you must use a split supply, i.e. +/- 7.5
> volts, if the RF signal voltage goes negative relative to ground. The RF
> signal amplitude should be limited to not more than +/- 5 volts in this
> case.
>
>
I was reading the original question as wanting to switch tuned circuits,
though signal path switching did occur to me.

I wouldn't use the 4000 series. The 4016 has a horribly high on resistance
(and the 4066 is somewhat better but other devices are far better). And both
the 4016 and 4066 are hard to use for analog purposes because you have to
run it off a dual supply (and oddball voltage to boot since it's
maximum supply voltage is low), and thw switching thus has to be of those same
voltages. I remember trying to use it that way for audio use twenty years
ago, and it was more trouble than it was worth.

I haven't looked recently, but I thought there were some in the 4000 series
that worked better with analog signals (they had some sort of level shifter

on the control pin?) and definitely the later devices had better specs.

But I think if I was using something for signal path switching, I'd look into other devices, particularly, as someone else pointed out, those from Maxim.

If the original question is about switching tuned circuits, I don't recall seeing CMOS switches being used that way. They aren't ideal switches, and in that sort of application you do want something really good.

Michael VE2BVW

3442. Feb96QST

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-15 00:00:00 UTC
From: Paul <pmartin@bright.net>
Message-ID: <3807728C.481F01B9@bright.net>
Source record: 66246

Does anyone have a Feb '96 QST? I'd like to get a copy of the
article(s) that has a discussion on the R1, R2, and miniR2 receivers.
I'll be glad to cover copy and postage costs or maybe someone can scan
it and send via email.
Thanks.
Paul N8ULS
pmartin@bright.net

3443. Re: ANNUAL PACIFICON SWAP MEET THIS SATURDAY OCT 16

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-15 00:00:00 UTC
From: James Horn <jimhorn@svn.net>
Message-ID: <380774a9.0@news1.svn.net>
Source record: 66247
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.swap

In rec.radio.amateur.homebrew Bill Rodgers <Bill@nospam.com> wrote:
> What city? What state?

Concord, (Northern) California.

Jim Horn WB9SYN/6

3444. Re: FET switches

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-15 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <38077B37.167E@eece.maine.edu>
Source record: 66248

Michael Black wrote:

> I was reading the original question as wanting to switch tuned circuits,
> though signal path switching did occur to me.
>
> I wouldn't use the 4000 series. The 4016 has a horribly high on resistance
> (and the 4066 is somewhat better but other devices are far better). And both
> the 4016 and 4066 are hard to use for analog purposes because you have to
> run it off a dual supply (and oddball voltage to boot since it's
> maximum supply voltage is low), and thw switching thus has to be of those same
> voltages. I remember trying to use it that way for audio use twenty years
> ago, and it was more trouble than it was worth.
>
> I haven't looked recently, but I thought there were some in the 4000 series
> that worked better with analog signals (they had some sort of level shifter
> on the control pin?) and definitely the later devices had better specs.
>
> But I think if I was using something for signal path switching, I'd look
> into other devices, particularly, as someone else pointed out, those from
> Maxim.
>
> If the original question is about switching tuned circuits, I don't recall
> seeing CMOS switches being used that way. They aren't ideal switches, and
> in that sort of application you do want something really good.
>
> Michael VE2BVW

Yeah, I was just looking for a way to switch signal paths in the
circuit, not a T/R switch but the same idea (lower power). I'll go look
at Maxim and/or Mini-ckts and see if they have what I'm looking for.
thanks.
--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

3445. Re: Ten-Tec 1220 and Ramsey FX146 mods

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-15 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <38077D4D.2781@eece.maine.edu>
Source record: 66249

Mike Rettig wrote:
>
> Has anyone modified a 1220 for DTMF or an FX146 for continuous tuning?
> Any other
> mods for either of these models? I'm thinking about buying one or the
> other and don't really want to re-invent the wheel!!
> Mike N3STJ

I don't think that adding DTMF to the 1220 would be that hard, simply inject the tones from a tone board into the audio in line somewheres, but I've never done it, so don't bother listening to me.

As for the FX146, I've thought about buying that as the price is good, and building a little PIC processor to get continous tuning, but after a bit of thought, I wouldn't save any money on it. $100 for the radio, $30 for the case, $40 for the tone board, $30 or so for the mic, and I'm at the same price for buying a Icom/Yaseu/Kenwood low end 2m only mobile that has all that built in and 50W to boot. Just not worth the mods.

However, I might just buy the FX146 for one reason--if all I want to do is packet/APRS, this would do it. No need for the mic or tone board, so $130 for a 12 channel 5W radio is a deal.

--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

3446. 1976 QST

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-15 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <38077DCE.446B@eece.maine.edu>
Source record: 66250

Hello all,

My local library almost has all the QST's... except for a few years.
At some point, our club would like to buy the CDroms that have 10 years
of issues, but until then...

I'm interested in getting ahold of the issue that has the review of the
Icom 245. I have this radio, and I think it would be nice to have the
review for it. If someone has this issue, and could scan the pages and
simply zip 'em up and mail to me, that would be great. Thanks.
--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

3447. Re: FET switches

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-15 00:00:00 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <7udnfu$r4i@nnrp2.farm.idt.net>
Source record: 66251

Michael Black <blackm00@cam.org> wrote in message news:blackm00-
>And both
> the 4016 and 4066 are hard to use for analog purposes because you have to
> run it off a dual supply (and oddball voltage to boot since it's
> maximum supply voltage is low), and thw switching thus has to be of those
same
> voltages. I remember trying to use it that way for audio use twenty years
> ago, and it was more trouble than it was worth.

I think you would have this problem with any FET type switch when you want
to handle bipolar signals. I have used the CD4016's at work but not for RF
applications.

>
> I haven't looked recently, but I thought there were some in the 4000
series
> that worked better with analog signals (they had some sort of level
shifter
> on the control pin?) and definitely the later devices had better specs.
>
> But I think if I was using something for signal path switching, I'd look
> into other devices, particularly, as someone else pointed out, those from
> Maxim.
>
> If the original question is about switching tuned circuits, I don't recall
> seeing CMOS switches being used that way. They aren't ideal switches, and
> in that sort of application you do want something really good.

There is one more thing to consider. If there is more than one switch per
package you need to watch how much signal isolation you have between the
switches. You will get some amount of cross talk between the switches if the
FETs are all on the same die.

--
73,

Leland C. Scott
KC8LDO

ARRL member
NCI member

"You ask what Morse Code is good for? I'll tell you. Morse
Code is used exclusively by Electronics Based life forms to
communicate amongst themselves using advanced Organic
Digital Signal Processors, running state of the art Artificial

Intelligence Software, to perform the highly complex
transmit encryption, receive decryption and error correction
functions."

3448. Need SK-410 socket for 3-500 in Henry 2K.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-15 00:00:00 UTC
From: af4z@palmnet.net
Message-ID: <yZvN3.4911$E_1.246533@typ11.nn.bcandid.com>
Source record: 66381

I'm looking for a SK-410 replacement 3-500 tube socket for my Henry 2K.

If you have a used one is good condition and interested in selling it, please email me and state condition and pRICE.

Tnx,

Don AF4Z
af4z@palmnet.net

3449. Re: Weather radio "cube" on 2 meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-15 00:00:00 UTC
From: noone@nowhere.com
Message-ID: <3809b8ab.268160602@news.squonk.net>
Source record: 66382

A long time ago, I built a single channel, crystal
based, single conversion 27 MHz AM receiver w/
ceramic filter. Was cheap and worked pretty well.

Seems like there should be plans somewhere for
something similar in VHF. It would be a nice
project for somebody that just wanted to listen to
the local repeater.

Of course, picking up an old bearcat at a hamfest
could be cheaper & simpler, but what's the fun in
that?

On 14 Oct 1999 21:25:41 GMT,
douglas931@aol.comnospam (Douglas931) wrote:

>Anyone have any info on this oldy project? I know, why ruin a perfectly good
>weather radio. Or perhaps someone can recommend a very cheap 2M receiver
>project. TIA

Just random thoughts

3450. Re: Weather radio "cube" on 2 meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-15 00:00:00 UTC
From: wb4lnm@aol.com
Message-ID: <19991014221020.07085.00000188@ng-ce1.aol.com>
Source record: 66383

>Anyone have any info on this oldy project? I know, why ruin a perfectly good
>weather radio. Or perhaps someone can recommend a very cheap 2M receiver
>project. TIA

Yes. This modification was covered years ago in a QST article. Check the ARRL
web site for a listing.

John...
John H. Klingelhoeffer
WB4LNMxx@aol.com (remove xx for real address)

3451. FS 3KV PLATE POWER TRANSFORMER

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-15 00:00:00 UTC
From: Joe Ship <ve2js@total.net>
Message-ID: <3806AA9D.3255@total.net>
Source record: 66384

```
--
\\W//
(@ @)
________ooO_(_)_Ooo__________
|Visit Joe Ship's home page at|
| http://www.total.net/~ve2js |
|_____________________________|
```

FOR SALE HAMMOND 3 KV PLATE POWER TRANSFORMER.

Brand New. Still in the crate. Hammond No. 37478.
2900-0-2900 volt @ 750ma ICAS rating.

Weight approx. 100 lbs.

For sale USD $200. plus transport.

3452. Re: Weather radio "cube" on 2 meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-16 00:00:00 UTC
From: Murray Kelly <mkelly@powerup.com.au>
Message-ID: <38073621.5C14@powerup.com.au>
Source record: 66252

Michael Black wrote:
>
> In article <19991014221020.07085.00000188@ng-ce1.aol.com>, wb4lnm@aol.com
> (WB4LNM) wrote:
>
> > >Anyone have any info on this oldy project? I know, why ruin a perfectly good
> > >weather radio. Or perhaps someone can recommend a very cheap 2M receiver
> > >project. TIA.

snip

> Are we talking about the Weathercube from thirty years ago? If so, there
> was a modification for it in QST in 1971, April, May or June. It
> was part of an article about cheap methods for receiving 2M FM, more
> an idea article than real specifics.

snip

> I am left curious about the present-day Weather radios at Radio Shack.
> It would be nice to find that they are in fact double conversion receivers
> with ceramic filters at 10.7MHz and 455KHz, as seen in a lot of consumer
> equipment nowadays. That would make for a decent receiver, and would
> require only a new crystal and some readjustment of the front end tuning
> circuits. But I'm not prepared to spend the money on such a radio just
> to see if it uses a good design.
>
> Michael VE2BVW

I have a quite recent Weather Rx from RS and it seemed like they used
a 10th (!) harmonic of a crystal with a 455kHz IF and the strip
appeared to be DC coupled.

Don't know what to do with the thing! :-(

--
****
* Murray Kelly vk4aok mkelly@powerup.com.au *
* 29 Molonga Ter. / Graceville/ QLD. 4075/ Australia *
* ph/fax Intl+ 61 7 3379 3307 *
****

3453. Re: Need SK-410 socket for 3-500 in Henry 2K.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-16 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <7uakbr$nh1$1@nnrp1.deja.com>
Source record: 66253

In article <yZvN3.4911$E_1.246533@typ11.nn.bcandid.com>,
af4z@palmnet.net (Don Winn) wrote:
> I'm looking for a SK-410 replacement 3-500 tube socket for my Henry
2K.
>
> If you have a used one is good condition and interested in selling it,
please
> email me and state condition and pRICE.
>
> Tnx,
>
> Don AF4Z
> af4z@palmnet.net
>
>

Dear Don, the socket is easily available with RF Parts at
http://www.rfparts.com/sockets.html but not very cheap!
Enter the URL and see for yourself.
--
Greetings,

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Before you buy.

3454. Re: FET switches

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-17 00:00:00 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <7udp11$rgv@nnrp2.farm.idt.net>
Source record: 66254

Bob,

I think Shawn Upton is the one who wants the info. Also who is the
manufacture of the DG180?

--
73,

Leland C. Scott
KC8LDO

ARRL member
NCI member

"You ask what Morse Code is good for? I'll tell you. Morse
Code is used exclusively by Electronics Based life forms to
communicate amongst themselves using advanced Organic
Digital Signal Processors, running state of the art Artificial
Intelligence Software, to perform the highly complex
transmit encryption, receive decryption and error correction
functions."

3455. WANTED 24 VDC 6 AMP POWER SUPPLY

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-17 00:00:00 UTC
From: kable guy minn <n0mnb@minn.net>
Message-ID: <7udsqb$4nu$1@newsfeed.minn.net>
Source record: 66255
Cross-posted to: alt.comp.hardware.homebuilt,alt.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.swap,sci.electronics.equipment

HELLO
looking for a 24vdc @6 amp power supply for a amp from a cell site. doesn't need to be the matching unit but would be nice.. (ERICSSON) AMP

thanks
Bill
n0mnb@minn.net

3456. Re: Network & TelCo Video Proposals using 3-30MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-17 00:00:00 UTC
From: DavidC <eDoc@netzero.net>
Message-ID: <s0kvq1osr0169@freenews.remarq.com>
Source record: 66256
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

> I just heard on the HCJB Ham Radio program that a new home
> computer networking technology that operates 3-30 mHz has been
> approved and that manufacturers expect 75% market saturation
> within 3 years. It will obliterate the ENTIRE HF spectrum with
> noise!
> Also the telephone companies plan to send the same system down
> the telephone lines so that they will be able to send video to
subscribers.
> Cliff WA9YXG

With all due respect to HCJB if they made the same claims as you
have paraphrased they clearly have failed to check their facts. The
whole thing doesn't sound right technologically anyhow. You sure
they weren't talking about bandwidths varying from 3-30 MHz wide?

It is illegal for anyone to broadcast a signal that interferes with other
communications. Just imagine the class action lawsuit Hams will have
against any company that causes such illegal interference ... we could
fund all sorts of charitable Ham-related activities!

There are International treaties and US laws that would be breached
by any such interference ... and guess what, Ham signals are just as
likely to foul their systems ... unless they are very well shielded ...
thus protecting us from them as they protect themselves against us.

Let's not panic, let's get some facts. I am guessing they were talking
about bandwidth rather than bands. Once we know more we can discuss
a strategy to respond effectively, if at all. If we have a challenge before
us we need to remember that it is amazing how QRO on the air and
through the political process can get people's attention!

73, DavidC K1YP

* Sent from RemarQ http://www.remarq.com * The Internet's Discussion Network *
* The fastest and easiest way to search and participate in Usenet - Free! *

3457. Re: Anyone have PC Electronics Phone Number

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-17 00:00:00 UTC
From: Mark Garrett <mgarrett@pdnt.com>
Message-ID: <Z2wO3.34$VN.860@sol.pdnt.net>
Source record: 66257

li@ionet.net wrote in message <3807ab88.15524817@news.ionet.net>...
>Anyone have PC Electronics Phone Number

Try (626) 447-4565

e-mail tomsmb@aol.com

website http://www.hamtv.com

3458. Re: Weather radio "cube" on 2 meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-17 00:00:00 UTC
From: blackm00@cam.org
Message-ID: <blackm00-1710992344320001@dialup-756.hip.cam.org>
Source record: 66258

In article <38094BAC.31AE@powerup.com.au>, mkelly@powerup.com.au wrote:

> I am tempted to put a 14MHz ceramic resonator in, and pull that
> around - they swing quite well, I am told.
>
> x10 and the 455kHz IF might give some 'funny' hi-side/lo-side
> combinations tho! Still, for the money, who cares? :-)
>
> Cheers.
> Murray vk4aok
>
>

One thing you used to see in the ham magazines, but not much recently, were "cavities" made out of tin cans. Run a stiff piece of wire or tubing up the middle and tune it with a variable capacitor. Quite narrow considering the frequency range they were used, which was usually 2meters and up. I've wondered whether they'd give enough selectivity so you could drop 2M down to a low IF without an intermediate conversion. It wouldn't be a high performance receiver, but it might make for an interesting simple receiver where low cost or simplicity was desired.

Or the extension of that would be to use a whip antenna instead of the center conductor, so you have a selective antenna. An intersting path if you're interested in simplicity. I've seen articles about these, though I can't supply references or even what the antennas called.

Michael VE2BVW

3459. Ten Tec Scout frequency jump in CW mode

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-17 00:00:00 UTC
From: Will White <will.white@mindspring.com>
Message-ID: <380AB4F8.3B824A92@mindspring.com>
Source record: 66259
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.homebrew

A few months ago I participated in a thread on this group about the well

known tendency of the Scout to drift or jump up to a KHZ or more in extended CW transmissions. Someone was kind enough to email to me a mod (a simple R&R of a single capacitor, if I remember) that cures this problem.

Unfortunately, while upgrading my mail client, I lost the saved message.

Would the person who emailed me this information please get in touch, or

alternatively, if anyone else knows the correct procedure and part values, please let me know via email. Thank you very much.

Will
KD7BFX
mailto: will.white@mindspring.com

3460. Re: Electrostatic Toroid Shield

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-17 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <5TyO3.6620$y45.201505@news4.giganews.com>
Source record: 66260

Mike I don't know anything about the Flag antenna. But an electrostatic shield should go to a low potential point, one with no signal on it. That needs to be some sort of ground, almost anything will do. Try connecting it to the coaxial outer conductor if the SWR is low. If not, connect it to the radio ground or to a water pipe.

73, Bob K6DDX

3461. Re: spectra mod for 902

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-17 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19991017215428704 32@zetnet.co.uk>
Source record: 66261

> I know there is some one out there that can and would help me with the
> spectra 902 mhz ham band mod. I have seen other hams with them so i know
> it can be done. please can any ham help..Danny ko6oy
==========
In the USA the 33 cms band (902 -928 MHz) is a band radio amateurs
share on a non-interference basis with Government Radio Location
(radar) services ....spectrum galore !

Frank GM0CSZ / KN6WH

3462. SRS-455 heater

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-18 00:00:00 UTC
From: Andrej Laudis <laudis@my-deja.com>
Message-ID: <7uff22lrr1@nnrp1.deja.com>
Source record: 66262

Hi all,

Have someone data sheet for vacuum tube SRS-455? How many volts must be
on heater? I think that is 5V (Like in RE-125C), but i'm not 100% sure.
Thanx for help es 73!

de Andy/OM1CW

Sent via Deja.com http://www.deja.com/
Before you buy.

3463. Re: Storage scan converter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-18 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7ufhernif1@nnrp1.deja.com>
Source record: 66263

In article <3805c5c5.9404086@news.icon.co.za>,
craiggib@deathtojunkmail.icon.co.za (Craig Gibson) wrote:

> (snip...)
> While I am about it, does anyone know where I can get detailed HRPT
> info? I found some sites with decoder schematics using FPGA's, but I
> am the type of person who wants to know whats "inside" :)

http://www2.ncdc.noaa.gov/docs/klm/index.htm

HRPT and APT. Everything you wanted to know but were afraid to ask.

After you see the HRPT specs you'll understand why FPGAs and things
are useful.
--
Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte
Satellite: VA3SFL on UO-22, KO-25

Sent via Deja.com http://www.deja.com/
Before you buy.

3464. Widow looking to sell tubes, etc San Carlos, Ca

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-18 00:00:00 UTC
From: ssmith1636@aol.com
Message-ID: <19991017215505.13598.00000280@ng-cb1.aol.com>
Source record: 66264

My neighbor is selling her deceased husbands collection of electronic stuff. She is in San Carlos, Ca. Looking for someone who could help value and market this stuff. Transformers, capicators, tubes etc. Seems to be a closet full.
Scott

3465. Re: NiCads

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-18 00:00:00 UTC
From: WIZ <WIZ@prodigy.net>
Message-ID: <01bf1916$91a137a0$9e1efed1@newmicronpc>
Source record: 66265

Yes. Nevertheless, you should use all of the charge
before recharging. That means running the thing down
to the point where it measures about .9 volts per cell.
73 Ed AF2P

marc schneider <drmarc@wwa.com> wrote in article
<oMoN3.2378$Jd2.5961@ord-read.news.verio.net>...
> I seem to remember a couple of years ago I read that modern Nicads do not
have
> the memory effect problem.
>
> My questions is:
>
> I have a 15 year old Kenwood HT TR 2500 and got a brand new battery for
it
> three years ago. Would that battery have the new technology of nicads if

> there is a new nicad technology?
>
>
> Marc Schneider, Psy.D.
> e-mail to: <drmarc@wwa.com>
> (call sign: W4NVY)
>

3466. need spectra mod

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-18 00:00:00 UTC
From: "Danny (ko6oy) OR Linda (ad6lt)" <ko6oy@jetlink.net>
Message-ID: <380AA03D.9203F0B1@jetlink.net>
Source record: 66266

I know there is some one out there that can and would help me with the spectra 902 mhz ham band mod. I have seen other hams with them so i know

it can be done. please can any ham help..Danny ko6oy

3467. 137MHz WXSAT Receiver ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-18 00:00:00 UTC
From: Colin Lowe <colinlowe@jet.es>
Message-ID: <7uf2mhmta1@lola.ctv.es>
Source record: 66267
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

I am looking for a kit to build a weather sat receiver for 137MHz. What kits are available and how do they perform?

73 de Colin

3468. Re: Weather radio "cube" on 2 meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-18 00:00:00 UTC
From: "Laszlo I. Morocz" <kf4pv@SPAMMENOTlmorocz.com>
Message-ID: <OmEO3.368$no.1832@jump.innerx.net>
Source record: 66268

Harry, SM0VPO, has a nice construction project along these lines (a
cavity-tuned UHF -> uwave crystal set) which is quite clever on
http://hem2.passagen.se/sm0vpo/use/cavity.htm .

73 de KF4PV/3, Laszlo

--
To reply, remove the text SPAMMENOT from the e-mail address.
Michael Black wrote in message ...
>>
>One thing you used to see in the ham magazines, but not much recently,
>were "cavities" made out of tin cans. Run a stiff piece of wire or
>tubing up the middle and tune it with a variable capacitor. Quite
>narrow considering the frequency range they were used, which was
>usually 2meters and up. I've wondered whether they'd give enough
>selectivity so you could drop 2M down to a low IF without an intermediate
>conversion. It wouldn't be a high performance receiver, but it might
>make for an interesting simple receiver where low cost or simplicity
>was desired.
>
>Or the extension of that would be to use a whip antenna instead of
>the center conductor, so you have a selective antenna. An intersting
>path if you're interested in simplicity. I've seen articles about
>these, though I can't supply references or even what the antennas
>called.
>
> Michael VE2BVW

3469. HAMFEST October 24, 1999 - Lindenhurst, LI

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-18 00:00:00 UTC
From: W2GSB <info@gsbarc.org>
Message-ID: <sEEO3.243$18.869641@news.optonline.net>
Source record: 66269
Cross-posted to: rec.radio.amateur,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.swap,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

HAMFEST October 24, 1999 - Lindenhurst, LI

GREAT SOUTH BAY AMATEUR RADIO CLUB
ARRL APPROVED LONG ISLAND HAMFEST - October 24, 1999

LINDENHURST, LI - NY

On October 24, 1999 the Great South Bay Amateur Radio Club will again sponsor an indoor Hamfest-Computer Show. The location will be at the:

Knights of Columbus
400 South Broadway, Lindenhurst, NY.
This is an ARRL approved Hamfest.

There will be radio equipment, electronic components, computers and accessories, software, books, technical manuals, ARRL information, Amateur Radio License Exams, Door Prizes.

Advanced registration is $15.00 each table. Tables at the door are $20.00 each. Contact Peter Portanova WB2OQQ at 516 541-4886 for table reservations. NO TABLES WILL BE RESERVED WITHOUT PRIOR PAYMENT due to the space available.

General admission is $ 6.00.

VE - ARRL - 12:00 NOON at Babylon Town Hall, 200 E Sunrise Hwy, Lindenhurst. For exam candidates please remember to bring your original FCC Amateur Radio license (if licensed), any C.S.C.E. forms that are pending, plus a photocopy of each, pens, calculator, formal form of ID (preferably photo ID), and the examination fee, to the exam session. 1998 ARRL/VEC fee is $ 6.35, exact change is appreciated. Novice exams are free.
The VE team is from ISLIP ARES Group and GSBARC. Thanks guys.

Talk-in will be via GSBARC Repeaters on 146.685 4Z(136.5) PL.

Food Service during the Hamfest will be provided by members of the Knights of Columbus Council.

Information is also available during the GSBARC 2 meter info net every Monday evening at 7:00 PM following the Newsline Report on the W2GSB repeater, 146.685 -600 4Z(136.5) PL required. You may also write to:

Great South Bay ARC
P.O. Box 1356
West Babylon, NY 11704

E-mail GSBARC info@gsbarc.org or visit GSBARC online at
http://www.gsbarc.org/hamfest.htm

Y2K Hamfest Schedule - March 5, 2000 and October 29, 2000

73,
GSBARC

3470. Re: need a single channel TV bandpass filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-18 00:00:00 UTC
From: WB3KUM <d.breeden@nospam.wcom.com>
Message-ID: <380B2407.5482F7F7@nospam.wcom.com>
Source record: 66270
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Try Fair Radio Sales in Lima, Oh. They have some filters for various bands, including some cavity filters for the higher end.

3471. Re: 137MHz WXSAT Receiver ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-18 00:00:00 UTC
From: Simon Lewis <slewis@pacsat.demon.co.uk>
Message-ID: <7rLemCAr8xC4EwdC@pacsat.demon.co.uk>
Source record: 66271
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

In article <7uf2mhmta1@lola.ctv.es>, Colin Lowe <colinlowe@jet.es>
writes
>I am looking for a kit to build a weather sat receiver for 137MHz. What kits
>are available and how do they perform?
>
>73 de Colin
>
>

49 quid from remote imaging group. as good as anything commercial.

www.rig.org.uk

73 Simon

+--+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
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+--+

3472. Is there an Inexspensive MULTI freq PL Schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-18 00:00:00 UTC
From: RJ Scott <kf7qz@premier1.net>
Message-ID: <380B3109.E55F91F1@premier1.net>
Source record: 66272

Found a simple PL Schematic for a single freq, is there one for multiple freqs? I have an older Yaesu FT-2700 and want to add PL. The Yaesu board is 89 - 100 bucks. I only want a couple 3 PL's to add. Anyone know where I can find a cheap, easy one for Multiple Frequencies.

Rick KF7QZ

3473. Re: Is there an Inexspensive MULTI freq PL Schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-18 00:00:00 UTC
From: nielsen@primenet.com
Message-ID: <slrn80mg6e.3o8.nielsen@bob.localnet>
Source record: 66273

The AEA catalog shows multiple tone encoder boards from Nor-Com and
Communications Specialists for > $30.

On Mon, 18 Oct 1999 14:39:05 GMT, RJ Scott wrote:
>Found a simple PL Schematic for a single freq, is there one for multiple
>freqs? I have an older Yaesu FT-2700 and want to add PL. The Yaesu
>board is 89 - 100 bucks. I only want a couple 3 PL's to add. Anyone
>know where I can find a cheap, easy one for Multiple Frequencies.
>
>Rick KF7QZ

--
Bob Nielsen Internet: nielsen@primenet.com
Tucson, AZ AMPRnet: w6swe@w6swe.ampr.org
DM42nh http://www.primenet.com/~nielsen

3474. Re: How find out Power Transformer Information

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-18 00:00:00 UTC
From: mcalhoun@ksu.edu
Message-ID: <7uff9o$n5p@unix2.cc.ksu.edu>
Source record: 66274

>I have an older stereo that has a bad channel. Well since I have a new
>stereo I thought I would put the components to good use. Lots of nice
>stuff in here. Any way has nice bridge rectifier and caps So I thought
>Neat. Second Power supply. The transformer is as big as My Kenwood PS-30.
>SO How would I find out about the Transformer.

Although "Rating Unknown Power Transformers", by H. Q. DuGuid, published
in "Electronics World" in July, 1964 (pp. 24-25), obviously doesn't
account for "recent" innovations in transformer design, maybe it will help.

--Myron.
--
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (Professor Emeritus) "Barbershop" tenor. CDL(PTX) W0PBV (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

3475. Re: 137MHz WXSAT Receiver ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-18 00:00:00 UTC
From: Roger Basford <Roger@g3vkm.demon.co.uk>
Message-ID: <9iva4AASxxC4Ew8F@g3vkm.demon.co.uk>
Source record: 66275
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

In article <7uf2mhmta1@lola.ctv.es>, Colin Lowe <colinlowe@jet.es>
writes
>I am looking for a kit to build a weather sat receiver for 137MHz. What kits
>are available and how do they perform?
>
>73 de Colin
>
>
Try the RX2 from the Remote Imaging Group - http://www.rig.org.uk. The
kit is ï¿½49.50 but you have to join RIG first, although you get a
quarterly magazine and other benefits explained on the Web pages. I've
just joined and bought a kit and must say the RX2 works very well, a big
improvement over my IC-746 which was too narrow for good WXSAT
reception. RIG have sold (IIRC) 800 or so kits and offer a free repair
service if you get in a mess!

HTH,

Roger Basford

3476. Re: Is there an Inexspensive MULTI freq PL Schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-18 00:00:00 UTC
From: RJ Scott <kf7qz@premier1.net>
Message-ID: <380B553D.4A35D06D@premier1.net>
Source record: 66276

Bob Nielsen wrote:
>
> The AEA catalog shows multiple tone encoder boards from Nor-Com and
> Communications Specialists for > $30.
>
> On Mon, 18 Oct 1999 14:39:05 GMT, RJ Scott wrote:
> >Found a simple PL Schematic for a single freq, is there one for multiple
> >freqs? I have an older Yaesu FT-2700 and want to add PL. The Yaesu
> >board is 89 - 100 bucks. I only want a couple 3 PL's to add. Anyone
> >know where I can find a cheap, easy one for Multiple Frequencies.
> >
> >Rick KF7QZ
>
> --
> Bob Nielsen Internet: nielsen@primenet.com
> Tucson, AZ AMPRnet: w6swe@w6swe.ampr.org
> DM42nh http://www.primenet.com/~nielsen

Thanks Bob,
I shall peruse the catalog and see what they have,

Thanks for the quick answer
have a great millennium

Rick KF7QZ

3477. Re: Is there an Inexspensive MULTI freq PL Schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-18 00:00:00 UTC
From: RJ Scott <kf7qz@premier1.net>
Message-ID: <380B5616.A07C2DCD@premier1.net>
Source record: 66277

Bob Nielsen wrote:
>
> The AEA catalog shows multiple tone encoder boards from Nor-Com and
> Communications Specialists for > $30.
>
> On Mon, 18 Oct 1999 14:39:05 GMT, RJ Scott wrote:
> >Found a simple PL Schematic for a single freq, is there one for multiple
> >freqs? I have an older Yaesu FT-2700 and want to add PL. The Yaesu
> >board is 89 - 100 bucks. I only want a couple 3 PL's to add. Anyone
> >know where I can find a cheap, easy one for Multiple Frequencies.
> >
> >Rick KF7QZ
>
> --
> Bob Nielsen Internet: nielsen@primenet.com
> Tucson, AZ AMPRnet: w6swe@w6swe.ampr.org
> DM42nh http://www.primenet.com/~nielsen

and you meant AES not AEA :) Yes !

Rick KF7QZ

3478. Re: Slug-tuned inductors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-18 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <7uftl9evl1@neptunium.btinternet.com>
Source record: 66278

For radio receiving purposes the most effective and practical method of "permeability tuning" is to close-wind enamel-insulated or Litz wire on a thin cardboard tube. A ferrite rod, 10mm diameter, 100mm long slides in and out of the cardboard tube. An inductance ratio of 10 to 1 is attainable. This gives a frequency range of approx 3 to 1.

Ganged tuning rods can be used. In a superhet receiver It is possible to use one ferrite rod for the RF coil and another ganged rod for the local oscillator coil, the position of one rod being displaced with respect to the other to give a the IF difference frequency.

It is possible to arrange for the the rods to be drawn in and out of the coils by a nylon-braided cord which is wrapped round a pully wheel operated from the receiver front panel. The tuning indicator is a pointer attached to the cord which moves in front of a scale calibrated, for example, from 510 KHz to 1600 KHz.

Fine RF/oscillator tracking is acheived by moving one rod inside its coil relative to the other rod inside ITS coil.

Before 1940 the tuning scale was calibrated from 200 metres to 580 metres and iron dust cores were used. This was a less expensive and lighter-in-weight arrangement than a two or three-gang 500pF variable capacitor but not quite so mechanically stable. It was prone to greater frequency drift versus temperature and knocks and bangs.

Permeability tuned receivers have the advantage of more constant sensitivity over a the frequency band.
--
==========
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp
==========

3479. Extremely small transmitters for radiotracking?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-18 00:00:00 UTC
From: Martin Gorissen <Gorissen@t-online.de>
Message-ID: <380B87E7.4E98D76B@t-online.de>
Source record: 66279

Transmitters for radiotracking small animals are simple designed, but expensive. The component costs are about 10 per cent of their price. They usually consist of a multivibrator pulsing a two-stage crystal oscillator. Using SMD components, also SMD crystals, commercially available models reach a weight of 0.3 g (without battery).
Who has any experience, if this is within reach by do-it-yourself? A central problem would be the availability of single SMD crystals for the 150 MHz range.

3480. Re: Widow looking to sell tubes, etc San Carlos, Ca

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-18 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <MgLO3.7398$5W2.234196@news6.giganews.com>
Source record: 66280

I don 't live close to you (I'm in Los Angeles) but if all else fails, I may be able to help. Write down the descriptions of whatever you can and I'll help you identify and appraise what she has.

73, Bob K6DDX

3481. homebrew tube HF rcvr

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-18 00:00:00 UTC
From: grogancat@aol.com
Message-ID: <19991018165322.05328.00000128@ng-ck1.aol.com>
Source record: 66281

Howdy you-all.

I have tried building an all american five that uses the following lineup for
HF
superhet-style variable tuning condenser (made for the medium waves)
12BE6 converter
12BA6 IF amp
12AV6 detector/agc

I used bank wound coil formulae for the RF and
Osc coils... got it working covering about 7000 kc to
13000 kc. Added a BFO too. Works great except
that I notice stations appear twice on the dial. I
thought this might be the osc and rf preselector
crossing each other but stations appear twice a
few kc away both at the top of the dial and at the
bottom. I would think I would see this phenomenon
happen only near the crossover point where you would
expect to hear the station at the -455 and +455 kc
sides of the preselector.
Any body have an idea what I am seeing? Tried using
a non-superhet style condenser i.e. the plates for the
osc section are not specially cut to compensate for the
crossover phenomenon at medium waves, but I see this
problem occur using this new condenser.

Thanks in advance, you radio pal tony

3482. Re: 137MHz WXSAT Receiver ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-18 00:00:00 UTC
From: "colinlowe@jet" <colinlowe@jet.es>
Message-ID: <7ug041$h1l$1@lola.ctv.es>
Source record: 66282
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Ok thats great,

I have had a look at the webpage and the RX2 will be fine for my requirments. Plus the quartly newsletter will be interesting.

Thanks Roger and Simon for your help

73 de Colin.

3483. Old Conar Model 500 RCVR Need Schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-18 00:00:00 UTC
From: alg460@aol.com
Message-ID: <19991018173541.02901.00000125@ng-fg1.aol.com>
Source record: 66283

Anyone have or know where I can Obtain a schematic for this unit.

Tony

3484. European VHF/UHF/SHF techniques

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-18 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <380b92c6.202501542@news.online.no>
Source record: 66284

had some requests earlier for Weinheim Scripts, and this year I did
not obtain a copy so I had to investigate into this matter

information about the Weinheim (DF0UKW/DL0WH) VHF convention is found
on http://www.2burgen-apotheke.de

or
http://www.ukw-tagung.de

and the books may be ordered at the DARC-Verlag http://www.darc.de or
http://www.darc-verlag.de

but this does not include 1999 issue
so then you must send an email to
DARC-Verlag darcverlag@t-online.de

perhaps the DARC site will be updated later(?)

73 jan-martin LA8AK

PS. at least a few of the sites has information in English, so pse
don't hesitate to see what VHF/UHF/SHF technical discussions are going
on in Europe

3485. Re: homebrew tube HF rcvr

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-18 00:00:00 UTC
From: Bob Liesenfeld <wb0poq@visi.com>
Message-ID: <380BACFE.31657AFD@visi.com>
Source record: 66285

Grogancat wrote:
>
> Howdy you-all.
>
> I have tried building an all american five that uses the following lineup for
> HF
> superhet-style variable tuning condenser (made for the medium waves)
> 12BE6 converter
> 12BA6 IF amp
> 12AV6 detector/agc
>
> I used bank wound coil formulae for the RF and
> Osc coils... got it working covering about 7000 kc to
> 13000 kc. Added a BFO too. Works great except
> that I notice stations appear twice on the dial.

If I understand you correctly, I believe what you are describing is
the image frequency, thus:

Say you wish to rx 10.000MHz... Preselector tuned to 10.000MHz
Osc tuned to 9.545MHz----> desired sig beats to IF of 455KHz

Now you wish to rx 10.910MHz... Preselector tuned to 10.910MHz
Osc tuned to 10.455MHz---> desired sig beats to IF of 455KHz
BUT!
The signal on 10.000MHz (which you are not interested in now) sneaks
through the single preselector tuned ckt at a reduced but still
substantial level, beats with the osc at 10.455MHz to make the same
455KHz IF as before. Ergo, there are *two* local oscillator frequencys
that will beat with any antenna frequency to produce the IF frequency.
Or, if you will, there are *two* antenna frequencys that will beat with
the local oscillator to produce the IF frequency. It is up to the
preselector's tank(s) to reduce the unwanted antenna frequency from
reaching the mixer.

At HF frequencys, a single tank just doesn't have sufficient Q to pick
out one and knock out the other. This is one of the disadvantages of a
superhet that haunted Armstrong the inventor of same. It lead to the
developement of double and triple conversion designs, where the first IF
was a relativly high frequency so the image signal would be sufficiently
far from the desired frequency so tanks with obtainable values of Q
could reduce it's level.

Hope this made sense. Add more tanks to your preselector, and you
should see this problem start to go away.

72
Bob 'POQ
--
Genuine E-mail From the Land of the Everlasting Icicle...
Bob Liesenfeld
wb0poq@visi.com

3486. Vacuum Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-18 00:00:00 UTC
From: Mark Dumont <mark@ciainc.com>
Message-ID: <KiQO3.272$kh.2132@newsfeed.slurp.net>
Source record: 66286

Wanted Vacuum Variable Capacitors ... 630pf @ 10,000 volts
and 2552pf @ 1500 to 2000 volts
mark@ciainc.com

3487. Just 4 Fun.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-18 00:00:00 UTC
From: Bill <bill@hovac.com>
Message-ID: <380bd4c2_8@news.newsfeeds.com>
Source record: 66287

Anyone know about what frequencies those drive thrus at fast food restaurants use to link to the kid making mininum wage with the $10k worth of radio equipment on his head?

Bill :)

----------== Posted via Newsfeeds.Com, Uncensored Usenet News ==----------
http://www.newsfeeds.com The Largest Usenet Servers in the World!
------== Over 73,000 Newsgroups - Including Dedicated Binaries Servers ==-----

3488. Re: Slug-tuned inductors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-18 00:00:00 UTC
From: blackm00@cam.org
Message-ID: <blackm00-1810992251560001@dialup-384.hip.cam.org>
Source record: 66288

One place to get permability tuned coils complete with the mechanism
is old car radios. Many were permability tuned. While they weren't
linear, unlike the permability tuned oscillators in Collins equipment,
having the mechanical parts all worked out sure make the idea more
approachable.

The AM broadcast band cores will at least be fine for medium wave,
and hopefully work somewhat lower in frequency. If the inductance
range isn't right, one could rewind the coils. I've seen suggestions,
though I've never been sure if anyone had tried it successfully, to
change the cores so you can use the mechanism in other frequency ranges.

Over the years, I've also found just the permability tuned front ends
at surplus stores. You'd stil have to work up some sort of dial mechanism.
Years ago, I did use the coil as part of a medium wave variable oscillator.
It was stable, and the multi-turn was a nice advantage.

Michael VE2BVW

In article <7uftl9evl1@neptunium.btinternet.com>, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

> For radio receiving purposes the most effective and practical method
> of "permeability tuning" is to close-wind enamel-insulated or Litz
> wire on a thin cardboard tube. A ferrite rod, 10mm diameter, 100mm
> long slides in and out of the cardboard tube. An inductance ratio of
> 10 to 1 is attainable. This gives a frequency range of approx 3 to 1.
>
> Ganged tuning rods can be used. In a superhet receiver It is possible
> to use one ferrite rod for the RF coil and another ganged rod for the
> local oscillator coil, the position of one rod being displaced with
> respect to the other to give a the IF difference frequency.
>
> It is possible to arrange for the the rods to be drawn in and out of
> the coils by a nylon-braided cord which is wrapped round a pully wheel
> operated from the receiver front panel. The tuning indicator is a
> pointer attached to the cord which moves in front of a scale
> calibrated, for example, from 510 KHz to 1600 KHz.
>
> Fine RF/oscillator tracking is acheived by moving one rod inside its
> coil relative to the other rod inside ITS coil.
>
> Before 1940 the tuning scale was calibrated from 200 metres to 580
> metres and iron dust cores were used. This was a less expensive and
> lighter-in-weight arrangement than a two or three-gang 500pF variable
> capacitor but not quite so mechanically stable. It was prone to

> greater frequency drift versus temperature and knocks and bangs.
>
> Permeability tuned receivers have the advantage of more constant
> sensitivity over a the frequency band.
> --
> ================================
> Reg, G4FGQ For free software go to:-
> http://www.btinternet.com/~g4fgq.regp
> ================================

3489. Texas Hamfest

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-18 00:00:00 UTC
From: n5rkn <justuse-n5rkn@cableone.net>
Message-ID: <s0nou0g4r0118@corp.supernews.com>
Source record: 66289

Join us here in West Texas at the 16th Annual Odessa Texas Hamfest November 6th & 7th.
Plenty of Grand Prizes, Door Prizes, dealers, and fun.
Check out our website at: www.wt5arc.org/hamfest/hamfest.html for more info.

Robert
N5RKN

3490. Re: Just 4 Fun.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-18 00:00:00 UTC
From: Charles Wenzel <wenzel@wenzel.com>
Message-ID: <380BF072.45C7@wenzel.com>
Source record: 66290

Bill wrote:
>
> Anyone know about what frequencies those drive thrus at fast food
> restaurants use to link...(clip)

Around here, they use frequencies just above 30 MHz.

3491. Re: need a single channel TV bandpass filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-18 00:00:00 UTC
From: Aart Olsen <aolsen@prairienet.org>
Message-ID: <380BF3A2.5399139B@prairienet.org>
Source record: 66291
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Well it turns out to be not so bad and not so simple...

Software/soundcard DSPs can clean up the audio. I really like and recommend the very elegant GNASP1, freeware from http://members.tripod.com/~gniephaus/gnasp1/gnasp1.html, by the way.

I'm perhaps not hearing meteors after all. Meteor heads decelerate quickly and so the audio "ping" drops in frequency. The things I hear don't do this.

Thanks to everyone for your thoughtful comments!
--
Aart Olsen
aolsen@prairienet.org

3492. VCO design

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-18 00:00:00 UTC
From: slug@aeminium.dhis.org
Message-ID: <7ug4nghna1@bbs.aeminium.pt>
Source record: 66292

Hello,
i need to design a UHF 555-565MHz VCO to use on a frequency synthesizer.
Any ideas , links or books appreciated

Thank you,
Nuno Sucena
--
http://alumni.dee.uc.pt/~slug
CT1FOX

3493. LOOKING FOR A 3-1000Z TUBE

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-19 00:00:00 UTC
From: ts950sdx@aol.com
Message-ID: <19991018210551.19241.00000257@ng-fn1.aol.com>
Source record: 66293

IM IN NEED OF A NEW OR GOOD PULL
3-1000Z TUBE

MUST BE GOOD

THANKS JOE KF4TOH

3494. FET switches

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-19 00:00:00 UTC
From: luke@trio.COM.AU
Message-ID: <199910190306.UAA25209@mailbox2.ucsd.edu>
Source record: 66294

At 04:30 AM 10/16/99 -0700, you wrote:

>I wouldn't use the 4000 series. The 4016 has a horribly high on resistance
>(and the 4066 is somewhat better but other devices are far better). And both
>the 4016 and 4066 are hard to use for analog purposes because you have to
>run it off a dual supply (and oddball voltage to boot since it's
>maximum supply voltage is low), and thw switching thus has to be of those
same
>voltages. I remember trying to use it that way for audio use twenty years
>ago, and it was more trouble than it was worth.

You don't have to have dual supplies to use 4066s to switch audio. You can
use a resistor divider to bias the switch to half rail and capacitively
couple the audio signal. There are still problems with horrible cross-over
like distortions which I have never worked out.

Regards,
Luke

Luke Enriquez (VK3EM) Trio Communications 2000 Pty. Ltd.
Electronics Design Engineer. 41 Aster Ave.
B.Eng (Comms) Hon. Carrum Downs, Victoria. 3201
03-9775-0505 (BH) Australia
0414-679-432 (Mob) http://www.trio.com.au

3495. Re: Miniature Metal Lathe, Attachments

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-19 00:00:00 UTC
From: nuckolls@aeroelectric.com
Message-ID: <380bf76f.10164049@news.supernews.com>
Source record: 66295

On Sat, 21 Aug 1999 20:07:47 -0500, James Parsons
<k5rov@earthlink.net> wrote:

>I have an Emco Unimat-3 metal lathe complete with most accessories. I
>bought this new some years ago and became ill shortly after. I put some
>use on it but not much. I have kept it sprayed with WD-40.
>

<snip>
>
>I would like to work out a trade for an Icom 756, or I might sell. But
>here is the problem...it must be picked up only. Its small, but heavy
>when the stock is included. And, I would not be able to pack it. I live
>in San Angelo, Texas.
>
>I have to go to the hospital every week for chemo, and may not answer
>right away. I am here on weekends but usually gone during the middle of
>the week.
>
>Best 73,
>
>Jim, K5ROV

Jim, Sorry to hear of your bad luck. What would you
take for the lathe in in cash?

Bob K0DYH since 1956
Wichita, KS
nuckolls@aeroelectric.com

3496. Re: FET switches

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-19 00:00:00 UTC
From: rice@ironbark.bendigo.latrobe.edu.au
Message-ID: <rice-ya02408000R1910991505130001@news.latrobe.edu.au>
Source record: 66296

In article <199910190306.UAA25209@mailbox2.ucsd.edu>, luke@trio.COM.AU
(Luke Enriquez) wrote:

> You don't have to have dual supplies to use 4066s to switch audio. You can
> use a resistor divider to bias the switch to half rail and capacitively
> couple the audio signal. There are still problems with horrible cross-over
> like distortions which I have never worked out.

The "on" resistance varies from around 300 to about 1000 Ohm, depending on
the instantaneous signal voltage.
At least two ways exist to minimise the effect of this:
1. Ensure the load impedance is much greater (say more than 100 times) than
the switch differential resistance (of 1000 - 300 Ohm).
2. Keep the signal level low eg. use the switch at the "virtual earth"
point in a summing amplifier.

73 de Phil VK3BHR

3497. Going digital

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-19 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7uife6oml1@nnrp1.deja.com>
Source record: 66297

It's an idea that comes up every now and then in this
newsgroup...

In this month's Electronics World (U.K.) there is a fully
digital FM receiver. It connects the antenna (though some
filtering and amplification) to a high-speed ADC (Harris/
Intersil HI5766), processes the bit-stream further (HSP50016)
and then demodulates it in DSP (ADSP-2181). The buzzword
that makes it go is "sub-Nyquist sampling".

I thought it was rather cool...
--
Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte
Satellite: VA3SFL on AO-16, UO-22, KO-23

Sent via Deja.com http://www.deja.com/
Before you buy.

3498. Re: FET switches

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-19 00:00:00 UTC
From: Richard Hosking <richardh@iinet.net.au>
Message-ID: <01bf1a0f$ac6e3ac0$23473bcb@default>
Source record: 66298

--
Richard Hosking
VK6BRO
http://www.iinet.net.au/~richardh/VK6BRO.htm
richardhzap@iinet.net.au

Delete "zap" for address
QRP/Amateur Radio/Microcontrollers

Shawn

I have built a QRP SSB transceiver for 80/40/20 which used simple diodes to switch tuned circuits for each band. Basically there are two diodes at each end of the filter in a series/parallel setup to the signal path. Use inductors to ground/feed DC to the diodes. This setup gave >70 dB of isolation at HF. I used some SM diodes I had but I couldnt tell you what they were! I presume ordinary 1N4148 would work at HF. At Uhf/VHF you would have to use PIN diodes but these are quite expensive and difficult to get for HF. (apparently UHF diodes are not suitable). You could use FET switches but this seems rather complicated. The only problem was that the setup was a little lossy due to the forward resistance of the diodes I used. Another alternative is a NE630 DPDT 50 Ohm switch but these rather expensive.

Richard

3499. Need diode info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-19 00:00:00 UTC
From: Simon Cox <simon.cox@breathe.co.uk>
Message-ID: <380c48ba_1@news2.vip.uk.com>
Source record: 66299
Cross-posted to: rec.ham-radio,rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

Trying to repair TV but have unknown diode.
5G 20E 10 are the ident figures but I can't find it listed.
Does anyone know of a replacement number.

Thanks, G1DRY

3500. Re: LOOKING FOR A 3-1000Z TUBE

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-19 00:00:00 UTC
From: sabbatai_zvi@hotmail.com
Message-ID: <380c445b.5852274@news.earthlink.net>
Source record: 66300

Try asking the guy at:

http://www.thetubeshop.com

I think he may have some.

On 19 Oct 1999 01:05:51 GMT, ts950sdx@aol.com (TS950SDX) wrote:

>IM IN NEED OF A NEW OR GOOD PULL
> 3-1000Z TUBE
>
> MUST BE GOOD
>
> THANKS JOE KF4TOH

3501. L.O.S.A Contribution Form

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-19 00:00:00 UTC
From: cjX@hth.com
Message-ID: <380c7436.513924@news.sverige.net>
Source record: 66301
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

```
List Of Stamp Applications (L.O.S.A for short)
==============================================

If you have done something (big or small) with the BASIC Stamp
that you are willing to tell others please use the form below and
write a short description, nothing fancy is needed just a simple
explanation. If you have source code to share that's even better but
it's not necessary.

Then e-mail the form to:

cj@hth.com

With the following as the subject:

L.O.S.A Contribution

Or you could point your Web-browser to the following URL and fill in
the L.O.S.A form on the Web-page...

http://www.hth.com/losa.htm

The latest version of L.O.S.A is always available at the above
mentioned both in ASCII and in ZIP-file format for easy download.
An index of L.O.S.A is posted to the following mailing lists and
news groups, I will update it approx. once a month.

Mailing lists:

BASIC Stamp Mailing List

News groups:

comp.robotics.misc
comp.home.automation
sci.electronics
sci.electronics.misc
rec.radio.amateur.homebrew

FTP-site:

ftp://ftp.parallaxinc.com/pub/text/losa.txt

You can also find the latest version on the following URL...

http://www.hth.com/losa.htm

[--- cut ---]
```

```
================================================================================
- L.O.S.A Contribution Form -
================================================================================
New Contribution [ ] Update [ ]
--------------------------------------------------------------------------------

Title :
Author: Date:

E-mail: (optional)
--------------------------------------------------------------------------------

Stamp model : BASIC Stamp/BS1-IC/BS2-IC/BS2SX-IC
Code available: YES/NO
Filename : (optional)
URL : (optional)
--------------------------------------------------------------------------------
Description : (5-50 rows describing your application)

================================================================================

[--- cut ---]

Regards,

/Christer

[NOTE: Clear the "X" from my e-mail address if you want to e-mail me]

-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
Send and receive serial data over the power lines... For more info
about the PLM-24 Power Line Modem go to http://www.hth.com/plm-24/
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
```

3502. Help with Simple Transmitter/Reciever

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-19 00:00:00 UTC
From: Jim <jimchapman@entercomp.com>
Message-ID: <3rapXeBx5oJIt0MchMjB4pBQjgs0@4ax.com>
Source record: 66302

My goal is build a simple radio transmitter and reciever with a range of about 20 meter. It's only function is to start a sequence of events controlled by a computer, ie. reciever side trigger a 5Volt input. I have seen a few transmitters and reciever schematics out there but don't know which of them, if any would work together. Can some one please point me to a simple pair that are known to be compatible.

thanks
jim

3503. Re: Help with Simple Transmitter/Reciever

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-19 00:00:00 UTC
From: w4pqwhs@aol.com
Message-ID: <19991019095310.22750.00000247@ng-cr1.aol.com>
Source record: 66303

I would use a garage door opener,they will work for 20 meters and more,they also have filtering to keep out unwanted sigs etc. w4pqw

3504. Re: FET switches

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-19 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <380C7C60.41C6@eece.maine.edu>
Source record: 66304

Richard Hosking wrote:
>
> --
> Richard Hosking
> VK6BRO
> http://www.iinet.net.au/~richardh/VK6BRO.htm
> richardhzap@iinet.net.au
>
> Delete "zap" for address
> QRP/Amateur Radio/Microcontrollers
>
> Shawn
>
> I have built a QRP SSB transceiver for 80/40/20 which used simple diodes to
> switch tuned circuits for each band. Basically there are two diodes at each
> end of the filter in a series/parallel setup to the signal path. Use
> inductors to ground/feed DC to the diodes. This setup gave >70 dB of
> isolation at HF. I used some SM diodes I had but I couldnt tell you what
> they were! I presume ordinary 1N4148 would work at HF. At Uhf/VHF you would
> have to use PIN diodes but these are quite expensive and difficult to get
> for HF. (apparently UHF diodes are not suitable). You could use FET
> switches but this seems rather complicated. The only problem was that the
> setup was a little lossy due to the forward resistance of the diodes I
> used. Another alternative is a NE630 DPDT 50 Ohm switch but these rather
> expensive.
>
> Richard

The diode switching idea apears to be the better idea, at least better
than trying to figure out how to get the FET's to switch well. I think,
when I get around to doing some homebrew, I'll just use diode
switching. Thanks for all the responses!
--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

3505. Re: Tunnel diodes as RF rectifier?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-19 00:00:00 UTC
From: Nick Caruso <nick.caruso@software.com>
Message-ID: <380C7E3F.43AEF6D1@software.com>
Source record: 66305

Peter Bolch wrote:
>
> Hi,
>
> tunnel diodes used in the non-tunneling direction are said to be good RF
> rectifiers. Does anybody here more information about this? Can standard
> tunnel diodes be used or are there special types for rectifiers? What are
> the most important parameters of tunnel diodes if used as rectifier? Can
> this type of rectifier be used for frequencies up to, say, 1.5 GHz?
>
> Peter

The book _The Art of Electronics_ contains a detector circuit using a tunnel diode. They credit it to a radio astronomer at The Haystack Observatory. Don't have the page reference or ISBN number; the authors are Horowitz and Hill.

best regards,

--nick caruso
kb1dej

3506. Re: SRS-455 heater

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-19 00:00:00 UTC
From: Manfred von Gunten <v.gunten.manfred@bluewin.ch>
Message-ID: <380C9B05.5BC54B86@bluewin.ch>
Source record: 66306

Hello Andy

Found in "Radio-Tubes VADEMECUM, P.H. Brans, 1965-67, 20th Edition"

SRS-455 5V / 6.5A Ua=3kV Pout=375W fmax=200MHz

Greetings from Switzerland Manfred

v.gunten.manfred@bluewin.ch

Andrej Laudis schrieb:
>
> Hi all,
>
> Have someone data sheet for vacuum tube SRS-455? How many volts must be
> on heater? I think that is 5V (Like in RE-125C), but i'm not 100% sure.
> Thanx for help es 73!
>
> de Andy/OM1CW
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

3507. Re: homebrew tube HF rcvr

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-19 00:00:00 UTC
From: weathrship@aol.com
Message-ID: <19991019120605.17428.00000464@ng-bk1.aol.com>
Source record: 66307

Thanks, bob!

I checked and found the same station
anywhere on the dial to be about 1 MHz
apart (455 + 455!) .... One is very much
stronger than the other.. At medum waves,
I dont have this problem as I am only tuning from about 200 to 500 metres. At
HF with
that kind of bandspread, I will try winding
coils for higher Q, or change the preselector scheme entirely. Another
person replied re: overcoupling of the IF.
I do wind my own IF coils too, but dont
have proper lab equipment to check for
bandwidth etc.. I am using 'kentucky windage' and I know the bandwith cannot
compete with commercial shielded coils but they are quite adequate and work
well although of a low Q as I am band winding them on an acrylic rod and cant
quite get the criss-crossing of the #30 AWG wire to lessen the effects of
distributed capacitance.
Thank you all for your replies, I hope some
of you who have tried this reply too, and
perhaps some of you who are curious will
try it too, it really is quite easy and you
dont need any special tools, although a
spectrum analyzer and sweep gen would be a nice addition to the 'scope.
:-)

Your radio pal, Tony

3508. Ham Radio and SWL URL

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-19 00:00:00 UTC
From: nw7us@hfradio.removethispart.org
Message-ID: <IC1P3.651$bB1.10962@sea-read.news.verio.net>
Source record: 66308
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Howdy, Folks.

This is an open invitation to browse http://hfradio.org, the NW7US Ham Radio and Shortwave Radio Resource Website.

This non-commercial site offers:

+ Azimuth Map / Equidistant Map Creation (choose any QTH as center, many options

+ Propagational Resources (live, real-time reports, eAlert service (sign up for automatic email solar/geo reports, complete with Aurora index))

+ News, and DX information and reports

+ QSL Manager and Callsign Lookup center

+ Swap and Shop

+ FREE HOME PAGES THAT YOU CAN USE TO POST YOUR OWN HAM OR SWL SITE

+ Bookstore - SWL and Ham related books. Over a 1000 titles so far.

+ Plus more (Directories, etc.)

This is my offering to the community, all funded by me. I am working hard to bring excellent content to the site. I have need for others who might wish to assist. I need a Software editor -- someone who can review and post software links, etc. Let me know if you are interested. (See the site on how to email me).

If you feel up to it, after looking around the site, drop me a note (you'll find my address on the site) and share your thoughts.

73!

--

: World-Wide Communications via Amateur Radio : 122.93W : 47.67N :
: 10x56526 : CW/SSB - DX hunter : Brinnon, WA : Code Warrior #60 :
: visit http://hfradio.org/ :

3509. A/D computer card?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-19 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <380CBCCF.C8EA9CC5@teleport.com>
Source record: 66309

Does anyone know where I can get a card for a PC-type computer to do some simple data acquisition? I'm looking for a relatively inexpensive (say $100 or less) A/D converter plug-in card. It doesn't have to have particularly good resolution (8 bits would be adequate) or accuracy, and a fixed input voltage range is o.k. I used to get a catalog from a company making ruggedized computers and the like for manufacturing applications, and they had that sort of thing, but most of their products were understandably pretty expensive. Does anyone know of one more oriented toward the hobbyist?

I don't want to spend a lot of time fiddling with it, so a plug-in board is really what I'm looking for.

Roy Lewallen, W7EL

3510. overvoltage protection

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-19 00:00:00 UTC
From: james fisher <k4gf@worldnet.att.net>
Message-ID: <7uifi1$810$1@bgtnsc03.worldnet.att.net>
Source record: 66310

For a long time I have used a power supply without any overvoltage protection. Some of these days the pass transistors may short and my radio will get a severe jolt. Is there a common "crow bar" circuit I can add? I remember the crow bar part but not the schematic. Help appreciated, K4GF

3511. Re: A/D computer card?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-19 00:00:00 UTC
From: JW <jdwalton@home.com>
Message-ID: <380CF30E.43BF66E0@home.com>
Source record: 66311

BSoft has a 12 bit card for around $79 - the ANA200 - it has an 8255 type PIA so there is a lot you can do with it. Their URL is www.bsof.com

It is extremely easy to run an 8 bit ADC or DAC off LPT1 - the book "Controlling the World with Your PC" includes a CD-ROM with the DLL's you need under Windows98.

Roy Lewallen wrote:

> Does anyone know where I can get a card for a PC-type computer to do
> some simple data acquisition? I'm looking for a relatively inexpensive
> (say $100 or less) A/D converter plug-in card. It doesn't have to have
> particularly good resolution (8 bits would be adequate) or accuracy, and
> a fixed input voltage range is o.k. I used to get a catalog from a
> company making ruggedized computers and the like for manufacturing
> applications, and they had that sort of thing, but most of their
> products were understandably pretty expensive. Does anyone know of one
> more oriented toward the hobbyist?
>
> I don't want to spend a lot of time fiddling with it, so a plug-in board
> is really what I'm looking for.
>
> Roy Lewallen, W7EL

3512. Re: Equivalent for 2sc185

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-19 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <l5quFPAynMD4EwmV@falstaf.demon.co.uk>
Source record: 66312
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Dear All,
Thank you for the info. When I realised that I didn't need the high temperature resistance of the original device I substituted a BC107 which appears to do the job very well.

The TS500 now appears to work and I am just building up the courage to re-align it.

regards and thanks

Robin

--
Robin Birch robin@falstaf.demon.co.uk

M1ASU/2E0ARJ Old computers and radios always welcome

3513. Re: 137MHz WXSAT Receiver ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-19 00:00:00 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <7uiit5$t3j$3@lure.pipex.net>
Source record: 66313
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Simon Lewis wrote ...
> 49 quid from remote imaging group. as good as anything commercial.

137 MHz I can do, The link to the PC via the sound card already exists for
PSK31 and Hell, is there any FREE Wefax decoding Software,
and whilst I'm asking how about Amtor Software and RTTY
I can do the Amtor with an AMT-1 but reconfiguring would be better with a
suite of decoding PC software.

Gary7SLL

3514. FS: RG-8X Coax

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-19 00:00:00 UTC
From: Manuel Perry <mperry5@ix.netcom.com>
Message-ID: <380CCFC0.16C12BE@ix.netcom.com>
Source record: 66314

RG-8X coax cable for sale on ebay at:

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=184344122

3515. FS: 1000's of Tubes, very low prices

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-19 00:00:00 UTC
From: MURRAY PASTERNACK <M.PASTERNACK@prodigy.net>
Message-ID: <7uijko$3f1c$1@newssvr04-int.news.prodigy.com>
Source record: 66315
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

e-mail mailto:m.pasternack@prodigy.com for 10 page list. Murray W6KRC

3516. Re: WANTED 24 VDC 6 AMP POWER SUPPLY

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-19 00:00:00 UTC
From: Rich Grise <offduty@entheosengineering.com>
Message-ID: <380CEC16.16EE@entheosengineering.com>
Source record: 66316
Cross-posted to: alt.comp.hardware.homebuilt,alt.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.swap,sci.electronics.equipment

kable guy minn wrote:
>
> HELLO
> looking for a 24vdc @6 amp power supply for a amp from a cell site. doesn't
> need to be the matching unit but would be nice.. (ERICSSON) AMP
>
> thanks
> Bill
> n0mnb@minn.net

try
http://power-one.com/

Or put "Power Supplies" in your favorite search engine -
mine is http://www.metacrawler.com .

Cheers!
Rich

3517. Re: A/D computer card?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-19 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <380CF434.1CFB3EAF@teleport.com>
Source record: 66317

Thanks!

Roy Lewallen, W7EL

JW wrote:
>
> BSoft has a 12 bit card for around $79 - the ANA200 - it has an 8255 type
> PIA so there is a lot you can do with it. Their URL is www.bsof.com
>
> It is extremely easy to run an 8 bit ADC or DAC off LPT1 - the book
> "Controlling the World with Your PC" includes a CD-ROM with the DLL's you
> need under Windows98.

3518. Re: overvoltage protection

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-19 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <380CF7FA.C9A49FC0@teleport.com>
Source record: 66318

One of the hard parts of making a crowbar circuit is making it fast enough that the overvoltage won't kill your radio before the crowbar kicks in. Probably the most reliable and fastest is simply a herky zener across the output. (A problem with this is that its dissipation might get very high before the fuse blows.) One that's a little slower can be made like this:

Connect an SCR with the anode to the supply line and cathode to ground. Gate to ground through a moderate sized resistor. Zener from the gate to the supply bus (cathode to supply bus). I'd also put a resistor in series with the zener to keep from frying the gate. You can replace the zener with a resistor if you can tolerate the uncertainty of the SCR gate turn-on voltage to determine where the crowbar fires. The advantage to the SCR over the plain zener is that the voltage across the SCR will be low when it's on, so its dissipation won't be nearly as high as the plain zener. Also, it'll take out the fuse faster.

The care you have to take in the circuit design depends on the difference between the maximum normal operating voltage and the maximum allowable voltage for the crowbar to fire. If they're nearly the same voltage, you have to pay attention to things like gate and zener voltage change with temperature, zener voltage tolerance, and zener voltage as a function of zener current.

Make sure you have a fuse between the power supply and the crowbar circuit, and that the active device can handle the energy it gets before the fuse blows.

Roy Lewallen, W7EL

james fisher wrote:
>
> For a long time I have used a power supply without any overvoltage
> protection. Some of these days the pass transistors may short and my radio
> will get a severe jolt. Is there a common "crow bar" circuit I can add? I
> remember the crow bar part but not the schematic. Help appreciated, K4GF

3519. Re: Going digital

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-19 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <380CF9A3.7A61E23D@teleport.com>
Source record: 66319

I hope they're not trying to pawn off "sub-Nyquist sampling" as a new idea. Tektronix sampling scopes dating back to the '60s use it. (Typical sampling rate for a 10-50 GHz bandwidth scope is 100 kHz to a few MHz.)

The Nyquist limit applies only if you require a real-time, frequency-unscaled replica of the input waveform. If the waveform is repetitive and you don't need the result in real time, you can sample much more slowly. (Of course, for real-time one-shot events you can also interlace multiple sub-Nyquist samplers to get what amounts to above-Nyquist sampling. Modern digital scopes also use this technique.)

Roy Lewallen, W7EL

marsgal42@hotmail.com wrote:
>
> It's an idea that comes up every now and then in this
> newsgroup...
>
> In this month's Electronics World (U.K.) there is a fully
> digital FM receiver. It connects the antenna (though some
> filtering and amplification) to a high-speed ADC (Harris/
> Intersil HI5766), processes the bit-stream further (HSP50016)
> and then demodulates it in DSP (ADSP-2181). The buzzword
> that makes it go is "sub-Nyquist sampling".
>
> I thought it was rather cool...
> --
> Laura Halliday VA3LDH "Que les nuages soient notre pied
> Grid: FN03gs a terre..." - Hospital/Shafte
> Satellite: VA3SFL on AO-16, UO-22, KO-23
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

3520. Re: Going digital

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-19 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <380CF98B.60B6D676@teleport.com>
Source record: 66320

I hope they're not trying to pawn off "sub-Nyquist sampling" as a new idea. Tektronix sampling scopes dating back to the '60s use it. (Typical sampling rate for a 10-50 GHz bandwidth scope is 100 kHz to a few MHz.)

The Nyquist limit applies only if you require a real-time, frequency-unscaled replica of the input waveform. If the waveform is repetitive and you don't need the result in real time, you can sample much more slowly. (Of course, for real-time one-shot events you can also interlace multiple sub-Nyquist samplers to get what amounts to above-Nyquist sampling. Modern digital scopes also use this technique.)

Roy Lewallen, W7EL

marsgal42@hotmail.com wrote:
>
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> newsgroup...
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> digital FM receiver. It connects the antenna (though some
> filtering and amplification) to a high-speed ADC (Harris/
> Intersil HI5766), processes the bit-stream further (HSP50016)
> and then demodulates it in DSP (ADSP-2181). The buzzword
> that makes it go is "sub-Nyquist sampling".
>
> I thought it was rather cool...
> --
> Laura Halliday VA3LDH "Que les nuages soient notre pied
> Grid: FN03gs a terre..." - Hospital/Shafte
> Satellite: VA3SFL on AO-16, UO-22, KO-23
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

3521. Re: overvoltage protection

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-19 00:00:00 UTC
From: Bob - W7AVK <rsrolfne@atnet.net>
Message-ID: <380CFA26.B2185EB3@atnet.net>
Source record: 66321

James - Yes. Some years ago such an attachment was common. Normally it considered of something like a zener diode and a SCR. Connect your power supply to its load through a fuse and this device across the load. If the output voltage ever went high the zener would conduct and fire the SCR which would short the supply and blow the fuse.

What voltage where you look for as I may have some of these guys in the junk box.

73's Bob W7AVK

james fisher wrote:

> For a long time I have used a power supply without any overvoltage
> protection. Some of these days the pass transistors may short and my radio
> will get a severe jolt. Is there a common "crow bar" circuit I can add? I
> remember the crow bar part but not the schematic. Help appreciated, K4GF

3522. Re: Going digital

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-19 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <380D064B.5C18@pop.removethistomailme.net>
Source record: 66322

Roy Lewallen wrote:
>
> I hope they're not trying to pawn off "sub-Nyquist sampling" as a new
> idea. Tektronix sampling scopes dating back to the '60s use it. (Typical
> sampling rate for a 10-50 GHz bandwidth scope is 100 kHz to a few MHz.)
>
> The Nyquist limit applies only if you require a real-time,
> frequency-unscaled replica of the input waveform. If the waveform is
> repetitive and you don't need the result in real time, you can sample
> much more slowly. (Of course, for real-time one-shot events you can also
> interlace multiple sub-Nyquist samplers to get what amounts to
> above-Nyquist sampling. Modern digital scopes also use this technique.)
>

Not really the same thing as equivalent-time sampling, I don't imagine.
What they're probably doing is recovering the intelligence from an alias
of the carrier, rather than the carrier itself. The baseband signal can
be recovered from a folded-over alias of the carrier just as well as it
can be recovered from the carrier itself. At first glance, broadcast FM
seems like a good application for this because the capture effect could
overcome interference from unwanted aliases.

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

3523. Re: overvoltage protection

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-19 00:00:00 UTC
From: Joe Leikhim <jleikhim@nettally.com>
Message-ID: <380D30DA.C1E7933F@nettally.com>
Source record: 66323

Check out Lambda and Motorola Semiconductors. I am told they both have OVP modules. Be sure to get one with enough headroom so that it won't fire prematurely. Most radios can tolerate about 16 volts. Be sure your PS has some form of current limiting fuse before the OVP or things might cook. Another idea would be a zener/relay arrangment that pulls in if voltage gets too high or polarity reverses.

james fisher wrote:

> For a long time I have used a power supply without any overvoltage
> protection. Some of these days the pass transistors may short and my radio
> will get a severe jolt. Is there a common "crow bar" circuit I can add? I
> remember the crow bar part but not the schematic. Help appreciated, K4GF

--
Joe Leikhim K4SAT (EX KE4TZH)
Jleikhim@nettally.com

"tv dinner by the pool,
i'm so glad i finished school" -F.Zappa 1967

"The Revolution will NOT be televised" -Gil Scott Heron

3524. Re: need a single channel TV bandpass filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-19 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <gEINOAwEpbG61oNwhqRNdVtOmEmR@4ax.com>
Source record: 66324
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On Mon, 18 Oct 1999 23:29:22 -0500, Aart Olsen <aolsen@prairienet.org> wrote:

>Well it turns out to be not so bad and not so simple...
>
>Software/soundcard DSPs can clean up the audio. I really like and
>recommend the very elegant GNASP1, freeware from
>http://members.tripod.com/~gniephaus/gnasp1/gnasp1.html, by the way.
>
>I'm perhaps not hearing meteors after all. Meteor heads decelerate
>quickly and so the audio "ping" drops in frequency. The things I hear
>don't do this.
>
>Thanks to everyone for your thoughtful comments!

Hi Aart,

You might want to visit
http://www.monumental.com/rshorne/examples.html
which has an example wav file for "Meteor Trail Echoes" with that example
sounding (ping) much like what they identify as satellites.

This site also has a freeware spectrum analyzer, but the display format is more
that of the audiologist.

73's
Richard Clark, KB7QHC

3525. Re: A/D computer card?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-19 00:00:00 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <TlfP3.3777$r46.2081@news.indigo.ie>
Source record: 66325

Roy Lewallen <w7el@teleport.com> wrote in message
news:380CBCCF.C8EA9CC5@teleport.com...
> Does anyone know where I can get a card for a PC-type computer to do
> some simple data acquisition? I'm looking for a relatively inexpensive
> (say $100 or less) A/D converter plug-in card.

Try http://www.picotech.com

I haven't looked there for a while. I hope the address is still ok.

73, Ed. EI9GQ

--

http://www.qsl.net/ei9gq

Remove 'X' to reply

3526. What's a good 2m tranceiver kit?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-20 00:00:00 UTC
From: troglodite@aol.com
Message-ID: <19991020102859.03749.00000083@ng-fi1.aol.com>
Source record: 66191

Greetings,

I'm thinking of purchasing a 2m transceiver kit. I've looked at the TenTec and the Ramsey FX146. Does anybody have any experience with either of these? Or alternately, can someone recommend a good kit? I'm on a tight budget.

Doug Moore KB9TMY (Formerly K6HWY)

3527. Re: What's a good 2m tranceiver kit?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-20 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <380E20C5.6474EBCB@bellsouth.net>
Source record: 66192

Troglodite wrote:
> I'm thinking of purchasing a 2m transceiver kit. I've looked at the TenTec and
> the Ramsey FX146. Does anybody have any experience with either of these? Or
> alternately, can someone recommend a good kit? I'm on a tight budget.

While I've not built either of the kits in question, I did build the
Ramsey 440MHz unit and a TenTec HF QRP radio. I would recommend the
TenTec. Better quality parts, sturdier chassis/cabinet, better
instructions.
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

3528. Re: What's a good 2m tranceiver kit?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-20 00:00:00 UTC
From: Ed Schick <schick@#us.ibm.com>
Message-ID: <380e06e6_3@news1.prserv.net>
Source record: 66193

I'm currently building the Ten-Tec 20 meter to 6 meter transverter (and modifying it to use a 10 meter rig instead of a 20 meter rig, but that's another story). I think their kit is very good and their instructions excellent. Also, they provide good support via the phone. If ny experience is representative of all their stuff, then the 2M kit is likely a good choice. Ed

Troglodite wrote:

> Greetings,
>
> I'm thinking of purchasing a 2m transceiver kit. I've looked at the TenTec and
> the Ramsey FX146. Does anybody have any experience with either of these? Or
> alternately, can someone recommend a good kit? I'm on a tight budget.
>
> Doug Moore KB9TMY (Formerly K6HWY)

3529. Re: RF Choke value?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-20 00:00:00 UTC
From: Ed Schick <schick@#us.ibm.com>
Message-ID: <380e0594_3@news1.prserv.net>
Source record: 66194

I don't know how much isolation I'll need,
but this is not a precision instrument, so
I expect some "leak through" will do no
damage. I'll be using .01 uf after the choke.
And I'm wondering if I can get away with
a ferrite bead or two. The circuit is right
out of the ARRL amateur radio handbook,
but it does not discuss the choke at all, other
than showing it on the schematic. In fact,
there are two ciruits shown (in the 1988
handbook). I designed the thing on paper
first - then dumb me, I thought of looking
in the handbook. The first circuit I found
was identical to mine, except it showed
no choke. Instead, it spoke of using the
switching diodes in series AND in shunt
mode, to positively prevent the xtal that
is supposed to be off from running - a
concept I had not thought of. But no RFC
was shown, leading me to think I had
overdesigned. But I wondered about that
long enough to keep searching, and finally
discovered a schematic in there that did show
the choke. I was g;ad that my paper design
matched what I found - but stiil nothing on
determining the choke value. That made me
begin to think that the value isn't all that
important - just shoot for a large Z.
But, bottom line, I don't know enough, yet,
to figure it out. My hope is someone who
has played around with this will provide
some pointers - and yours - considering
how much isolation is needed - is good.
It opens up new line of thought: how do I
know how much isolation is needed? What
factors apply? How could I measure things
to determine that? And so forth - all stuff
I don't know. You whet my appetite!
Thanks, Ed

Thomas C. Sefranek wrote:

> WIZ wrote:
>
> > I'm building an xtal oscillator to run at two frequencies - 22 and 24 Mhz.

> > I intend to use diode switching:
> > xsistorbase---xtal---trimmercap--XX--diode---ground
> > The +12 volt line (through 4.7K) will be switched to the point marked XX.
> > How do I determine the reactance to use to keep RF off the +12v
> > line? Or do I just stuff as big of a choke as I can fit in there? Space
> > IS
> > a problem. 73 Ed AF2P
> > --
>
> Well, how MUCH isolation do you require to satisfy "keep RF off the +12v"?
> It's all a matter of what level CAN you tollerate? (-40 db?, -50, -120?
> what?)
> You will be using a bypass cap after the coil right?
> What value is it? (It contrbutes to the isolation as part of a low pass
> filter.)
>
> --
> Thomas C. Sefranek WA1RHP
> ARRL Instructor, Technical Specialist, VE Contact.
> http://www.harvardrepeater.org
> http://hamradio.cmcorp.com/inventory/Inventory.html

3530. Re: RF Choke value?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-20 00:00:00 UTC
From: troglodite@aol.com
Message-ID: <19991020145257.24690.00000083@ng-ch1.aol.com>
Source record: 66195

>> > I'm building an xtal oscillator to run at two frequencies - 22 and 24
>Mhz.
>> > I intend to use diode switching:
>> > xsistorbase---xtal---trimmercap--XX--diode---ground
>> > The +12 volt line (through 4.7K) will be switched to the point marked XX.
>> > How do I determine the reactance to use to keep RF off the +12v
>> > line? Or do I just stuff as big of a choke as I can fit in there? Space
>> > IS
>> > a problem. 73 Ed AF2P

Depending on the circuit, a resistor may work as well as a choke, and is (usually) smaller. Otherwise, I'd suggest 10-20 microhenries ought to do it. If it's a Pierce oscillator, you may need the Q of the choke, otherwise an overtone crystal may decide to oscillate at it's fundamental and really confuse things.

Doug Moore

3531. question about VFO design

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-20 00:00:00 UTC
From: Nick Caruso <nick.caruso@software.com>
Message-ID: <380E0FD1.3D23D4F@software.com>
Source record: 66196

A simple question (I hope):

I'm building a VFO. I've checked out lots of schematics/designs for homebrew VFOs, and they
all seem to have very restricted tuning ranges, often less than 1MHz.

Why is this? I can think of several possibilities:

1) larger tuning ranges lead to instability (for reasons I don't understand)
2) people are working with tuning caps that don't have reduction drives/and or have
small ranges of capacitance
3) just because they're designing for the CW portions of the various HF bands and don't ever intend to go outside them.

My guess is it's #2 or #3. Anything else?

My nefarious plan is to build an HF VFO that tunes from 7 to 8 MHz and mix that with a crystal oscillator running at 43MHz, yielding a sum at 50 - 51 MHz(*), and then use the thing with the miniR2 receiver and a T2 based SSB transmitter to do weak-signal work on six meters this spring/summer.

(*) Yes, I know I have to filter the difference frequency! Suggestions there would be welcomed.
my vague plan is to use a band-pass diplexer after the mixer, followed by some gain stages to
get me to 8 or 9 dBm, to drive the miniR2 and T2 mixer chains.

I've got a reduction-drive equipped 25-145pF air variable behemoth cap stamped "ARC" on one end, assumed to be of WWII vintage, so it seems like I should be able to get decent tuning over a 1 MHz range.

Is this reasonable?

thanks and 73

nick caruso
kb1dej

3532. Re: What's a good 2m tranceiver kit?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-20 00:00:00 UTC
From: troglodite@aol.com
Message-ID: <19991020150331.24690.00000084@ng-ch1.aol.com>
Source record: 66197

Ed,

Thanks for your input, and also thanks to Doug Smith.

I'm trying to get back on the air after a mere 39 year absence. Got my ticket back last year, and restored an old Hallicrafters 6m AM rig, but there doesn't seem to be any activity in my area - at least on AM. (Maybe there isn't any 6m AM activity ANYWHERE.) Anyway, while I'm putting together a 40M CW transmitter, I'd like to add a few more entries in my log.

Doug Moore KB9TMY

3533. Re: question about VFO design

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-20 00:00:00 UTC
From: dpotter@bbn.com
Message-ID: <380e1a43.15222258@news>
Source record: 66198

Nick,

good set of goals. Go for it!

The reason for restricting the tuning range of a VFO that uses a
variable capacitor involves the mechanical limitations of such things:
It is tough to avoid drift and mechanical sensititivity when you have
a very wide swing of capacitance. For example, your 25-145 pF cap will
tune from 8 MHz down to 3.32 MHz with a 15.8 uH inductor. You will be
using only 20% of the range; not a problem in itself, but now any
backlash, vibration, or drift due to temperature will be five times
what you would encounter with a cap that was just the right size.

My suggestion is that you calculate the capacitance range you need and
pull plates off the cap until you can achieve just that. Or put a
capacitor in series with it to make the total change correct for the
tuning range you need.

Let us know how the projec turns out!

73

Dave
K1MBO

On Wed, 20 Oct 1999 14:54:09 -0400, Nick Caruso
<nick.caruso@software.com> wrote:

>A simple question (I hope):
>
>I'm building a VFO. I've checked out lots of schematics/designs for homebrew
>VFOs, and they
>all seem to have very restricted tuning ranges, often less than 1MHz.
>
>Why is this? I can think of several possibilities:
>
>1) larger tuning ranges lead to instability (for reasons I don't understand)
>2) people are working with tuning caps that don't have reduction drives/and or
>have
> small ranges of capacitance
>3) just because they're designing for the CW portions of the various HF bands
> and don't ever intend to go outside them.
>
>My guess is it's #2 or #3. Anything else?
>
>My nefarious plan is to build an HF VFO that tunes from 7 to 8 MHz and mix that
>with a crystal oscillator running at 43MHz, yielding a sum at 50 - 51 MHz(*),

>and then use the thing with the miniR2 receiver and a T2 based SSB transmitter
>to do weak-signal work on six meters this spring/summer.
>
> (*) Yes, I know I have to filter the difference frequency! Suggestions there
>would be welcomed.
> my vague plan is to use a band-pass diplexer after the mixer, followed by
>some gain stages to
> get me to 8 or 9 dBm, to drive the miniR2 and T2 mixer chains.
>
>I've got a reduction-drive equipped 25-145pF air variable behemoth cap stamped
>"ARC" on one end, assumed to be of WWII vintage, so it seems like I should be
>able to get decent tuning over a 1 MHz range.
>
>Is this reasonable?
>
> thanks and 73
>
> nick caruso
> kb1dej

3534. Re: overvoltage protection

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-20 00:00:00 UTC
From: trucker <trucker@wcoil.com>
Message-ID: <7ul9q7$4p5$0@208.10.3.123>
Source record: 66199

Roy Lewallen wrote:

> One of the hard parts of making a crowbar circuit is making it fast
> enough that the overvoltage won't kill your radio before the crowbar
> kicks in. Probably the most reliable and fastest is simply a herky zener
> across the output. (A problem with this is that its dissipation might
> get very high before the fuse blows.) One that's a little slower can be
> made like this:
>
> Connect an SCR with the anode to the supply line and cathode to ground.
> Gate to ground through a moderate sized resistor. Zener from the gate to
> the supply bus (cathode to supply bus). I'd also put a resistor in
> series with the zener to keep from frying the gate. You can replace the
> zener with a resistor if you can tolerate the uncertainty of the SCR
> gate turn-on voltage to determine where the crowbar fires. The advantage
> to the SCR over the plain zener is that the voltage across the SCR will
> be low when it's on, so its dissipation won't be nearly as high as the
> plain zener. Also, it'll take out the fuse faster.
>
> The care you have to take in the circuit design depends on the
> difference between the maximum normal operating voltage and the maximum
> allowable voltage for the crowbar to fire. If they're nearly the same
> voltage, you have to pay attention to things like gate and zener voltage
> change with temperature, zener voltage tolerance, and zener voltage as a
> function of zener current.
>
> Make sure you have a fuse between the power supply and the crowbar
> circuit, and that the active device can handle the energy it gets before
> the fuse blows.
>
> Roy Lewallen, W7EL
>
> james fisher wrote:
> >
> > For a long time I have used a power supply without any overvoltage
> > protection. Some of these days the pass transistors may short and my radio
> > will get a severe jolt. Is there a common "crow bar" circuit I can add? I
> > remember the crow bar part but not the schematic. Help appreciated, K4GF

I found this site that may be useful

3535. Need schematic.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-20 00:00:00 UTC
From: Hank Lewis <lewisjr@dmci.net>
Message-ID: <380e6fd6@nntp-out.newsnerds.com>
Source record: 66200

Hello all...
I'm looking for schematics to build my own 30A 13.8V supply....I would like to utilize 200mA meters for monitoring the volts and current as I already have these on hand....Nearly all the schematics I have found on the net are for 6A or less which aren't enough to power the rigs in my shack....
Please respond to lewisjr@dmci.net
73's
=Hank=

3536. Re: What's a good 2m tranceiver kit?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-20 00:00:00 UTC
From: Bryan Fields <kb9mci@urbancom.net>
Message-ID: <380DB6F9.68E2F5BE@urbancom.net>
Source record: 66201

I have built the 220 MHz kit and if the 2m kit is similar then it is a "damn good kit".
I also believe that the ramseys kit has a inferiour recever and trasmitter. it is also hard to add a pl to it. where as the ten-tec kit is well designed and has a digital read out and pl out of the box. plus for $64 more you can have 30W out. this would also be a good radio to experment with beacuse you could custom program your own PIC microcontroller if you felt like doing it.

hope that helps,

Bryan Fields, KB9MCI

Troglodite wrote:

> Greetings,
>
> I'm thinking of purchasing a 2m transceiver kit. I've looked at the TenTec and
> the Ramsey FX146. Does anybody have any experience with either of these? Or
> alternately, can someone recommend a good kit? I'm on a tight budget.
>
> Doug Moore KB9TMY (Formerly K6HWY)

3537. Re: What's a good 2m tranceiver kit?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-20 00:00:00 UTC
From: Bryan Fields <kb9mci@urbancom.net>
Message-ID: <380DB716.702C2108@urbancom.net>
Source record: 66202

I have built the 220 MHz kit and if the 2m kit is similar then it is a "damn good kit".
I also believe that the Ramsey kit has a inferior receiver and transmitter. it is also hard to add a pl to it. where as the ten-tec kit is well designed and has a digital read out and pl out of the box. plus for $64 more you can have 30W out. this would also be a good radio to experiment with because you could custom program your own PIC micro controller if you felt like doing it.

hope that helps,

Bryan Fields, KB9MCI

Troglodite wrote:

> Greetings,
>
> I'm thinking of purchasing a 2m transceiver kit. I've looked at the TenTec and
> the Ramsey FX146. Does anybody have any experience with either of these? Or
> alternately, can someone recommend a good kit? I'm on a tight budget.
>
> Doug Moore KB9TMY (Formerly K6HWY)

3538. amp design question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-20 00:00:00 UTC
From: Bryan Fields <kb9mci@urbancom.net>
Message-ID: <380DB9D1.5F5030B1@urbancom.net>
Source record: 66203

Basically my question is if I use a transistor that is designed for class C in a amp, does the input and output impedance change when I bias it up to class B or AB. The transistor I am using is a MRF 461.

I looked over all the info I have and could not find anything about this. I am new to this radio stuff, just having been licensed for 3 yrs. now.

Thank You in advance,

Bryan Fields, KB9MCI

3539. Re: amp design question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-20 00:00:00 UTC
From: Bob Liesenfeld <wb0poq@visi.com>
Message-ID: <380E6E63.65F7AB9B@visi.com>
Source record: 66204

Bryan Fields wrote:
>
> Basically my question is if I use a transistor that is designed for
> class C in a amp, does the input and output impedance change when I bias
> it up to class B or AB. The transistor I am using is a MRF 461.
>
> I looked over all the info I have and could not find anything about
> this. I am new to this radio stuff, just having been licensed for 3
> yrs. now.
>
Oh baby, does it ever.... ;) The input Z will vary over a
considerable range when moving through the classes. The input
resistance as well as reactance both change. Output Z is a tougher
nut... usually Z out is quite high and the output ckt is designed to
present a particular Z to the collector ckt for a given power out.
Motorola prints (or least did) a number of manuals that give specs for
many of their power devices. Most of the specs are for 50MHz and up
though.

Many of the DeMaw books do a good job of introducing this subject.

Good luck es 72

Bob 'POQ

--
Genuine E-mail From the Land of the Everlasting Icicle...
Bob Liesenfeld
wb0poq@visi.com

3540. Re: overvoltage protection

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-20 00:00:00 UTC
From: dialcover@webtv.net
Message-ID: <27012-380E7462-5@storefull-122.bryant.webtv.net>
Source record: 66205

A DIODE PREVENTS REVERSE CURRENT. A RELAY IS TO SLOW TO PROTECT THE
RADIO.

disregard caps, visual problem
Bill Turner WA0ABI
1117 Pike Street
Saint Charles, MO 63301
636-949-2210

3541. Re: amp design question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-20 00:00:00 UTC
From: alforo <alforo@megisnet.com>
Message-ID: <R5yP3.28$HG3.1799@news.corecomm.net>
Source record: 66206

Bryan Fields wrote in message <380DB9D1.5F5030B1@urbancom.net>...
>Basically my question is if I use a transistor that is designed for
>class C in a amp, does the input and output impedance change when I bias
>it up to class B or AB. The transistor I am using is a MRF 461.

Wow, either the MRF 461 is VERY old or brand new. I could not find any info on it in my umpteen year old library. Anyway, yes, unfortunately, the S parameters will most certainly change when you change the class of operation. As a consequence, the input/output impedances change accordingly.

73, AL, w6wqc e-mail alforo@megsinet.net

3542. One more try

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-20 00:00:00 UTC
From: Ron Angle K6KYJ <k6kyj@hotmail.com>
Message-ID: <FByP3.159$mi.3206@news2.randori.com>
Source record: 66207

Would appreciate any advice, comments, circuits diagrams, etc. I am trying to match impedance between a 500 ohm microphone element on a boom mike and a 50K ohm input impedance on a TS-820.

3543. Re: High-rate capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-20 00:00:00 UTC
From: Fidel Leon <ea3gip@pobox.com>
Message-ID: <7ujv70fcn1@diana.bcn.ttd.net>
Source record: 66208

Richard Karlquist escribi&#65533; en mensaje <7u3drv$8hr$1@vax.area.com>...
>In article <7u2adcajj1@diana.bcn.ttd.net>, Fidel Leon <fleon@bcg.es>
wrote:
>>good sources of high-power capacitors.
>Here in the states, you can get power mica caps from RF parts, which
>advertises in the ham magazines.

Thanks for the reply, I will look for them!! 73,

Fidel Leon - EA3GIP
ea3gip@pobox.com

3544. Re: Need diode info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-20 00:00:00 UTC
From: It's me <RMAYER@kscable.com>
Message-ID: <jh9P3.14686$o_2.157329@typhoon2.kc.rr.com>
Source record: 66326
Cross-posted to: rec.ham-radio,rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

Where is it used at and doing what??

Simon Cox <simon.cox@breathe.co.uk> wrote in message
news:380c48ba_1@news2.vip.uk.com...
> Trying to repair TV but have unknown diode.
> 5G 20E 10 are the ident figures but I can't find it listed.
> Does anyone know of a replacement number.
>
> Thanks, G1DRY
>
>
>
>

3545. RF Choke value?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-20 00:00:00 UTC
From: WIZ <WIZ@prodigy.net>
Message-ID: <01bf1aab$7e6a78e0$3c1ffed1@newmicronpc>
Source record: 66327

I'm building an xtal oscillator to run at two frequencies - 22 and 24 Mhz.
I intend to use diode switching:
xsistorbase---xtal---trimmercap--XX--diode---ground
The +12 volt line (through 4.7K) will be switched to the point marked XX.
How do I determine the reactance to use to keep RF off the +12v
line? Or do I just stuff as big of a choke as I can fit in there? Space
IS
a problem. 73 Ed AF2P
--

3546. Re: Going digital

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-20 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7ukgn3$5bu$1@nnrp1.deja.com>
Source record: 66328

In article <380D064B.5C18@pop.removethistomailme.net>,
jmiles@pop.removethistomailme.net wrote:

> Not really the same thing as equivalent-time sampling, I don't
imagine.
> What they're probably doing is recovering the intelligence from an
alias
> of the carrier, rather than the carrier itself...

This is exactly what they're doing - and, no, they're not passing
it off as something new. But being able to do it on anything less
than a professional/military budget *is* a fairly new development.
--
Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte
Satellite: VA3SFL on UO-22, KO-25

Sent via Deja.com http://www.deja.com/
Before you buy.

3547. Re: Need diode info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-20 00:00:00 UTC
From: Simon Cox <simon.cox@breathe.co.uk>
Message-ID: <380d71cd_2@news1.vip.uk.com>
Source record: 66329
Cross-posted to: rec.ham-radio,rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

I don't have a circuit diagram and beyond the fact that it looks like its in the psu but not HT I couldn't tell you. The diode looks like a 1N4000 series but fatter and is a diode not zener, a guy from the USA has emailed some specs, seems they know it there, but I can't match them up either. It's in a Matsui set that was sold here, a bit old now though.

It's me <RMAYER@kscable.com> wrote in message
news:jh9P3.14686$o_2.157329@typhoon2.kc.rr.com...
> Where is it used at and doing what??
>
> Simon Cox <simon.cox@breathe.co.uk> wrote in message
> news:380c48ba_1@news2.vip.uk.com...
> > Trying to repair TV but have unknown diode.
> > 5G 20E 10 are the ident figures but I can't find it listed.
> > Does anyone know of a replacement number.
> >
> > Thanks, G1DRY
> >
> >
> >
> >
>
>

3548. Re: 137MHz WXSAT Receiver ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-20 00:00:00 UTC
From: afrb2@cus.cam.ac.uk
Message-ID: <7uk1te$3tu$1@pegasus.csx.cam.ac.uk>
Source record: 66330
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

In article <7uiit5$t3j$3@lure.pipex.net>,
Gary Peach <xcg34@dial.pipex.com> wrote:
>
>Simon Lewis wrote ...
>> 49 quid from remote imaging group. as good as anything commercial.
>
>137 MHz I can do, The link to the PC via the sound card already exists for
>PSK31 and Hell, is there any FREE Wefax decoding Software,
>and whilst I'm asking how about Amtor Software and RTTY
>I can do the Amtor with an AMT-1 but reconfiguring would be better with a
>suite of decoding PC software.
>
I found the JVFAX software suite seemed able to do WEFAX; but not
via the sound card, you need a special interface (diagrams are included)
and it's not very hard to build. WEFAX is a multilevel grey-scale
tranmsmission mode, rather than the black and white of the simpler
two tone FSK used for `faxing' weather maps.

Alan

3549. Re: 137MHz WXSAT Receiver ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-20 00:00:00 UTC
From: Roger Basford <Roger@g3vkm.demon.co.uk>
Message-ID: <c4Y2tAAjnXD4EwQ+@g3vkm.demon.co.uk>
Source record: 66331
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

In article <7uiit5$t3j$3@lure.pipex.net>, Gary Peach
<xcg34@dial.pipex.com> writes
>
>Simon Lewis wrote ...
>> 49 quid from remote imaging group. as good as anything commercial.
>
>137 MHz I can do, The link to the PC via the sound card already exists for
>PSK31 and Hell, is there any FREE Wefax decoding Software,
>and whilst I'm asking how about Amtor Software and RTTY
>I can do the Amtor with an AMT-1 but reconfiguring would be better with a
>suite of decoding PC software.
>
>Gary7SLL
>
>
Gary,

You can get all the (free!) software you need from the RIG Web site,
www.rig.org.uk

Cheers,

Roger Basford

3550. Re: 137MHz WXSAT Receiver ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-20 00:00:00 UTC
From: Simon Lewis <slewis@pacsat.demon.co.uk>
Message-ID: <oczqrEAOuWD4EwIX@pacsat.demon.co.uk>
Source record: 66332
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

In article <7uiit5$t3j$3@lure.pipex.net>, Gary Peach
<xcg34@dial.pipex.com> writes
>
>Simon Lewis wrote ...
>> 49 quid from remote imaging group. as good as anything commercial.
>
>137 MHz I can do, The link to the PC via the sound card already exists for
>PSK31 and Hell, is there any FREE Wefax decoding Software,
>and whilst I'm asking how about Amtor Software and RTTY
>I can do the Amtor with an AMT-1 but reconfiguring would be better with a
>suite of decoding PC software.
>
>Gary7SLL
>
>

you need a wide BW at 137 MHz though Gary. Needs to be 80 KHz or so.

There is loads of PC software for downloading to do APT service, try
WXSAT as one good one.

Not sure about AMTOR but quite a few RTTY decoders available.

73 Simon GM4PLM
+--+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
| Fax Service- 0870 0520972 |
+--+

3551. Re: RF Choke value?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-20 00:00:00 UTC
From: "Thomas C. Sefranek" <tcs@cmcorp.com>
Message-ID: <380D851C.7E14743A@cmcorp.com>
Source record: 66333

WIZ wrote:

> I'm building an xtal oscillator to run at two frequencies - 22 and 24 Mhz.
> I intend to use diode switching:
> xsistorbase---xtal---trimmercap--XX--diode---ground
> The +12 volt line (through 4.7K) will be switched to the point marked XX.
> How do I determine the reactance to use to keep RF off the +12v
> line? Or do I just stuff as big of a choke as I can fit in there? Space
> IS
> a problem. 73 Ed AF2P
> --

Well, how MUCH isolation do you require to satisfy "keep RF off the +12v"?
It's all a matter of what level CAN you tollerate? (-40 db?, -50, -120?
what?)
You will be using a bypass cap after the coil right?
What value is it? (It contrbutes to the isolation as part of a low pass
filter.)

--
Thomas C. Sefranek WA1RHP
ARRL Instructor, Technical Specialist, VE Contact.
http://www.harvardrepeater.org
http://hamradio.cmcorp.com/inventory/Inventory.html

3552. Re: 137MHz WXSAT Receiver ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-20 00:00:00 UTC
From: geoff@nospam.demon.co.uk
Message-ID: <FJwHCx.3Jz@nospam.demon.co.uk>
Source record: 66334
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Gary Peach (xcg34@dial.pipex.com) wrote:

: Simon Lewis wrote ...
: > 49 quid from remote imaging group. as good as anything commercial.

: 137 MHz I can do, The link to the PC via the sound card already exists for
: PSK31 and Hell, is there any FREE Wefax decoding Software,
: and whilst I'm asking how about Amtor Software and RTTY
: I can do the Amtor with an AMT-1 but reconfiguring would be better with a
: suite of decoding PC software.

: Gary7SLL

Gary, you're going to love me for saying this but Linux supports all of the
above (except possibly wefax, I'm not absolutely certain on this) plus SITOR
and PSK31. Walt would love it even more because I don't think NT does!

Geoff
--
Geoff Blake geoff (at) palaemon . demon . co . uk linux 2.0.36
Chelmsford g8gnz @ g8gnz . ampr . org sparc - i586
Please, only use the .ampr.org address if you know what you are doing
Intel create faster processors - Microsoft create slower processes

3553. Re: overvoltage protection

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-21 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19991021011402704 32@zetnet.co.uk>
Source record: 66209

> For a long time I have used a power supply without any overvoltage
> protection. Some of these days the pass transistors may short and my radio
> will get a severe jolt. Is there a common "crow bar" circuit I can add? I
> remember the crow bar part but not the schematic. Help appreciated, K4GF
==========
If you do not insist on 13.8 V - DC for your radio equipment ,you
could run your station with 12 V batteries.
ie deep cycle batteries as used for caravans/ mobile homes and solar
powered installations.
Depending on your operating habits and hence battery capacity ,the
batteries can be charged with a relatively low current 14.4 V power
supply with in series a diode and one or more car head lamp bulbs
(the latter in parallel)
This configuration will protect your equipment against over- voltage.
Moreover the overall cost might be lower compared with a high current PSU.
If you would make the car bulb visible from your operating position ,
if it glows bright and the radio is operating normally the power
supply unit (charger) has an over-voltage ,but the batteries will
keep the voltage to the equipment at a safe level . Only after a long
period the batteries could be overcharged.
If the car bulb is out of sight you can monitor its voltage
differential with a LED or piezo sounder / zener diode combination.
I am in the process of converting my 100 W HF station and low power
packet station to battery supply , with the ultimate aim of charging
the batteries (3 pcs 75 Ah ,costing equiv US$50.- each) by means of
solar- and wind power.
Why ? Just to learn more about the practical application of
renewable energy..... and being able to operate essential domestic
equipment for some time in case of a longer than usual power supply
interruption during the bird migration season or winter storms.

Frank GM0CSZ / KN6WH North of Scotland - UK

3554. Re: Need schematic.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-21 00:00:00 UTC
From: JW <jdwalton@home.com>
Message-ID: <380EA69F.3E16E515@home.com>
Source record: 66210

Dec98/Jan99 QST had a beefy switch mode ps design.

Hank Lewis wrote:

> Hello all...
> I'm looking for schematics to build my own 30A 13.8V supply....I would like
> to utilize 200mA meters for monitoring the volts and current as I already
> have these on hand....Nearly all the schematics I have found on the net are
> for 6A or less which aren't enough to power the rigs in my shack....
> Please respond to lewisjr@dmci.net
> 73's
> =Hank=

3555. HELP! B&W PI-NET INFO

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-21 00:00:00 UTC
From: qroking@aol.com
Message-ID: <19991021033744.28696.00000284@ng-cc1.aol.com>
Source record: 66211

Hi fellow homebrewers.....Once upon a time I had a B&W catalog that had the 850A and 852 pi-network tapped inductance values for each band. I cannot seem to locate this old catalog any more, so I am unable to get that info, seems as though B&W does not show these items for sale anymore. Perhaps someone out there has an old catalog like I once had or may have this information. SO....if you know the 80-10 meter tapped inductance for the 850A and 852 either or both, can you send me the values...It would be much appreciated!!! Thank You........73 LOU

3556. Re: 137MHz WXSAT Receiver ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-21 00:00:00 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <7umq32soj2@lure.pipex.net>
Source record: 66212
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Simon Lewis wrote ...
> Gary Peach writes
> >Simon Lewis wrote ...
> >> 49 quid from remote imaging group. as good as anything commercial.
> >137 MHz I can do, The link to the PC via the sound card already exists
for
> >PSK31 and Hell, is there any FREE Wefax decoding Software,
> >and whilst I'm asking how about Amtor Software and RTTY
> >I can do the Amtor with an AMT-1 but reconfiguring would be better with a
> >suite of decoding PC software.
>
> you need a wide BW at 137 MHz though Gary. Needs to be 80 KHz or so.

Interesting the built in AM -6 dB Bw is 6 kHz and -540 dB 20 kHz.
However I could go into the 8.83 MHz If at Q18 and build an external detector. The problem is I have no spec figures for the BW up to that point where the IF enters the predetection filter. The front end sections are in 2 MHz chunks so there is pososibly quite a broad band signal available at the input to the Predetection Filter.
Does any one have any measured values for the IF bandwidth up to the O/P of Q18 on the IF Unit (X48-3000-00) in the Kenwood R-5000 reciever please?

> There is loads of PC software for downloading to do APT service, try
> WXSAT as one good one.

Roger

> Not sure about AMTOR but quite a few RTTY decoders available.

Will look around thanks.
Is anyone seriously looking at PSK31 on VHF ?

Gary7SLL

3557. Re: One more try

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-21 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <7umqh4avj1@neptunium.btinternet.com>
Source record: 66213

An impedance match in entirely unnecessary. Just plug the 500-ohm mike into the TS820 50K microphone socket and away you go. You may need to fully turn up the mike gain control on the 820. The audio quality will hardly be affected by a mismatch. It may even be more to you liking.

The lower a mike's internal impedance the lower will be its output voltage. If the output of your 500-ohm mike is insufficient to fully drive the TS820 an audio iron-core 10:1 voltage step-up ratio transformer could be used. But a 3 or 4 to 1 may do the job. Very often such a transformer is built into the mike case to provide a switchable dual impedance.

Or a single-stage, any npn transistor, amplifier could be used + gain cotrol + 3V dry battery. Try to avoid this inconvenience. Does the 820 mike socket have a pin which gives access to a DC supply ?

It may be cheaper and faster to purchase one of those inexpensive miniature tie-clip electrostatic microphones.

Reg, G4FGQ

3558. ELECTRONICS GARAGE SALE

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-21 00:00:00 UTC
From: Joe Ship <ve2js@total.net>
Message-ID: <380F110F.16DC@total.net>
Source record: 66214

ELECTRONICS GARAGE SALE

After 38 years of collecting, it's time to unload
my "goodies" of test equipment, receivers, transmitters,
coax, fittings, cavity filters, repeaters, antennas,
and lots more. For a complete list click on:

http://www.total.net/~ve2js/saleindex.htm

Joe Ship, VE2JS

3559. Re: What's a good 2m tranceiver kit?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-21 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <380F1C03.794B@eece.maine.edu>
Source record: 66215

Doug Smith wrote:
>
> Troglodite wrote:
> > I'm thinking of purchasing a 2m transceiver kit. I've looked at the TenTec and
> > the Ramsey FX146. Does anybody have any experience with either of these? Or
> > alternately, can someone recommend a good kit? I'm on a tight budget.
>
> While I've not built either of the kits in question, I did build the
> Ramsey 440MHz unit and a TenTec HF QRP radio. I would recommend the
> TenTec. Better quality parts, sturdier chassis/cabinet, better
> instructions.
> --
> Doug Smith W9WI
> Pleasant View (Nashville), TN EM66
> http://personal.bellsouth.net/~w9wi

I've only built one TenTec radio, one of the QRP radios, and it was a
good kit. Couple of things I didn't like, nothing major, like I kept
breaking the solid strand wire they included in the kit (I had some junk
multistranded wire; problem solved). More importantly, there was no
reverse polarity protection on the battery, and guess how I figured that
out? Otherwise, excellent kit, with even better tech support.
--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

3560. Re: What's a good 2m tranceiver kit?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-21 00:00:00 UTC
From: troglodite@aol.com
Message-ID: <19991021120446.05803.00000166@ng-ch1.aol.com>
Source record: 66216

Thanks to all who replied to my question. So far, it's 6 to 0 in favor of the Ten Tec. Guess my choice is clear. Thanks again.

Doug Moore KB9TMY

3561. Mixing SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-21 00:00:00 UTC
From: milo17@aol.com
Message-ID: <19991021182349.20018.00000100@ng-cb1.aol.com>
Source record: 66217

I am a little confused on mixing a ssb signal. Are the sidebands inverted (usb becomes lsb and vice versa) after mixing occurs ? If this is the case, why doesn't this occur with a transverter ? Any help is greatly appreciated ! Thanks to the group in advance,

Mike N2JVT

3562. wtb: Wanted: 1ma Round Small Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-21 00:00:00 UTC
From: DavidC <eDoc@netzero.net>
Message-ID: <s0v6oker0126@freenews.remarq.com>
Source record: 66218
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

I am in need of a 2" or smaller round meter with a 1ma movement.

Something nice and backlit (if not backlit it must be readily modified
with a backlight without an invasive procedure).

The meter face could be square but the meter body needs to fit in a
round hole.

Thanks! & 73, DavidC K1YP

* Sent from RemarQ http://www.remarq.com * The Internet's Discussion Network *
* The fastest and easiest way to search and participate in Usenet - Free! *

3563. Re: 137MHz WXSAT Receiver ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-21 00:00:00 UTC
From: geoff@nospam.demon.co.uk
Message-ID: <FJz1r5.5D9@nospam.demon.co.uk>
Source record: 66219
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Walt Davidson (no.junk.mail@thank.you) wrote:

: I cannot comment on NT,
: because it is not my practice to use multi-user operating systems in a
: single-user environment.

Walt, can you tell me how you use standard NT (server or WS) as a multi-user system?

Geoff
--
Geoff Blake geoff (at) palaemon . demon . co . uk linux 2.0.36
Chelmsford g8gnz @ g8gnz . ampr . org sparc - i586
Please, only use the .ampr.org address if you know what you are doing
Intel create faster processors - Microsoft create slower processes

3564. Re: Need diode info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-21 00:00:00 UTC
From: Sam Taylor <cygnet@cncnet.com>
Message-ID: <380fbe70.0@nntp.quiknet.com>
Source record: 66220
Cross-posted to: rec.ham-radio,rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

Who is the Manufacturer
That is a Man ufacturer part Number
Its probubly something like a 4004, but cant locate it
from just the 5G number
Simon Cox wrote in message <380c48ba_1@news2.vip.uk.com>...
>Trying to repair TV but have unknown diode.
>5G 20E 10 are the ident figures but I can't find it listed.
>Does anyone know of a replacement number.
>
>Thanks, G1DRY
>
>
>
>

3565. Re: 137MHz WXSAT Receiver ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-22 00:00:00 UTC
From: Paul Carrington <nexus@freecall-uk.co.uk>
Message-ID: <380fc7c8.0@news2.cluster1.telinco.net>
Source record: 66221
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Walt Davidson <no.junk.mail@thank.you> wrote in message
news:3815cea3.2901892@beta.news.uk.uu.net...
> On Wed, 20 Oct 1999 12:00:32 GMT, geoff@nospam.demon.co.uk (Geoff
> Blake) wrote:
>
> >Gary, you're going to love me for saying this but Linux supports all of
the
> >above (except possibly wefax, I'm not absolutely certain on this) plus
SITOR
> >and PSK31. Walt would love it even more because I don't think NT does!
>
> Pshaw! I had to replace both my graphics card and my sound card with
> *older* hardware before I could get them to work under Linux. With
Under Linux, there is definately a generic video driver, and you can
configure it for just about any combination.
As for sound card support, try getting a card other than a Soundblaster
working on Windows 95/98 without a
driver disk. This is down to hardware vendors to supply the linux drivers,
and I'm glad to say that they seem to
be catching on now.
Linux is not yet a viable desktop alternative, but is fast getting there. As
for how easy it is to configure Linux, try
configuring Windows NT (PROPERLY!!!) to be secure, and you'll find it can be
just as awkward as Linux. At
the end of the day, Linux is freely available, with the source, it is
distributed with a C compiler, and there is a
wealth of knowledge in all the many online discussion groups.
> Windows 95 or 98 there was no problem. (I cannot comment on NT,
> because it is not my practice to use multi-user operating systems in a
> single-user environment.)
NT is not solely a multi-user operating system, try getting dual processors
working under 95/98.

Paul Carrington

email: nexus@freecall-uk.co.uk

3566. Re: A/D computer card?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-22 00:00:00 UTC
From: Bobby Atkinson <bobbys@prodigy.net>
Message-ID: <01bf1c33$d105eec0$0100a8c0@ZTU>
Source record: 66222

You didn't mention the speed or number of channels your looking for,
if these aren't too important how about using a PC sound card ?
Cheap ones will do 16 bits at 44 KHz. Or if slow is ok, but you want
more for your money how about one of the TI dsp eval kits. They are
serial interfaced, have two A/Ds and D/As plus a nifty dsp when you
don't need the A/Ds anymore. If this isn't enough...
Analog device has come out with a neat part called a "system on a chip"
or some such. Maxim has eval boards for their high speed A/Ds...
etc. Bobby K4BGA

Roy Lewallen <w7el@teleport.com> wrote in article
<380CBCCF.C8EA9CC5@teleport.com>...
> Does anyone know where I can get a card for a PC-type computer to do
> some simple data acquisition? I'm looking for a relatively inexpensive
> (say $100 or less) A/D converter plug-in card. It doesn't have to have
> particularly good resolution (8 bits would be adequate) or accuracy, and
> a fixed input voltage range is o.k. I used to get a catalog from a
> company making ruggedized computers and the like for manufacturing
> applications, and they had that sort of thing, but most of their
> products were understandably pretty expensive. Does anyone know of one
> more oriented toward the hobbyist?
>
> I don't want to spend a lot of time fiddling with it, so a plug-in board
> is really what I'm looking for.
>
> Roy Lewallen, W7EL
>

3567. Re: Help with Simple Transmitter/Reciever

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-22 00:00:00 UTC
From: Bobby Atkinson <bobbys@prodigy.net>
Message-ID: <01bf1c34$4b2423c0$0100a8c0@ZTU>
Source record: 66223

Homebrew is fun, but Nuts& Volts mag has ads for keyfob 2 button xmtr
and multichannel rcvr board for about $ 50 a pr. Bobby

Jim <jimchapman@entercomp.com> wrote in article
<3rapXeBx5oJIt0MchMjB4pBQjgs0@4ax.com>...
> My goal is build a simple radio transmitter and reciever with a range
> of about 20 meter. It's only function is to start a sequence of events
> controlled by a computer, ie. reciever side trigger a 5Volt input. I
> have seen a few transmitters and reciever schematics out there but
> don't know which of them, if any would work together. Can some one
> please point me to a simple pair that are known to be compatible.
>
> thanks
> jim
>
>

3568. Re: Extremely small transmitters for radiotracking?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-22 00:00:00 UTC
From: Bobby Atkinson <bobbys@prodigy.net>
Message-ID: <01bf1c34$acbb5ae0$0100a8c0@ZTU>
Source record: 66224

Yes this is in the range of do it yourself, my friend does it at 4XX MHz
for tracking his falcons.

Martin Gorissen <Gorissen@t-online.de> wrote in article
<380B87E7.4E98D76B@t-online.de>...
> Transmitters for radiotracking small animals are simple designed, but
> expensive. The component costs are about 10 per cent of their price.
> They usually consist of a multivibrator pulsing a two-stage crystal
> oscillator. Using SMD components, also SMD crystals, commercially
> available models reach a weight of 0.3 g (without battery).
> Who has any experience, if this is within reach by do-it-yourself? A
> central problem would be the availability of single SMD crystals for the
> 150 MHz range.
>
>

3569. Re: A/D computer card?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-22 00:00:00 UTC
From: Michael Chang <pya_cha@alcor.concordia.ca>
Message-ID: <3810122F.4B60DD6B@alcor.concordia.ca>
Source record: 66225

If you ask nicely, http://www.dataq.com will give you one
for free. :=)

Michael

Roy Lewallen wrote:
>
> Does anyone know where I can get a card for a PC-type computer to do
> some simple data acquisition? I'm looking for a relatively inexpensive
> (say $100 or less) A/D converter plug-in card. It doesn't have to have
> particularly good resolution (8 bits would be adequate) or accuracy, and
> a fixed input voltage range is o.k.

3570. Motorola IC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-22 00:00:00 UTC
From: Mark Pullen <mpullen@melbpc.org.au>
Message-ID: <380FECE5.BE5B2172@melbpc.org.au>
Source record: 66226

can anyone help or have a motorola MC3362P IC it is a dual conversion
low power FM receiver motorola no longer make them and I'm having a lot
of trouble getting one here in Melbourne so if there is one for sale
anywhere I would be greatful,there is a new one
that is a drop in replacement the p/n is MC13135P this would also suit
my needs
regards
Mark.

3571. Ham Radio and SWL URL

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-22 00:00:00 UTC
From: nw7us@hfradio.removethispart.org
Message-ID: <tJWP3.96$iH6.571@sea-read.news.verio.net>
Source record: 66227
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Howdy, Folks.

This is an open invitation to browse http://hfradio.org, the NW7US Ham Radio and Shortwave Radio Resource Website.

This non-commercial site offers:

+ Azimuth Map / Equidistant Map Creation (choose any QTH as center, many options

+ Propagational Resources (live, real-time reports, eAlert service (sign up for automatic email solar/geo reports, complete with Aurora index))

+ News, and DX information and reports

+ QSL Manager and Callsign Lookup center

+ Swap and Shop

+ FREE HOME PAGES THAT YOU CAN USE TO POST YOUR OWN HAM OR SWL SITE

+ Bookstore - SWL and Ham related books. Over a 1000 titles so far.

+ Plus more (Directories, etc.)

This is my offering to the community, all funded by me. I am working hard to bring excellent content to the site. I have need for others who might wish to assist. I need a Software editor -- someone who can review and post software links, etc. Let me know if you are interested. (See the site on how to email me).

If you feel up to it, after looking around the site, drop me a note (you'll find my address on the site) and share your thoughts.

73!

--

: World-Wide Communications via Amateur Radio : 122.93W : 47.67N :
: 10x56526 : CW/SSB - DX hunter : Brinnon, WA : Code Warrior #60 :
: visit http://hfradio.org/ :

3572. Re: Mixing SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-22 00:00:00 UTC
From: dpotter@bbn.com
Message-ID: <38105a39.4076417@news>
Source record: 66228

On 21 Oct 1999 22:23:49 GMT, milo17@aol.com (MILO17) wrote:

>I am a little confused on mixing a ssb signal. Are the sidebands inverted (usb
>becomes lsb and vice versa) after mixing occurs ? If this is the case, why
>doesn't this occur with a transverter ? Any help is greatly appreciated !
>Thanks to the group in advance,
>
> Mike N2JVT

It can be confusing. The sideband is NOT inverted if the local
oscillator is lower in frequency than the RF, and it IS inverted if
the local oscillator is higher in frequency. Think of a 10 MHz carrier
modulated with a 1 kHz tone, then turned into a USB signal by
filtering or something. The transmitted signal is now at 10.001 MHz.
Mix it with a 9 MHz local oscillator. The difference is 1.001 MHz. The
modulating tone still appears higher in frequency than the carrier.
Now mix it with an 11MHz signal. The difference is 0.999 MHz. The
modulation is lower in frequency than the carrier, hence lower side
band.

73

Dave
K1MBO

3573. Re: Mixing SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-22 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7uqdab$c0q$1@nnrp1.deja.com>
Source record: 66229

In article <19991021182349.20018.00000100@ng-cb1.aol.com>,
milo17@aol.com (MILO17) wrote:
> I am a little confused on mixing a ssb signal. Are the sidebands
inverted (usb
> becomes lsb and vice versa) after mixing occurs ? If this is the
case, why
> doesn't this occur with a transverter ? Any help is greatly
appreciated !
> Thanks to the group in advance,

If you take the sum frequency the sidebands stay put. If you
take the difference they're inverted. Consider the frequencies
at the edge of the passband and their analogues after mixing...
--
Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte
Satellite: VA3SFL on UO-22, KO-25

Sent via Deja.com http://www.deja.com/
Before you buy.

3574. Re: Mixing SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-22 00:00:00 UTC
From: "Charles H. Reichert" <reichert@cig.mot.com>
Message-ID: <381073F1.6DB55DA6@cig.mot.com>
Source record: 66230

Depends if the L.O. is above or below the RF signal
being converted downband. Usually L.O.'s are below
the RF Signal when mixing down to the IF. The same
for Transverters. Thus no inversion of the SSB signal.

Chuck KD9JQ
mailto:kd9jq@imaxx.net
http://www.imaxx.net/~kd9jq

MILO17 wrote:
>
> I am a little confused on mixing a ssb signal. Are the sidebands inverted (usb
> becomes lsb and vice versa) after mixing occurs ? If this is the case, why
> doesn't this occur with a transverter ? Any help is greatly appreciated !
> Thanks to the group in advance,
>
> Mike N2JVT

3575. Re: What's a good 2m tranceiver kit?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-22 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <3810C184.B4415391@bellsouth.net>
Source record: 66231

Shawn Upton wrote:
> I've only built one TenTec radio, one of the QRP radios, and it was a
> good kit. Couple of things I didn't like, nothing major, like I kept
> breaking the solid strand wire they included in the kit (I had some junk
> multistranded wire; problem solved). More importantly, there was no
> reverse polarity protection on the battery, and guess how I figured that
> out? Otherwise, excellent kit, with even better tech support.

Interesting. I didn't have any trouble with the provided wire (though I
too prefer regular, stranded, hookup wire) but I did find it interesting
stuff; I've not seen wire like that before.

To be honest I didn't even think about the reverse-polarity situation!
One well-placed diode will fix that though, and it can be put in a place
(right on the RCA jack) where there's plenty of room for it.
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

3576. Re: 137MHz WX-Sat RX Kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-22 00:00:00 UTC
From: "colinlowe@jet" <colinlowe@jet.es>
Message-ID: <7uqmkl$9f1$1@lola.ctv.es>
Source record: 66232

Whoops sorry her'r the URL of my home page.

URL is: http://personales.jet.es/colinlowe/index.htm

3577. 137MHz WX-Sat RX Kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-22 00:00:00 UTC
From: "colinlowe@jet" <colinlowe@jet.es>
Message-ID: <7uqmg7$9b7$1@lola.ctv.es>
Source record: 66233

Thanks for all the replies following my News Group message about "What 137MHz weather satellite receivers" are available for the beginner.

It seem quite clear that the RX-2 from the "Remote Imaging Group" is one of the best choices.

I have now joined the "Remote Imaging Group" and ordered the RX-2 Kit.

A total cost of ?52 for the kit plus a modest ?7 for membership for the remaining months in 1999 and a extra ?13 for the whole of the year 2000.

Thanks to all that sent replies either direct or via the new group.

73 de Colin
EB/G1IVG in Barcelona Spain.

PS.
Have a look at my homepage for mods for the following:

Motorola GP300, GM300 McMicro
Yaesu FT847
Kenwood TM732, TH48
Standard C510
Icom IC2800H

Plus a few links etc.....73 de Colin

3578. Re: VCO design

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-22 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <38114046.2CD2@pop.removethistomailme.net>
Source record: 66234

slug@aeminium.dhis.org wrote:
>
> Hello,
> i need to design a UHF 555-565MHz VCO to use on a frequency synthesizer.
> Any ideas , links or books appreciated
>
> Thank you,
> Nuno Sucena
> --
> http://alumni.dee.uc.pt/~slug
> CT1FOX

Are you sure you need to design one? This sounds like a $10 part from
Mini-Circuits, unless you have unusual phase-noise requirements.

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

3579. Re: question about VFO design

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-23 00:00:00 UTC
From: b_runner@hotmail.com
Message-ID: <38111fec.12406511@news.eisa.net.au>
Source record: 66143

Hello,

This will sound a little arrogant, I apologize in advance, but:

How about a PLL with a DDS in the summing loop? This could be made on
two not very large PCBs (one: synth+uC, other: VCO). For the extra
design effort, you get:

1/ long term + short term stability
2/ no mechanical problems + compactness
3/ almost any reasonable tuning range, if you wish
4/ very fine tuning steps
5/ repeatibility (if needed ?)
6/ with good RF design practices, you get good performance (you still
need to build a clean VCO, etc...)

C'mon guys, mechanical tuning caps, free running oscillators..?
it's 1999...

On Wed, 20 Oct 1999 19:44:35 GMT, dpotter@bbn.com (David Potter)
wrote:

>Nick,
>
>good set of goals. Go for it!
>
>The reason for restricting the tuning range of a VFO that uses a
>variable capacitor involves the mechanical limitations of such things:
>It is tough to avoid drift and mechanical sensititivity when you have
>a very wide swing of capacitance. For example, your 25-145 pF cap will
>tune from 8 MHz down to 3.32 MHz with a 15.8 uH inductor. You will be
>using only 20% of the range; not a problem in itself, but now any
>backlash, vibration, or drift due to temperature will be five times
>what you would encounter with a cap that was just the right size.
>
>My suggestion is that you calculate the capacitance range you need and
>pull plates off the cap until you can achieve just that. Or put a
>capacitor in series with it to make the total change correct for the
>tuning range you need.
>
>Let us know how the projec turns out!
>
>73
>
>Dave
>K1MBO

>
>
>On Wed, 20 Oct 1999 14:54:09 -0400, Nick Caruso
><nick.caruso@software.com> wrote:
>
>>A simple question (I hope):
>>
>>I'm building a VFO. I've checked out lots of schematics/designs for homebrew
>>VFOs, and they
>>all seem to have very restricted tuning ranges, often less than 1MHz.
>>
>>Why is this? I can think of several possibilities:
>>
>>1) larger tuning ranges lead to instability (for reasons I don't understand)
>>2) people are working with tuning caps that don't have reduction drives/and or
>>have
>> small ranges of capacitance
>>3) just because they're designing for the CW portions of the various HF bands
>> and don't ever intend to go outside them.
>>
>>My guess is it's #2 or #3. Anything else?
>>
>>My nefarious plan is to build an HF VFO that tunes from 7 to 8 MHz and mix that
>>with a crystal oscillator running at 43MHz, yielding a sum at 50 - 51 MHz(*),
>>and then use the thing with the miniR2 receiver and a T2 based SSB transmitter
>>to do weak-signal work on six meters this spring/summer.
>>
>> (*) Yes, I know I have to filter the difference frequency! Suggestions there
>>would be welcomed.
>> my vague plan is to use a band-pass diplexer after the mixer, followed by
>>some gain stages to
>> get me to 8 or 9 dBm, to drive the miniR2 and T2 mixer chains.
>>
>>I've got a reduction-drive equipped 25-145pF air variable behemoth cap stamped
>>"ARC" on one end, assumed to be of WWII vintage, so it seems like I should be
>>able to get decent tuning over a 1 MHz range.
>>
>>Is this reasonable?
>>
>> thanks and 73
>>
>> nick caruso
>> kb1dej
>

3580. What is the current state of the art in HF fron end design?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-23 00:00:00 UTC
From: b_runner@hotmail.com
Message-ID: <38112f21.16300499@news.eisa.net.au>
Source record: 66144

Hi,

I am thinking about building an HF rig, so before I really start warming up the ARRL Radio designer[:-)], I would like to find out more about what can be done. Any hints, ideas, links, books etc, about this subject would be greatly appreciated.

I am very curious about the best currently achieved results in HF receiver front end design. For now,I would put aside the rest of the RX chain (I followed a lot of discussion about DSP/phase techniques here lately).

So for now I am looking at the best linear RF amps and mixers. For the amps, the best figures I have yet seen are for some push-pull amps : about 40-45dBm IP3. Have any of you gurus seen better figures+designs? I would imagine that it could be possible to get a pair of V-MOS FETs, run them in A-class (with large heat sinks), put a xformer feedback around and use two of those in push-pull mode... similar to transmitter amps, but for receive... Am I off track here? If this works, I would guess we could get over 50dBm IP3?

Now, with mixers, I am a bit on the fuzzy side here. I have seen the "Tayloe" mixer some time ago and it looks pretty impresive. Have any of you tried to replicate the results? I like diode ring mixers, or their variations, using other kinds of switching elements, eg. D-MOS FETs. These are linear, but have a fundamental disadvantage, the 5-7dB loss. So, when using them, if one wants to get sensitivity, a preamp is needed, and that reduces the linearity, which is counterproductive. Are there any active high performance mixers? With what I know now, if I was about to build a mixer, I woul do something similar as the amp suggested above: a couple of essentially super linear amps, but instead of DC supply, I would switch them on/off really hard. Perhaps a square wave between slightly negative bias (to switch the devices off quickly) and full A-class current?

Sorry for the long posting here... I seem to need feedback for my back-of the envelope thinking.

runner

3581. Re: Extremely small transmitters for radiotracking?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-23 00:00:00 UTC
From: gcouger@couger.com
Message-ID: <38113e9c.20440165@news.provalue.net>
Source record: 66145

A can oscilator works pretty good listen for a odd harmonic. If you
need more power build an amplifier tuned to the desired harmonic.

A NE 602 using an overtone crystal will work as well.

Gordon W5RED
>
>Martin Gorissen <Gorissen@t-online.de> wrote in article
><380B87E7.4E98D76B@t-online.de>...
>> Transmitters for radiotracking small animals are simple designed, but
>> expensive. The component costs are about 10 per cent of their price.
>> They usually consist of a multivibrator pulsing a two-stage crystal
>> oscillator. Using SMD components, also SMD crystals, commercially
>> available models reach a weight of 0.3 g (without battery).
>> Who has any experience, if this is within reach by do-it-yourself? A
>> central problem would be the availability of single SMD crystals for the
>> 150 MHz range.
>>
>>

3582. Re: Motorola IC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-23 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <7usacajct1@nnrp1.deja.com>
Source record: 66146

In article <380FECE5.BE5B2172@melbpc.org.au>,
@melbpc.org.au wrote:
> can anyone help or have a motorola MC3362P IC it is a dual conversion
> low power FM receiver motorola no longer make them and I'm having a
lot
> of trouble getting one here in Melbourne so if there is one for sale
> anywhere I would be greatful,there is a new one
> that is a drop in replacement the p/n is MC13135P this would also suit
> my needs
> regards
> Mark.
>
>

Try for the MC3362P:

1 - Dial Electronics at http://www.dialelectronics.co.uk/m11.htm (UK)
2 - Sungjin Electronic Corp. at http://www.sungjin.co.kr/pur.htm (KR)
3 - Techsonic at http://members.tripod.com/~techsonic5/html (USA)

For the MC13135P:

1 - Dial Electronics (above)
Anyway, try MOTOROLA distributors in AU:

Veltek Australia Pty. Ltd
9 Bastow Place
Mulgrave
VIC 3170
Australia
Tel : (61-3) 9574-9300
Fax : (61-3) 9574-9773
WWW : http://www.arrowveltek.com

Avnet Pacific Pty. Ltd
Unit C 6-8 Lyon Park Road
North Ryde NSW 2113
Australia
Tel : 132 732 (nationwide)
Fax : (61-2) 9878-1166
WWW : http://www.avnet.com

Future Electronics
1013 Whitehorse Road,
Box Hill,
3128,

VIC,
Australia
Tel : (61-3) 9899-7944
Fax : (61-3) 9899-3449
WWW : http://www.future.ca

Farnell (61)2 9644-7722

--
Greetings,

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Before you buy.

3583. FT890 Which SSB filter ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-23 00:00:00 UTC
From: dave@omens.freeserve.co.uk
Message-ID: <N.102399.114930.00@q1d9h5>
Source record: 66147
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hi,
thanks for reading, i am looking to get a better filter for ssb use
such as one of the inrad filters 1.8, 2.1 etc, or should i go for
the standard yaesu filter at 2.4 or 2.6 k ??
any advice will be a great help.

with thanks De dave mw5adj
--

3584. Boatanchor Classifieds

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-23 00:00:00 UTC
From: Jeff James <jeff@eclipse.net>
Message-ID: <3811BEF0.ED536E6F@eclipse.net>
Source record: 66148

Dedicated to Vintage Radio..
http://www.dealamerica.com/deal/cgi-bin/ads/bcads.cgi
Free ads for Tube Gear and Parts..
Thank You!

3585. Re: Just 4 Fun.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-23 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <3811D12F.21063ABD@corecomm.net>
Source record: 66149

Bill wrote:
> Anyone know about what frequencies those drive thrus at fast food
> restaurants use to link to the kid making mininum wage with the $10k worth
> of radio equipment on his head?

Varies by location. Around here most are between 150-156 MHz. Search Deja;
someone posts a list from time to time in rec.radio.scanner.

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+

3586. Help: M290(4).

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-23 00:00:00 UTC
From: "D/\\\\/ID Pickard" <pickards@zen.co.uk>
Message-ID: <newscache$zmf2kf$28$1@socrates.zen.co.uk>
Source record: 66150

I've just bought the above VHF "low" PMR rig. It's possible, to convert to
4mFM but I know not very much! ;o)
Has someone on this list done on of these? I pse don't tell me to buy Chris
Loreck's book!!!
vy 73 from the NW of Eng.
David

--
[)/\\/|[) :oP

3587. Circuit of a quartz oven?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-23 00:00:00 UTC
From: Peter Bolch <nc-bolchpe@netcologne.de>
Message-ID: <7ustcn$21k$2@news.netcologne.de>
Source record: 66151

Hi

I am looking for a circuit for a simple quartz oven. A temperature tolerance
below 1 degree C will do.

Peter

3588. Principle of RF Power Level Meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-23 00:00:00 UTC
From: Peter Bolch <nc-bolchpe@netcologne.de>
Message-ID: <7ustct$21k$3@news.netcologne.de>
Source record: 66152

Hi

what type of detectors are used with modern broadband (> 2 GHz) and
sensitive
(below, say, -40 dBm) power level meters? (Schottky) diode detectors?

Peter

3589. 3 Schottky diodes on one chip?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-23 00:00:00 UTC
From: Peter Bolch <nc-bolchpe@netcologne.de>
Message-ID: <7ustd2$21k$4@news.netcologne.de>
Source record: 66153

Hi,

I'm looking for 3 (or more) unconnected RF low barrier / zero bias Schottky diodes on one chip. I have only found diodes on one chip and rings of 4.

Peter

3590. TI Hands-on TMS320C6000 Seminar

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-23 00:00:00 UTC
From: Joe Jesson <jjesson@ais.net>
Message-ID: <oGmQ3.1$tu1.56@news.ais.net>
Source record: 66154

A new all-day DSP hands-on workshop is going to be held on November 8th in Schaumberg - a Chicago suburb. I decided to attend ($195) since the TI workshop gives each attendent the latest DSP starter kit to be used during the seminar. This board has the TI DMS320C6211 DSP chip - the 1200 MIP part! TI gives each attendent the board and covers the development software, C compiler and the GO DSP simulator and development software. This simulator is powerful and both scope and spectrum "probes" can be placed anywhere in th code. When all the FIR filters or any code looks good, you can download on to the development board. Much easier than looking at ASM code. TI's registration number is 1-800-750-3377.

Joe

3591. INFO HEATHKIT

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-23 00:00:00 UTC
From: "Richard M. Ramzy" <kc8dmn@accinternet.com>
Message-ID: <WcnQ3.13322$zp.8370@ord-read.news.verio.net>
Source record: 66155
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,relcom.radio.ham

My Brother has some Heathkit equipment. Can some one help me on the price of this equipment?

MODEL HP-20 POWER
COMANCHE MODEL MR-1
CHEYENNE MODEL MT-1
SPEAKER MODEL HS-24
HEATHKIT HAND MIKE

E-MAIL @ kc8dmn@accinternet.com
WEB PAGE @ www.accinternet.com/~kc8dmn

3592. Re: Principle of RF Power Level Meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-23 00:00:00 UTC
From: "Al, N2NKB"
Message-ID: <7ut0hb$m17$1@bgtnsc03.worldnet.att.net>
Source record: 66156

Peter Bolch wrote in message <7ustct$21k$3@news.netcologne.de>...
>Hi
>
>
>what type of detectors are used with modern broadband (> 2 GHz) and
>sensitive
>(below, say, -40 dBm) power level meters? (Schottky) diode detectors?
>
>
>Peter
Two types,

Diode detectors can measure peak level power. For measuring
average power, sensors usually have a thermistor in them to convert
heat into a calibrated DC voltage.
Al

3593. Re: question about VFO design

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-23 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <38120D79.9E87C036@teleport.com>
Source record: 66157

For some of us, it's a case of "appropriate technology". If I want a VFO for a single-band rig, I can design and build one in an hour or so with a dozen or so parts. The spectral cleanliness will be much greater than I can get with a casually-designed PLL, and the stability will be more than adequate. The current drain will also be suitably low for portable operation. Now, maybe you can throw together a couple of boards' worth of ICs, come up with great spectral purity on your first design simply as a result of your extensive experience, and have the whole thing running in an afternoon. And maybe you can even do it all with 5 mA of current drain and half the size of a pack of cigarettes. For me, it would probably require several weeks of work, not to mention getting the parts required, and I'd end up with something with heavier current drain and larger size than I want. (And I even consider myself to be a competent analog design engineer.) So it may be a logical way for you to go. But it isn't for me, and probably not for other folks, either.

Roy Lewallen, W7EL

runner wrote:
>
> Hello,
>
> This will sound a little arrogant, I apologize in advance, but:
>
> How about a PLL with a DDS in the summing loop? This could be made on
> two not very large PCBs (one: synth+uC, other: VCO). For the extra
> design effort, you get:
>
> 1/ long term + short term stability
> 2/ no mechanical problems + compactness
> 3/ almost any reasonable tuning range, if you wish
> 4/ very fine tuning steps
> 5/ repeatibility (if needed ?)
> 6/ with good RF design practices, you get good performance (you still
> need to build a clean VCO, etc...)
>
> C'mon guys, mechanical tuning caps, free running oscillators..?
> it's 1999...
>
> On Wed, 20 Oct 1999 19:44:35 GMT, dpotter@bbn.com (David Potter)
> wrote:
>
> >Nick,
> >
> >good set of goals. Go for it!

> >
> >The reason for restricting the tuning range of a VFO that uses a
> >variable capacitor involves the mechanical limitations of such things:
> >It is tough to avoid drift and mechanical sensititivity when you have
> >a very wide swing of capacitance. For example, your 25-145 pF cap will
> >tune from 8 MHz down to 3.32 MHz with a 15.8 uH inductor. You will be
> >using only 20% of the range; not a problem in itself, but now any
> >backlash, vibration, or drift due to temperature will be five times
> >what you would encounter with a cap that was just the right size.
> >
> >My suggestion is that you calculate the capacitance range you need and
> >pull plates off the cap until you can achieve just that. Or put a
> >capacitor in series with it to make the total change correct for the
> >tuning range you need.
> >
> >Let us know how the projec turns out!
> >
> >73
> >
> >Dave
> >K1MBO
> >
> >
> >On Wed, 20 Oct 1999 14:54:09 -0400, Nick Caruso
> ><nick.caruso@software.com> wrote:
> >
> >>A simple question (I hope):
> >>
> >>I'm building a VFO. I've checked out lots of schematics/designs for homebrew
> >>VFOs, and they
> >>all seem to have very restricted tuning ranges, often less than 1MHz.
> >>
> >>Why is this? I can think of several possibilities:
> >>
> >>1) larger tuning ranges lead to instability (for reasons I don't understand)
> >>2) people are working with tuning caps that don't have reduction drives/and or
> >>have
> >> small ranges of capacitance
> >>3) just because they're designing for the CW portions of the various HF bands
> >> and don't ever intend to go outside them.
> >>
> >>My guess is it's #2 or #3. Anything else?
> >>
> >>My nefarious plan is to build an HF VFO that tunes from 7 to 8 MHz and mix that
> >>with a crystal oscillator running at 43MHz, yielding a sum at 50 - 51 MHz(*),
> >>and then use the thing with the miniR2 receiver and a T2 based SSB transmitter
> >>to do weak-signal work on six meters this spring/summer.
> >>
> >> (*) Yes, I know I have to filter the difference frequency! Suggestions there
> >>would be welcomed.

> >> my vague plan is to use a band-pass diplexer after the mixer, followed by
> >>some gain stages to
> >> get me to 8 or 9 dBm, to drive the miniR2 and T2 mixer chains.
> >>
> >>I've got a reduction-drive equipped 25-145pF air variable behemoth cap stamped
> >>"ARC" on one end, assumed to be of WWII vintage, so it seems like I should be
> >>able to get decent tuning over a 1 MHz range.
> >>
> >>Is this reasonable?
> >>
> >> thanks and 73
> >>
> >> nick caruso
> >> kb1dej
> >

3594. Re: Principle of RF Power Level Meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-23 00:00:00 UTC
From: n7ws@arrl.net
Message-ID: <3812199b.233737602@news.azstarnet.com>
Source record: 66158

On Sat, 23 Oct 1999 14:59:30 -0400, "Al, N2NKB"
<n2nkb@n2nkb@postoffice.worldnet.att.net> wrote:

>
>Peter Bolch wrote in message <7ustct$21k$3@news.netcologne.de>...
>>Hi
>>
>>
>>what type of detectors are used with modern broadband (> 2 GHz) and
>>sensitive
>>(below, say, -40 dBm) power level meters? (Schottky) diode detectors?
>>
>>
>>Peter
>Two types,
>
>Diode detectors can measure peak level power. For measuring
>average power, sensors usually have a thermistor in them to convert
>heat into a calibrated DC voltage.
>Al
>
>
Al,

He said "below -40 dBm." At that level, Schottky diodes are the usual method.

Wes N7WS

3595. Re: Principle of RF Power Level Meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-23 00:00:00 UTC
From: "Al, N2NKB"
Message-ID: <7ut7l4$rd7$1@bgtnsc02.worldnet.att.net>
Source record: 66159

Wes Stewart wrote in message <3812199b.233737602@news.azstarnet.com>...
>On Sat, 23 Oct 1999 14:59:30 -0400, "Al, N2NKB"
><n2nkb@n2nkb@postoffice.worldnet.att.net> wrote:
>
>>
>>Peter Bolch wrote in message <7ustct$21k$3@news.netcologne.de>...
>>>Hi
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>>>what type of detectors are used with modern broadband (> 2 GHz) and
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>>>
>>>
>>>Peter
>>Two types,
>>
>>Diode detectors can measure peak level power. For measuring
>>average power, sensors usually have a thermistor in them to convert
>>heat into a calibrated DC voltage.
>>Al
>>
>>
>Al,
>
>He said "below -40 dBm." At that level, Schottky diodes are the usual
method.
>
>
>Wes N7WS

You have an interesting point there, Wes. -40 dBm is 100 nW, not
a whole lot of heating value at this power level.
Al

3596. Re: Circuit of a quartz oven?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-23 00:00:00 UTC
From: Harke Smits <harke.smits@net.hcc.nl>
Message-ID: <38120866.C9499E87@net.hcc.nl>
Source record: 66160

Hello Peter,

Look in Dubus 3/1997: Oven stabilized XO for VHF by Uwe Nitschke, DF9LN.
Best 73 de Harke
PA0HRK

Peter Bolch wrote:

> Hi
>
> I am looking for a circuit for a simple quartz oven. A temperature tolerance
> below 1 degree C will do.
>
> Peter

3597. 4CX250F/G (8621) tubes 4SALE

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-23 00:00:00 UTC
From: Ipo Camacho <ac137nospam@iwvisp.com>
Message-ID: <s14f1jq085968@corp.supernews.com>
Source record: 66161
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,ca.forsale

I have (4) Eimac 4CX250F/G (8621) and (10) Amprex 8621 tubes for sale. I would like to get rid of these tubes because their just taking up space. Acquired them from estate sale for a project but not HAM qualified yet to start anything. Don't know the percentage of each tube but it was in a secret stash according to owners wife and never touched. Bought lot for $900 eight months ago. Will sell Eimac set for $200 and Amprex set for $400 or best offer. Any questions, feel free to email me and I'll send pictures. Thanx for looking.

Ipo Camacho

3598. Re: Principle of RF Power Level Meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-23 00:00:00 UTC
From: kahrs@rci.rutgers.edu
Message-ID: <7utfv7kse1@amenti.rutgers.edu>
Source record: 66162

I enthusiastically recommend "Radio Frequency and microwave power measurement" by A. Fantom, 1990, published by the IEE. Unfortunately, it's VERY expensive (like 90$), but maybe you can find it in a university library.

3599. Re: Principle of RF Power Level Meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-23 00:00:00 UTC
From: Dan Rae <rae4@ix.netcom.com>
Message-ID: <381245E8.979B7464@ix.netcom.com>
Source record: 66163

And there is a FREE application note available from hp, called
something like
"The Principles of RF power Measurement"
Very good value for money :-)
Horowitz and Hill have good stuff on diode detectors also.
Dan

3600. 10 Meter SSB/CW Transmitter plans needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-23 00:00:00 UTC
From: Lawrence Gruber <lawrence@javanet.com>
Message-ID: <38126100.59DC@javanet.com>
Source record: 66164

I'm in search for detailed plans for building a 10 meter
transmitter capable of SSB or CW modes with a power output
of, say, 2 to 20 watts. (I might also be interested in
20 meter CW operation)

I see that Far Radio supplies pcb's for two articles in
73's mag. The first is Feb '91 for a 10 meter 'SB' transmitter.
And the other is July '92 for a 10 meter DSB transmitter.

As I don't have access to these back issues of 73's mag.,
I can't evaluate these designs.

If anyone has suggestions and a construction article, I'd
be most willing to send you a few bucks in return for you
sending me a copy of the plans.

Oh, no license yet, but very soon. I'm also quite experienced
at electronic construction, including R.F. stuff.

You can contact me via. email at: lawrence@javanet.com

Regards,

Larry

3601. FS: Heath HR-1680, Speaker & Manual $140

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-23 00:00:00 UTC
From: frohro@wwc.edu
Message-ID: <frohro-2310992003410001@10.0.2.15>
Source record: 66165
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,alt.ham-radio.marketplace

I have a Heath HR-1680 receiver with the manual and matching Heath speaker for sale. It is all operational, and the condition is quite good, except that a previous owner re-painted the speaker grill black, and it is peeling. If you would like to see some photos, point your web browser to:

http://www.wwc.edu/~frohro/Ads/HR-1680/

$140 plus shipping.

73,

Rob, KL7NA/W7

3602. Re: 60cycle buzz elimination

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-23 00:00:00 UTC
From: Irv Finkleman <finkirv@cadvision.com>
Message-ID: <38129ACB.B0E9B57C@cadvision.com>
Source record: 66166

Is this an audible buzz, or are you referring to RF interference?

Irv VE6BP

N1EBA wrote:

> Besides eliminating a dimmer switch does anyone have a way I can eliminate a 60
> cycle buzz from a dimmer switch. Any tricks?
>
> Bob

3603. Re: Need schematic.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-24 00:00:00 UTC
From: WIZ <WIZ@prodigy.net>
Message-ID: <01bf1dc6$10042360$85f2fcd1@newmicronpc>
Source record: 66167

The simplest (not the best) design would be a linear regulator.
All of the "brains" can be purchased on a single IC for a buck
or 2 at radio shack - an LM217 will do nicely. The LM317 can
handle only 1.5 amps, max, so you need some 2n3055
pass transistors and a big heatsink, plus some low ohms, high
wattage emitter equalizing resistors. And you need a hefty
transformer. You can make the emitter resistors from wire
and 2n3055s are cheap, depending on where you get them.
So your expense, if you have to buy all new stuff, will be in
the transformer, and, to a lesser degree, in the heatsink.
You will need to so some math to determine the number of
pass transistors and the length of wire of a particular size
to use to make the emitter resistors.

You could also build a switcher. Switchers are more efficient,
and harder to design than linears. You save money on the
cost of the transformer, which is the single most costly
part of a linear. Switchers run colder than linears - no big
heatsink is needed. They are smaller and weigh less. A
switcher is harder to "control" - ie, prevent damaging itself
and connected equipment if a component within the switcher
dies, and they are prone to produce a good deal of RF
noise. Personally, I believe the best approach is to learn
about switchers with small projects that are intended to power
devices that don't cost much to replace, if the switcher that
powers them fails and kills the device. At 30 amps, I believe
the device you are powering with the supply is too costly to
risk with a first time attempt at a home brew switcher.
Ed AF2P

Hank Lewis <lewisjr@dmci.net> wrote in article
<380e6fd6@nntp-out.newsnerds.com>...
> Hello all...
> I'm looking for schematics to build my own 30A 13.8V supply....I would
like
> to utilize 200mA meters for monitoring the volts and current as I already
> have these on hand....Nearly all the schematics I have found on the net
are
> for 6A or less which aren't enough to power the rigs in my shack....
> Please respond to lewisjr@dmci.net
> 73's
> =Hank=
>
>
>

3604. 60cycle buzz elimination

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-24 00:00:00 UTC
From: n1eba@aol.com
Message-ID: <19991023223008.22511.00000589@ng-fi1.aol.com>
Source record: 66168

Besides eliminating a dimmer switch does anyone have a way I can eliminate a 60 cycle buzz from a dimmer switch. Any tricks?

Bob

3605. Re: question about VFO design

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-24 00:00:00 UTC
From: WIZ <WIZ@prodigy.net>
Message-ID: <01bf1dc9$6964a9e0$85f2fcd1@newmicronpc>
Source record: 66169

Nick,

I like the goal. Without commenting on the VFO
part of the design, why not switch 2 xtal oscillators
so you can cover all of 6 by selecting osc1 or osc2
to mix with the vfo? Or is the miniR2 no good for
whats above 51mhz? (I am not familiar with the
receiver.)

I'm doing that with a mod to the TEN-TEC 20meter
to 6 meter xverter: 2 xtals instead of 1 and reworking it for
a 10 meter instead of 20 meter if. I have a 10 meter all
mode rig, so I'll have full use of 6 meters when I'm done.

On to the VFO part: VFO's are hard to control beasts.
The smaller (physically, and therefore, electronically)
the variable capacitor, the less subject it is to variations
in spacing between the plates - therefore the more stable,
electronically. A physically big cap will have a much
greater tendency to vibrate when bumped than a small
one. Temperature gradients will be bigger over a wider
area than a smaller. And so forth. Thus, designing a
stable VFO for a small range with a smaller cap is
more "do-able" than going for a broader range with a
bigger cap. 73 Ed AF2P

Nick Caruso <nick.caruso@software.com> wrote in article
<380E0FD1.3D23D4F@software.com>...
> A simple question (I hope):
>
> I'm building a VFO. I've checked out lots of schematics/designs for
homebrew
> VFOs, and they
> all seem to have very restricted tuning ranges, often less than 1MHz.
>
> Why is this? I can think of several possibilities:
>
> 1) larger tuning ranges lead to instability (for reasons I don't
understand)
> 2) people are working with tuning caps that don't have reduction
drives/and or
> have
> small ranges of capacitance
> 3) just because they're designing for the CW portions of the various HF
bands

> and don't ever intend to go outside them.
>
> My guess is it's #2 or #3. Anything else?
>
> My nefarious plan is to build an HF VFO that tunes from 7 to 8 MHz and
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MHz(*),
> and then use the thing with the miniR2 receiver and a T2 based SSB
transmitter
> to do weak-signal work on six meters this spring/summer.
>
> (*) Yes, I know I have to filter the difference frequency!
Suggestions there
> would be welcomed.
> my vague plan is to use a band-pass diplexer after the mixer,
followed by
> some gain stages to
> get me to 8 or 9 dBm, to drive the miniR2 and T2 mixer chains.
>
> I've got a reduction-drive equipped 25-145pF air variable behemoth cap
stamped
> "ARC" on one end, assumed to be of WWII vintage, so it seems like I
should be
> able to get decent tuning over a 1 MHz range.
>
> Is this reasonable?
>
> thanks and 73
>
> nick caruso
> kb1dej
>

3606. jenning vac var cap f/s

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-24 00:00:00 UTC
From: ts950sdx@aol.com
Message-ID: <19991024032917.18295.00000527@ng-co1.aol.com>
Source record: 66170

I HAVE A JENNINGS 20 TO 2000 PF@5000 VAC VAR CAP

PART NUMBER IS UCSL 2000-5S

WITH MOUNT GREAT COND

8" LONG X 3 DIA 1/4 SHAFT

$150.00 SHIPPED
JOE KF4TOH

3607. ICOM R-72 AS NEW MUST SELL FAST!!!!!!!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-24 00:00:00 UTC
From: ts950sdx@aol.com
Message-ID: <19991024034454.18295.00000529@ng-co1.aol.com>
Source record: 66171

ICOM R72 REC LIKE NEW
AS NEW
MUST SELL SOON

$375 SHIPPED
JOE KANE, ASHLAND CITY TN
Sun Oct 24 04:32:33 1999

3608. What is the current state of the art in HF fron end design?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-24 00:00:00 UTC
From: b_runner@hotmail.com
Message-ID: <3812b6a7.10686489@news.eisa.net.au>
Source record: 66172

Hi,

I am thinking about building an HF rig, so before I really start warming up the ARRL Radio designer[:-)], I would like to find out more about what can be done. Any hints, ideas, links, books etc, about this subject would be greatly appreciated.

I am very curious about the best currently achieved results in HF receiver front end design. For now,I would put aside the rest of the RX chain (I followed a lot of discussion about DSP/phase techniques here lately).

So for now I am looking at the best linear RF amps and mixers. For the amps, the best figures I have yet seen are for some push-pull amps : about 40-45dBm IP3. Have any of you gurus seen better figures+designs? I would imagine that it could be possible to get a pair of V-MOS FETs, run them in A-class (with large heat sinks), put a xformer feedback around and use two of those in push-pull mode... similar to transmitter amps, but for receive... Am I off track here? If this works, I would guess we could get over 50dBm IP3?

Now, with mixers, I am a bit on the fuzzy side here. I have seen the "Tayloe" mixer some time ago and it looks pretty impresive. Have any of you tried to replicate the results? I like diode ring mixers, or their variations, using other kinds of switching elements, eg. D-MOS FETs. These are linear, but have a fundamental disadvantage, the 5-7dB loss. So, when using them, if one wants to get sensitivity, a preamp is needed, and that reduces the linearity, which is counterproductive. Are there any active high performance mixers? With what I know now, if I was about to build a mixer, I woul do something similar as the amp suggested above: a couple of essentially super linear amps, but instead of DC supply, I would switch them on/off really hard. Perhaps a square wave between slightly negative bias (to switch the devices off quickly) and full A-class current?

Sorry for the long posting here... I seem to need feedback for my back-of the envelope thinking.

runner

3609. Re: INFO HEATHKIT

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-24 00:00:00 UTC
From: sabbatai_zvi@hotmail.com
Message-ID: <3812ff33.8674553@news.earthlink.net>
Source record: 66173
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,relcom.radio.ham

On Sat, 23 Oct 1999 14:34:23 -0400, "Richard M. Ramzy"
<kc8dmn@accinternet.com> wrote:

>My Brother has some Heathkit equipment. Can some one help me on the price of
>this equipment?

Sure - just look it up at the Boneyard Bluebook!

http://www.geocities.com/CapeCanaveral/Hall/8701/ham/boneyard.htm

That will give you som eidea of what others have been ASKING for these
pieces.

3610. WTB caps.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-24 00:00:00 UTC
From: Matt Erickson <kk5dr@hotmail.com>
Message-ID: <38131A38.D3E1FB41@hotmail.com>
Source record: 66174

I need vacuum variable caps;
(1)350-500pf @ 5-7.5kv with turns counter
(1)1500-2000pf @ 3-4kv with turns counter

I also need a oil filled cap;
50-60mf @ 5kv

3611. Re: Principle of RF Power Level Meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-24 00:00:00 UTC
From: n7ws@arrl.net
Message-ID: <38131bfd.299894156@news.azstarnet.com>
Source record: 66175

On Sat, 23 Oct 1999 16:34:00 -0700, Dan Rae <rae4@ix.netcom.com> wrote:

>And there is a FREE application note available from hp, called
>something like
>"The Principles of RF power Measurement"
>Very good value for money :-)
>Horowitz and Hill have good stuff on diode detectors also.
>Dan
>

Yes indeed. HP has a lot of free information on its site.

Just for kicks, I just went looking for your reference and found that they have
an updated note on power measurement that I didn't have and it is WONDERFUL..

You can find it at:

http://www.tmo.hp.com/@@eWciUxUQmglPN2ej/tmo/Notes/English/5965-6630E.html

Wes N7WS

3612. Re: Circuit of a quartz oven?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-24 00:00:00 UTC
From: douglas dwyer <doug@ddwyer.demon.co.uk>
Message-ID: <GDnKGCApjyE4Ew5P@ddwyer.demon.co.uk>
Source record: 66176

In article <38120866.C9499E87@net.hcc.nl>, Harke Smits
<harke.smits@net.hcc.nl> writes
>> Hi
>>
>> I am looking for a circuit for a simple quartz oven. A temperature tolerance
>> below 1 degree C will do.
>>
>> Peter
>
Which ever way you chose to control temperature for best results plot
the frequency as a function of set temperature.
You should have chosen or specified a crystal with a temperature
coefficientwhich changes from positive to negative at roughly the set
temperature then adjust the set temperature to exactly the turnover
temperature.
An AT cut crystal with a 70C turnover will be about 40ppm high (from
memory) at room temperature.
If you dont specify a turnover temperature it may be possible to use a
crystal with minimum frequency variation over -20+70 and look for the
turning temperature which will be at about 40C.
--
douglas dwyer

3613. Class-S / Pulse Width Modulator ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-24 00:00:00 UTC
From: phil <phil@invest.fsbusiness.co.uk>
Message-ID: <2HvzzKAeYyE4Ewf9@invest.fsbusiness.co.uk>
Source record: 66177

Have found it difficult to find much design info circuits on PWM.

Have put together Raab's class-E 700w pa for 160m and matched his best efficiency of 90%+ using a pair of IRFP450's.

Now it's time to modulate!

Anybody out there experimenting with or using AM solid state part or fully digital modulating techniques?

Tnx

Phil G4ZOW

3614. Re: pulling a crystal off frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-24 00:00:00 UTC
From: WAYNE CHENG <ve7hcw@direct.ca>
Message-ID: <pnGQ3.243$LX2.38198@brie.direct.ca>
Source record: 66178

I have found on a Japanese ham home page on using two crystals in parallel with about 22uH inseries and a variable capacitor 22 to 100pF..It does shift over +/_5khz and more on Freq.higher than 10mhz..Look in www.ac6v.comm in homebrew..73..VE7HCW..Wayne..sk..
Jim wrote in message <12267-38001473-129@storefull-115.iap.bryant.webtv.net>...
several years ago i built a crystal converter from a plan in radio electronics magazine. it was for listening to shortwave on an am car radio. now i have a newer car with a digital radio. it steps in even steps that are too large to get some sw stations tuned in well. i wonder if i could draw the various crystals off frequency with a variable cap in parallel with them. does anyone know about this? will a crystal pull off frequency enough to help this problem? how much capacitance is required? 50pf? 100pf? if this would work then i could use the variable cap like a fine tune control to get between the 10khz steps. on another angle, will two crystals oscillate together in the same circuit? could i use a 5khz crystal with the other ones to get the frequency offset that i need? will they work together or will i need another mixer circuit to combine them? (a pre-mixer mixer?) are there any other ways to skin this cat? any input is welcome

3615. Re: What is the current state of the art in HF fron end design?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-24 00:00:00 UTC
From: Charles Reichert <kd9jq@imaxx.net>
Message-ID: <38134DA2.959D44BC@imaxx.net>
Source record: 66179

I have buried in my files a coupls of articles on high intercept
RF Amp stages using a bipolar. I found a flaw in the circuits
and re-drew themn. I've never actually built these but can fax
you the article/corrected sheets.

Chuck KD9JQ
http://www.imaxx.net/~kd9jq

runner wrote:
>
> Hi,
>
> I am thinking about building an HF rig, so before I really start
> warming up the ARRL Radio designer[:-)], I would like to find out
> more about what can be done. Any hints, ideas, links, books etc, about
> this subject would be greatly appreciated.
>
> I am very curious about the best currently achieved results in HF
> receiver front end design. For now,I would put aside the rest of the
> RX chain (I followed a lot of discussion about DSP/phase techniques
> here lately).
>
> So for now I am looking at the best linear RF amps and mixers. For the
> amps, the best figures I have yet seen are for some push-pull amps :
> about 40-45dBm IP3. Have any of you gurus seen better figures+designs?
> I would imagine that it could be possible to get a pair of V-MOS FETs,
> run them in A-class (with large heat sinks), put a xformer feedback
> around and use two of those in push-pull mode... similar to
> transmitter amps, but for receive... Am I off track here? If this
> works, I would guess we could get over 50dBm IP3?
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> Now, with mixers, I am a bit on the fuzzy side here. I have seen the
> "Tayloe" mixer some time ago and it looks pretty impresive. Have any
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> their variations, using other kinds of switching elements, eg. D-MOS
> FETs. These are linear, but have a fundamental disadvantage, the 5-7dB
> loss. So, when using them, if one wants to get sensitivity, a preamp
> is needed, and that reduces the linearity, which is counterproductive.
> Are there any active high performance mixers? With what I know now,
> if I was about to build a mixer, I woul do something similar as the
> amp suggested above: a couple of essentially super linear amps, but
> instead of DC supply, I would switch them on/off really hard. Perhaps
> a square wave between slightly negative bias (to switch the devices
> off quickly) and full A-class current?
>

> Sorry for the long posting here... I seem to need feedback for my
> back-of the envelope thinking.
>
> runner

3616. FS NIB ARC5 IF Cans

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-24 00:00:00 UTC
From: "John L." <larry.asp@sympatico.ca>
Message-ID: <38137CFA.7640@sympatico.ca>
Source record: 66180
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.boatanchors

I have 2 IF cans, new in the box for the ARC 5 BC453. These are 85kc, part#12011. One is still sealed and never opened, the other is in its box and wrapper, but has been opened. Also for sale and to be included with these cans are 5 new IF cans Part# G115A/G116A, and 3 new IF cans (WW2 era part#s22195 and 22196)On these latter parts I dont know what the specs are or where they came from - so dont ask. Hi! I want $20.00 for the lot plus postage. Youve gotta take em all. (Cleaning up the basement, and getting ready for a move.)

3617. Re: What is the current state of the art in HF fron end design?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-24 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <38135484.3B8A542C@corecomm.net>
Source record: 66181

Charles Reichert wrote:
> I have buried in my files a coupls of articles on high intercept
> RF Amp stages using a bipolar. I found a flaw in the circuits
> and re-drew themn. I've never actually built these but can fax
> you the article/corrected sheets.

I bet he's not the only one who'd like to see them, I bet I bet. :-) Any copyright problems if I were to scan them for you and put them up in web space?

```
--
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
```

3618. Wanted: SPRAT Magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-24 00:00:00 UTC
From: Duncan Walters <tesla@cwcom.net>
Message-ID: <381365CE.39A51923@cwcom.net>
Source record: 66182

Wanted: SPRAT Magazines (G-QRP-Club), particularly issues 1 to 40.
And before anyone else reminds me, I know I can obtain a CD-ROM with all

100 issues on - but I don't need one of them.
Can anyone help?
Please reply soon.

Best regards,
Duncan G4DFV

3619. Re: Class-S / Pulse Width Modulator ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-24 00:00:00 UTC
From: NOamradioSPAM@thebizlink.com
Message-ID: <NOamradioSPAM-2410991601180001@207-172-132-134.s134.tnt5.col.md.dialup.rcn.com>
Source record: 66183

In article <2HvzzKAeYyE4Ewf9@invest.fsbusiness.co.uk>, phil
<phil@invest.fsbusiness.co.uk> wrote:

> Have found it difficult to find much design info circuits on PWM.
>
> Have put together Raab's class-E 700w pa for 160m and matched his best
> efficiency of 90%+ using a pair of IRFP450's.
>
> Now it's time to modulate!
>
> Anybody out there experimenting with or using AM solid state part or
> fully digital modulating techniques?
>
> Tnx
>
> Phil G4ZOW

I know of t least US hams who have built fully functioning solid state PDM
AM rigs - WA1GFZ and KA1SI. Sorry, I don't have an email address for
either but their snail mail addresses should be in the callbook.

You can see photos of the WA1GFZ tranmitter at

http://www.thebizlink.com/am/pix/htm/gfzpdm1.htm

Tons of other info on AM activities available at the same site. Top level
address is

http://www.thebizlink.com/am

3620. WTB: Johnson open wire spreaders

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-24 00:00:00 UTC
From: k9sqg@aol.com
Message-ID: <19991024164639.01633.00000689@ng-fp1.aol.com>
Source record: 66184

Looking for a few new ones, 6".

73

Evan

3621. FS: Assorted sweep tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-24 00:00:00 UTC
From: ovrreactor@aol.com-nospam
Message-ID: <19991024191240.14045.00000549@ng-ce1.aol.com>
Source record: 66185

I am selling 61 assorted sweep tubes (list below).

I recently purchased a garage full of parts from a retired TV & radio repairman. I'm an audio guy and I don't use sweep tubes, so I'd like to sell them off. I was told by the seller that some were new, some were used, but he wasn't sure which were which, and most weren't even in their original cartons (some were loose). I have checked all of these tubes on a B&K 667, and have verified that all of the tubes listed below test LIKE NEW, have no grid emission/gas/leakage, and have no shorts. I have also re-boxed the loose tubes. (I rejected any questionable tubes during testing). During my testing, I made some judgements regarding the physical appearance of the tubes. The "rating system" that I used below ranges from "NEW-VG-GOOD-USED". The tubes marked "USED" may have discolored glass or significantly burned getters, but they STILL test "like new".

MAKE ME AN OFFER, I'm a motivated seller!!! Offers to buy the entire lot will be considered first, but I MIGHT consider breaking this lot up.

(FYI, if these tubes were purchased as NOS from that tube-selling place in Arizona, the cost would be over $1600...not that I'm expecting to actually GET that much.)

Interested buyers, please respond by email.

Regards,
Tom Mitchell
email - OvrReactor@aol.com

==========THE LIST==========

6DQ5 - GOOD- GE
6GJ5 - VG - Zenith (Sylvania)
6GJ5A - NEW - RCA
6HB5 - NEW - GE
6HB5 - VG - GE
6HB5 - VG - RCA
6HF5 - NEW - GE
6HF5 - GOOD- GE
6HF5 - GOOD- Sylvania
6JA5 - VG - Zenith (Sylvania)
6JA5 - VG - Zenith (Sylvania)
6JB6 - GOOD- Sylvania
6JB6 - GOOD- RCA (Sylvania)
6JE6 - USED- Sylvania (loose plate cap)
6JE6C - NEW - GE
6JE6C - GOOD- Int'l Servicemaster (GE)

6JT6A - NEW - GE
6JT6A - NEW - GE (RCA)
6JT6A - NEW - GE (RCA)
6JT6A - NEW - RCA
6JT6A - GOOD- Sylvania
6JS6C - GOOD- GE
6JS6C - USED- GE (loose plate cap)
6JS6C - USED- Sylvania (GE)
6JS6C - USED- Sylvania
6JU6 - GOOD- GE
6KD6 - VG - GE
6KD6 - GOOD- Sylvania
6KD6 - GOOD- Sylvania
6KD6 - USED- Sylvania
6KN6 - GOOD- Sylvania
6KV6A - NEW - Lindall (GE)
6LB6 - NEW - Zenith (GE)
6LB6 - GOOD- Zenith (GE)
6LB6 - VG - Zenith (Sylvania)
6LF6 - GOOD- Philips ECG (Sylvania)
6LF6 - GOOD- RCA (Sylvania)
6LF6 - USED- Zenith (Amperex)
6LF6 - USED- Zenith (Amperex)
6LQ6 - USED- RCA
6LQ6 - USED- Magnavox (Japan)
6LQ6 - USED- "Unknown" (Japan)
6LW6 - NEW - GE
12GW6 - NIB - RCA
12JB6A- NEW - RCA
12JB6A- NEW - RCA
12JB6A- VG - GE
21KA6 - NIB - Sylvania
21KA6 - VG - Sylvania
24LQ6 - USED- Raytheon
24LQ6 - USED- RCA
26HU5 - VG - Sylvania
26HU5 - USED- GE
26LW6 - NIB - Sylvania (GE)
31JS6C- GOOD- GE
31JS6C- GOOD- Sylvania
31LQ6 - VG - RCA
35LR6 - GOOD- RCA (GE)
36KD6 - GOOD- Zenith (GE)
36MC6 - GOOD- Sylvania
36MC6 - USED- RCA (Sylvania)

3622. Re: What is the current state of the art in HF fron end design?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-24 00:00:00 UTC
From: Charles Reichert <kd9jq@imaxx.net>
Message-ID: <3813C375.823115EF@imaxx.net>
Source record: 66186

I found the one article by Ulrich L. Rohde DJ2LR
from the November 1979 issue of HR page 34
and a sheet I made up with a working schematic/equations
using the 2N5109.

The other is a schematic of the design based on U.S. Patent
3,891,834; 1975. I'm assuming that this is printable for
general consumption since 17 years has passed.

I'll clean them up this week and put them on my web page.

73 Chuck KD9JQ

Charles Reichert wrote:
>
> I have buried in my files a coupls of articles on high intercept
> RF Amp stages using a bipolar. I found a flaw in the circuits
> and re-drew themn. I've never actually built these but can fax
> you the article/corrected sheets.
>
> Chuck KD9JQ
> http://www.imaxx.net/~kd9jq
>
> runner wrote:
> >
> > Hi,
> >
> > I am thinking about building an HF rig, so before I really start
> > warming up the ARRL Radio designer[:-)], I would like to find out
> > more about what can be done. Any hints, ideas, links, books etc, about
> > this subject would be greatly appreciated.
> >
> > I am very curious about the best currently achieved results in HF
> > receiver front end design. For now,I would put aside the rest of the
> > RX chain (I followed a lot of discussion about DSP/phase techniques
> > here lately).
> >
> > So for now I am looking at the best linear RF amps and mixers. For the
> > amps, the best figures I have yet seen are for some push-pull amps :
> > about 40-45dBm IP3. Have any of you gurus seen better figures+designs?
> > I would imagine that it could be possible to get a pair of V-MOS FETs,
> > run them in A-class (with large heat sinks), put a xformer feedback
> > around and use two of those in push-pull mode... similar to
> > transmitter amps, but for receive... Am I off track here? If this
> > works, I would guess we could get over 50dBm IP3?

> >
> > Now, with mixers, I am a bit on the fuzzy side here. I have seen the
> > "Tayloe" mixer some time ago and it looks pretty impresive. Have any
> > of you tried to replicate the results? I like diode ring mixers, or
> > their variations, using other kinds of switching elements, eg. D-MOS
> > FETs. These are linear, but have a fundamental disadvantage, the 5-7dB
> > loss. So, when using them, if one wants to get sensitivity, a preamp
> > is needed, and that reduces the linearity, which is counterproductive.
> > Are there any active high performance mixers? With what I know now,
> > if I was about to build a mixer, I woul do something similar as the
> > amp suggested above: a couple of essentially super linear amps, but
> > instead of DC supply, I would switch them on/off really hard. Perhaps
> > a square wave between slightly negative bias (to switch the devices
> > off quickly) and full A-class current?
> >
> > Sorry for the long posting here... I seem to need feedback for my
> > back-of the envelope thinking.
> >
> > runner

3623. Re: /\/\otorola SP50 help?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-24 00:00:00 UTC
From: Kenn <pamkenn@iland.net>
Message-ID: <3813DA30.F6B68F57@iland.net>
Source record: 66187

check the solder connections on all parts of the antenna ports. I jave seen
a lot of them with bad solder connections coe through the shop

Kenn KD0IY

Jim Devenport wrote:

> Any one of you whizzes familiar with the Motorola SP-50 handheld radio?
> I have 2 that exhibit the same symptoms: Very weak trans and recieve,
> as though the RF path from antenna socket to board input. No visible
> breaks in the PC microstrip trace, etc. I've seen this problem
> before. Batts are fully charged and the antennas are OK. Could anyone
> point me toward a probable failure item?
> Jim W5AOX

3624. WTB: Eimac Plate Caps 4-400A

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-24 00:00:00 UTC
From: CMC25 <c415a@mashell.com>
Message-ID: <3813E6C3.F303E0C5@mashell.com>
Source record: 66188
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew

Looking for a pair of Eimac plate caps for 4-400A. Eimac part number is

HR-6.

Please reply by eMail.

Jon

3625. Re: Class-S / Pulse Width Modulator ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-25 00:00:00 UTC
From: phil <phil@invest.fsbusiness.co.uk>
Message-ID: <OFndzEA5jAF4EwQT@invest.fsbusiness.co.uk>
Source record: 66043

Hi Steve,
>> Have found it difficult to find much design info circuits on PWM.
>>
>> Have put together Raab's class-E 700w pa for 160m and matched his best
>> efficiency of 90%+ using a pair of IRFP450's.
>>
>> Now it's time to modulate!
>>
>> Anybody out there experimenting with or using AM solid state part or
>> fully digital modulating techniques?
<snip>
>I know of t least US hams who have built fully functioning solid state PDM
>AM rigs - WA1GFZ and KA1SI. Sorry, I doni¿½t have an email address for
>either but their snail mail addresses should be in the callbook.
>
>You can see photos of the WA1GFZ tranmitter at
>
>http://www.thebizlink.com/am/pix/htm/gfzpdm1.htm
>
>Tons of other info on AM activities available at the same site. Top level
>address is
>
>http://www.thebizlink.com/am

Thank you for the info above.

(((73)))

Phil G4ZOW

3626. Re: WANTED 24 VDC 6 AMP POWER SUPPLY

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-25 00:00:00 UTC
From: 2findit <no_spam@please.com>
Message-ID: <YeUQ3.17500$v11.21220@dfw-read.news.verio.net>
Source record: 66044
Cross-posted to: alt.comp.hardware.homebuilt,alt.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.swap,sci.electronics.equipment

Greetings Bill..

They're really not THAT difficult to build now-a-days!
Something to consider..

Cheers,
Gary

kable guy minn wrote in message <7udsqb$4nu$1@newsfeed.minn.net>...
>HELLO
>looking for a 24vdc @6 amp power supply for a amp from a cell site.
doesn't
>need to be the matching unit but would be nice.. (ERICSSON) AMP
>
>thanks
>Bill
>n0mnb@minn.net
>
>

3627. valve / tube home brew

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-25 00:00:00 UTC
From: Bob <merryprankster@cwcon.net>
Message-ID: <HkZQ3.45$cf2.28@news1-hme0>
Source record: 66045

valve / tube home brew is what I am wanting to try
Has any one a suggestions as to what is a good all round valve to use on up to 2 meters
or a H F one to start a receiver project poss. changing to a transmitter
I want to get some experience with valve sets before I start to restore my 1949 ex WD 19 set
Any advice is welcome Thanks Bob

3628. Belden 8230 distributors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-25 00:00:00 UTC
From: Fidel Leon <ea3gip@pobox.com>
Message-ID: <7v1tck$n9d$1@diana.bcn.ttd.net>
Source record: 66046

Looking for distributors who sell the Belden 8230 cable... It's commented at the Butternutt HF9V antenna manual, used for tuned radials.

73,
Fidel Leon - EA3GIP
ea3gip@pobox.com

3629. An Apology: ARRL Radio Designer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-25 00:00:00 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <cJUUOA6NUAZxqBLtDRTvbFEQlkuC@4ax.com>
Source record: 66047

I've been pretty thrashy about what I considered a shortcoming of the ARRL Radio Designer not working with my video board and system. I have roundly criticized ARRL for not having any interest in technical help, but "send it back" for a solution.

For whatever reason, my system totally crashed and I was forced to reinstall EVERYTHING from scratch including the operating system, the video drivers, and most of the applications software (the data was backed up and I really didn't lose anything valuable).

When I went to reinstall Designer, I find now that it works. Why it didn't work before, whether it will quit working in the future are conjecture. It works now, and I'd like to apologize to the ARRL for my fairly pointed and negative comments. I'm still not thrilled with tech support, but the system appears to be as advertised.

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

3630. Frontend for FM digital radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-25 00:00:00 UTC
From: Tomas Ahrne <dirac@takethisoutalgonet.se>
Message-ID: <172R3.11724$7G2.69077@news1.online.no>
Source record: 66048

Hi,

I am currently designing a software radio (sampling the RF signal directly and doing all down conversion and demodulation in DSP [Digital Signal Processor]) for the FM band.

The DSP part is no problem as I work with this in my everyday job, but RF design is another thing. In theory I know how to do it, but I don't have the experience that you get after some years of working in a field.

Can anybody give me a pointer how to design a really high-quality FM fromtend. It would be comprised of an antenna input, AGC, and a band-pass filter. The band-pass filter should, of couse, have pass-band points at 88 and 108 MHz. The stop-bands should be at about 103MHz and 113 MHz. Phase should be fairly smooth with no abrupt peaks (not phase linear, though). Up to 6 dB ripple could be OK, although about 2 dB would be better.

What stop-band attenuation would be needed?

I need practical help and pointers.

The input stage must be able to handle weak signals as well as very strong ones. S/N > 75 dB (is it pssible?).

I have looked at a 14th order inverse Tchebychev band-pass filter and I could possibly design that, but it is the whole integrated front end that I need help with. What components do you use and how do you use them to get the best performance.

Can you for instance buy ready made band-pass filters for this purpose?

I'd be greatful for any help in the area.

Best,

Tomas Ahrne

3631. Re: question about VFO design

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-25 00:00:00 UTC
From: Nick Caruso <nick.caruso@software.com>
Message-ID: <3814AE82.4D77B525@software.com>
Source record: 66049

runner wrote:
>
> Hello,
>
> This will sound a little arrogant, I apologize in advance, but:
>
> How about a PLL with a DDS in the summing loop?

I think this is a reasonable question: for myself, the answer is simplicity. I'm not an EE, I'm a software engineer. I've read a bunch, soldered a lot of kits together successfully, and am now making a foray into building my own equipment, with a tiny tiny bit of design (er, parameter variation, rather) thrown in.

> C'mon guys, mechanical tuning caps, free running oscillators..?
> it's 1999...

It might give you some insight to know that I own a Hammarlund HQ-180 receiver -- I like the feel of the tuning, and the way the dial lights cast interesting patterns on the walls, through the perforated steel shell of the receiver late at night. That is, there's a large element of irrationality involved here...

Thanks to everyone for all the advice -- I really appreciate it!

best regards
nick caruso
kb1dej

3632. ANyone use these 2.4Ghz ATV modules?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-25 00:00:00 UTC
From: Paul Breed <Paul@rasdoc.com>
Message-ID: <3814AF40.AD5653AD@rasdoc.com>
Source record: 66050

Any experience with the following ATV products?

http://www.4atv.com/atvprod.htm

You can't beat the price.

Paul
(KL7JG)

3633. Belden

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-25 00:00:00 UTC
From: Fidel Leon <ea3gip@pobox.com>
Message-ID: <7v1t90$n68$1@diana.bcn.ttd.net>
Source record: 66051

Looking for distributors who sell the Belden 8230 cable... It's commented at the Butternutt HF9V antenna manual.

73,
Fidel Leon - EA3GIP
ea3gip@pobox.com

3634. Re: ANyone use these 2.4Ghz ATV modules?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-25 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <3814BE11.A60@pop.removethistomailme.net>
Source record: 66052

Paul Breed wrote:
>
> Any experience with the following ATV products?
>
> http://www.4atv.com/atvprod.htm
>
> You can't beat the price.
>
> Paul
> (KL7JG)

Interesting. I just ordered a pair, we'll see what they look like. I'd like to look into getting an Ethernet link working at 2.4 GHz.

-- jm

---

http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

3635. Re: What is the current state of the art in HF fron end design?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-25 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <3814CD31.72DEBE46@teleport.com>
Source record: 66053

I recommend getting a copy of _Communications Receivers_ by Rohde, Whitaker, and Bucher (McGraw-Hill, ISBN 0-07-053608-2). It has in-depth discussions of techniques used in state-of-the-art receivers.

runner wrote:
>
> Hi,
>
> I am thinking about building an HF rig, so before I really start
> warming up the ARRL Radio designer[:-)], I would like to find out
> more about what can be done. Any hints, ideas, links, books etc, about
> this subject would be greatly appreciated.
>
> I am very curious about the best currently achieved results in HF
> receiver front end design. For now,I would put aside the rest of the
> RX chain (I followed a lot of discussion about DSP/phase techniques
> here lately).
>
> So for now I am looking at the best linear RF amps and mixers. For the
> amps, the best figures I have yet seen are for some push-pull amps :
> about 40-45dBm IP3. Have any of you gurus seen better figures+designs?
> I would imagine that it could be possible to get a pair of V-MOS FETs,
> run them in A-class (with large heat sinks), put a xformer feedback
> around and use two of those in push-pull mode... similar to
> transmitter amps, but for receive... Am I off track here? If this
> works, I would guess we could get over 50dBm IP3?
>
> Now, with mixers, I am a bit on the fuzzy side here. I have seen the
> "Tayloe" mixer some time ago and it looks pretty impresive. Have any
> of you tried to replicate the results? I like diode ring mixers, or
> their variations, using other kinds of switching elements, eg. D-MOS
> FETs. These are linear, but have a fundamental disadvantage, the 5-7dB
> loss. So, when using them, if one wants to get sensitivity, a preamp
> is needed, and that reduces the linearity, which is counterproductive.
> Are there any active high performance mixers? With what I know now,
> if I was about to build a mixer, I woul do something similar as the
> amp suggested above: a couple of essentially super linear amps, but
> instead of DC supply, I would switch them on/off really hard. Perhaps
> a square wave between slightly negative bias (to switch the devices
> off quickly) and full A-class current?
>
> Sorry for the long posting here... I seem to need feedback for my
> back-of the envelope thinking.
>

> runner

3636. Re: WTB: Eimac Plate Caps 4-400A

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-25 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <7v2pthukm1@nnrp1.deja.com>
Source record: 66054
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew

In article <3813E6C3.F303E0C5@mashell.com>,
c415a@mashell.com wrote:
> Looking for a pair of Eimac plate caps for 4-400A. Eimac part number
is
>
> HR-6.
>
> Please reply by eMail.
>
> Jon
>
>

Contact RF Parts at http://www.rfparts.com/.
They have what you want.
--
Greetings,

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Before you buy.

3637. Re: question about VFO design

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-25 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <3814F161.67A4EA22@corecomm.net>
Source record: 66055

Nick Caruso wrote:
> It might give you some insight to know that I own a Hammarlund HQ-180 receiver
> -- I like the feel of the tuning, and the way the dial lights cast interesting
> patterns on the walls, through the perforated steel shell of the receiver late
> at night. That is, there's a large element of irrationality involved here...

Anyone who hasn't experienced that particular brand of irrationality is
missing a truly unique joy.

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

3638. Re: Principle of RF Power Level Meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-25 00:00:00 UTC
From: Al Lorona <al_lorona@hp.com>
Message-ID: <3814ECE3.7F5@hp.com>
Source record: 66056

Peter Bolch wrote:
>
> Hi
>
> what type of detectors are used with modern broadband (> 2 GHz) and
> sensitive
> (below, say, -40 dBm) power level meters? (Schottky) diode detectors?
>
> Peter

Hi, Peter,

Yes, you're right on the money. You'll find low-barrier Schottky diodes in the most sensitive power sensors commonly available. With lots of averaging and a little bit of patience, levels as low as -70 dBm can be measured.

Two other types of sensors, thermistor and thermocouple, are still around, but their sensitivity is much worse, say, above -30 or -20 or so. So why are they still around? Because thermocouples can handle *really* high power signals without frying, and thermistors are the most accurate (due to their good match).

One of the best publications that any RF engineer needs to have on his or her shelf is HP Application Note 64-1, Fundamentals of RF and Microwave Power Measurement, available for free download at http://www.tmo.hp.com/tmo/Notes/English/5965-6630E.html

Regards,

Al W6LX

--

While you're passing out the spam, don't forget these guys:

admin@loopback
$LOGIN@localhost
$LOGNAME@localhost
$USER@localhost
$USER@$HOST
root@mailloop.com
Chairman William Kennard: wkennard@fcc.gov
Commissioner Susan Ness: sness@fcc.gov
Commissioner Harold Furchtgott-Roth: hfurchtg@fcc.gov
Commissioner Michael Powell: mpowell@fcc.gov
Commissioner Gloria Tristani: gtristan@fcc.gov

US Postal Service: customer@email.usps.gov
Fraud Watch: fraudinfo@psinet.com
Federal Trade Commission: consumerline@ftc.gov

3639. B&W Tank Coil Inductance

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-25 00:00:00 UTC
From: Bill - <billjd@mcleodusa.net>
Message-ID: <3814F82C.7E99@mcleodusa.net>
Source record: 66057

B&W 850A and 852 Bandswitched Tank coils:

For any interested parties, I had occasion to check on the inductance values for the various tap positions on the B&W 850A and 852 tank coils from an old catalog. They are as follows

The 850A is 13.6-6.5-1.75-1.0-0.8 uH. Capacity to resonate each band 150-80-70-55-50 pf.

The 852 is 7-3.72-2.34-1.34-0.95 uH. Capacity to resonate each band 268-144-73-48.5-36 pf

Bands are 80-40-20-15-10

73, Bill, W0BVR

3640. Re: B&W Tank Coil Inductance

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-25 00:00:00 UTC
From: "R.C.M." <robrk@pgh.net>
Message-ID: <38150DBF.6C41@pgh.net>
Source record: 66058

Bill - wrote:
>
> B&W 850A and 852 Bandswitched Tank coils:
>
> For any interested parties, I had occasion to check on the inductance
> values for the various tap positions on the B&W 850A and 852 tank coils
> from an old catalog. They are as follows
>
> The 850A is 13.6-6.5-1.75-1.0-0.8 uH. Capacity to resonate each band
> 150-80-70-55-50 pf.
>
> The 852 is 7-3.72-2.34-1.34-0.95 uH. Capacity to resonate each band
> 268-144-73-48.5-36 pf
>
> Bands are 80-40-20-15-10
>
> 73, Bill, W0BVR
And if you do the math, they don't hold the same plate Z on each
band...Think
it was one of Bill Orr's books that speaks of moving taps. It's a good
exercise to figure it out....

3641. Re: What is the current state of the art in HF fron end design?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-25 00:00:00 UTC
From: DavidC <eDoc@netzero.net>
Message-ID: <s1a5q37vgbb69@freenews.remarq.com>
Source record: 66059

From what I have heard about the JRC JST-245 you may want to
take a peek at what they have done. You may also want to take a
look at the new Elecraft K2 rig design.

73, DavidC K1YP

****

runner <b_runner@hotmail.com> wrote in message
news:38112f21.16300499@news.eisa.net.au...
> Hi,
>
> I am thinking about building an HF rig, so before I really start
> warming up the ARRL Radio designer[:-)], I would like to find out
> more about what can be done. Any hints, ideas, links, books etc, about
> this subject would be greatly appreciated.
>
> I am very curious about the best currently achieved results in HF
> receiver front end design. For now,I would put aside the rest of the
> RX chain (I followed a lot of discussion about DSP/phase techniques
> here lately).
>
> So for now I am looking at the best linear RF amps and mixers. For the
> amps, the best figures I have yet seen are for some push-pull amps :
> about 40-45dBm IP3. Have any of you gurus seen better figures+designs?
> I would imagine that it could be possible to get a pair of V-MOS FETs,
> run them in A-class (with large heat sinks), put a xformer feedback
> around and use two of those in push-pull mode... similar to
> transmitter amps, but for receive... Am I off track here? If this
> works, I would guess we could get over 50dBm IP3?
>
> Now, with mixers, I am a bit on the fuzzy side here. I have seen the
> "Tayloe" mixer some time ago and it looks pretty impresive. Have any
> of you tried to replicate the results? I like diode ring mixers, or
> their variations, using other kinds of switching elements, eg. D-MOS
> FETs. These are linear, but have a fundamental disadvantage, the 5-7dB
> loss. So, when using them, if one wants to get sensitivity, a preamp
> is needed, and that reduces the linearity, which is counterproductive.
> Are there any active high performance mixers? With what I know now,
> if I was about to build a mixer, I woul do something similar as the
> amp suggested above: a couple of essentially super linear amps, but
> instead of DC supply, I would switch them on/off really hard. Perhaps
> a square wave between slightly negative bias (to switch the devices
> off quickly) and full A-class current?
>

> Sorry for the long posting here... I seem to need feedback for my
> back-of the envelope thinking.
>
> runner
>

* Sent from RemarQ http://www.remarq.com * The Internet's Discussion Network *
* The fastest and easiest way to search and participate in Usenet - Free! *

3642. Re: Frontend for FM digital radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-25 00:00:00 UTC
From: rick@area.com
Message-ID: <7v35vk$j7d$1@vax.area.com>
Source record: 66060

In article <172R3.11724$7G2.69077@news1.online.no>,
Tomas Ahrne <dirac@takethisoutalgonet.se> wrote:
>Hi,
>
>Can anybody give me a pointer how to design a really high-quality FM
>fromtend. It would be comprised of an antenna input, AGC, and a band-pass
>filter. The band-pass filter should, of couse, have pass-band points at 88
>and 108 MHz. The stop-bands should be at about 103MHz and 113 MHz. Phase

Rather than a fixed band pass filter, what you should use is a tracking
band pass filter that tunes to the specific station. This will
greatly improve the strong signal performance.

A design which is known to work is to use air core inductors about 1/4
inch diameter magnetically coupled to each other (about 1 inch spacing)
and tuned with series varactor diodes. The details are not published
so you would have to work them out from basic filter theory. Read
old papers published in the 1940's in Proc. IRE; they tell all about
how to build these things (except the varactors, which were air
variables in those days).

Is this easy? No. But you wanted a "really high-quality" frontend.
This is it. Anything else will be *much* worse. Believe me, I
have built them all and tested them.

For an easy front end, just scavenge one of those little FM
tuner cans from any receiver and tap in before the mixer. Sometimes
you see the tuners for sale in surplus catalogs with docs.
The performance will be ... nothing to write home about.

Now, all we need is some program material worth tuning in!

Rick Karlquist N6RK
rick@area.com

3643. DSW Power Mod?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-25 00:00:00 UTC
From: David Kritzberg <dkritz@mindspring.com>
Message-ID: <3814EC95.51F0@mindspring.com>
Source record: 66061

Does anyone know of a power mod for the DSW 40?
Any suggestions?

3644. Re: Principle of RF Power Level Meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-25 00:00:00 UTC
From: Jim Pennell <spam@nospam.com>
Message-ID: <7v38m2tuo1@nntp8.atl.mindspring.net>
Source record: 66062

One other detail about Thermistors Vs diode detectors is that the thermistor detector is an RMS detector and a diode is a peak detector with a correction factor thrown in by the display device and may not be accurate, depending on modulation technique of the signal being measured.

Although, for low level signals, diodes work quite nicely. Still, this difference CAN sneak up on a user.

Jim

Anti-SPAMBOT return address......

jpennell at

ix dot netcom dot com

3645. Interested in Heathkit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-25 00:00:00 UTC
From: Doc <docky@earthlink.net>
Message-ID: <381531B2.A61685FC@earthlink.net>
Source record: 66063

Interested in Heathkit? check http://home.earthlink.net/~docky large
Heathkit Site Hundreds of pics

3646. Re: 60cycle buzz elimination

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-25 00:00:00 UTC
From: Bahremu <bahremu@yahoo.com>
Message-ID: <7v5j6h$1sr3@enews4.newsguy.com>
Source record: 66064

make sure that the resistance between ground and the rest of the circut is
equal.
They way that I do it for the proffesional sound equpment that i use is to
"lift" all the devices except for one from ground, thereby forcing them all
to ground at the same place and it keeps 60 cycle hum from showing up.
(60Hz hum sounds really annoying at on an 800W sound system)

N1EBA <n1eba@aol.com> wrote in message
news:19991023223008.22511.00000589@ng-fi1.aol.com...
> Besides eliminating a dimmer switch does anyone have a way I can eliminate
a 60
> cycle buzz from a dimmer switch. Any tricks?
>
> Bob

3647. Yaesu 5100 Mod problem...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-25 00:00:00 UTC
From: jmtsr@mindspring.com
Message-ID: <3815ae8f.106605312@news.mindspring.com>
Source record: 66189

I just did the extended receive mod on the Yaesu 5100. When I turned it on after the mod to set the limits it will only let me set the UHF limits, but not the VHF.. it gets through with the UHF, and that's it. The VHF side is very limited. I have double checked the Mod instructions with the jumpers, etc..

The mod said when the unit was turned back on, you would see:

300.000 & 20.000

I get :

300.000 & 144.000

I have also tried the D/MR, F/W, REV, while turning on the radio, but still get the same 300.00 & 144.000.
What could be wrong?.. It will only set the limits for the UHF... anyone else run into this problem?

Here's my Jumpered list:

R4001
R4003
R4004
R4051
R4061
R4062
R4064
R4068
R4070
R4072

R4072 was unsoldered and jumpered.
R4067 was unjumpered for Band Switching. I replaced this, but still get the same results.
The only thing that I did , that the instructions didn't mention was I removed the head from the two ribbons connecting the control head.... didn't know if by removing one of the jumpers it reset the radio in some way, and that could be one reason, since the ribbons were not plugged in at the time of the Mod?

Thanks for any help.

Send mail to jmtsr@(REMOVEFORSPAM)mindspring.com

3648. Wanted, SB-200 parts...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-25 00:00:00 UTC
From: Skipp <skipp@latte.ucdavis.edu>
Message-ID: <7v0vramnn4@mark.ucdavis.edu>
Source record: 66190

re: wanted... Heathkit SB-200 parts (HV board and whatever)

Hello there,

I'm trying to repair a Heathkit SB-200 amplifier, struck by the golden screwdriver (previous owners). If you have a spare HV pc board (not a charcoal brickette) from a repair or Harbach upgrade, I'd like to buy your old board. As long as it's in most any reasonable shape (no holes larger than a pencil eraser...)

Please contact me at the address below my name if you can help.

thanks

skipp

skipp@pilot.ucdavis.edu

3649. Re: homebrew tube HF rcvr

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-26 00:00:00 UTC
From: NANCY GIANAKOPOULOS <n.gianakopoulos@worldnet.att.net>
Message-ID: <7v5g8n$2pr$1@bgtnsc03.worldnet.att.net>
Source record: 65993

What you are seeing is the image response from your mixer. When you mix a local oscillator signal into one port of a mixer, and an RF signal into another port, the resulting output is two identical sidebands; one at the LO signal + the RF signal, and the other at the LO signal - the RF signal. The preselector in the front end of your receiver selects the desired sideband, either one can be selected; the unwanted sideband is the image. The image will removed 2 time the IF from the desired frequency. It would take a great deal of RF selectivity to remove this image response, with an IF of 455 KHz, for this reason, modern receivers generally use an upconverting design. As an example, if a high IF of 45MHz is used, your image response will be 90MHz away. Another way of looking at this is that the desired band of frequencies might be 0 to 30MHz, while the image band would be at 90 to 120MHz. A good low-pass filter that cuts off at 33MHz would put the image band far enough "down the filter slope" that these undesired signals would not be detected.

Pete Gianakopoulos
Grogancat <grogancat@aol.com> wrote in message
news:19991018165322.05328.00000128@ng-ck1.aol.com...
> Howdy you-all.
>
> I have tried building an all american five that uses the following lineup
for
> HF
> superhet-style variable tuning condenser (made for the medium waves)
> 12BE6 converter
> 12BA6 IF amp
> 12AV6 detector/agc
>
> I used bank wound coil formulae for the RF and
> Osc coils... got it working covering about 7000 kc to
> 13000 kc. Added a BFO too. Works great except
> that I notice stations appear twice on the dial. I
> thought this might be the osc and rf preselector
> crossing each other but stations appear twice a
> few kc away both at the top of the dial and at the
> bottom. I would think I would see this phenomenon
> happen only near the crossover point where you would
> expect to hear the station at the -455 and +455 kc
> sides of the preselector.
> Any body have an idea what I am seeing? Tried using
> a non-superhet style condenser i.e. the plates for the
> osc section are not specially cut to compensate for the
> crossover phenomenon at medium waves, but I see this

> problem occur using this new condenser.
>
> Thanks in advance, you radio pal tony

3650. Re: BC109C

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-26 00:00:00 UTC
From: Dan Rae <rae4@ix.netcom.com>
Message-ID: <38164CC2.2944D36B@ix.netcom.com>
Source record: 65994

pete owen wrote:

> Transistor??????????????????
>

What's that supposed to mean?

J-M's advice was good and correct. The BC109C is an old 300 MHz Ft npn high gain (beta 400 -800) TO18 device very common in european designs around 20 years ago. It was even second sourced in the US by Motorola.

Dan AC6AO G3NCR

3651. Re: What is the current state of the art in HF fron end design?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-26 00:00:00 UTC
From: blackm00@cam.org
Message-ID: <blackm00-2610992051000001@dialup-386.hip.cam.org>
Source record: 65995
Body handling: HTML body converted to readable text

In article <38151C3C.33F993AF@psyc.canterbury.ac.nz>, Winton Bell
wrote:

> --------------DF87BBF738DE24F053A67ABA
> Content-Type: text/plain; charset=us-ascii
> Content-Transfer-Encoding: 7bit
>
> Hi Runner,
>
> I would suggest that you check with Wes Hayward, W7ZOI who did a series of
> papers in QST about Mixers, and front end dynamic range. Wes has recently
> released his latest project a spectrun anaylser so is not heard to find.
>
> 73, Winton at ZL3AO.
>
As a matter of fact, he's in the latest issue (must be November) that just
appeared at newsstands. He has an article about a tracking generator
to go with the spectrum analyzer.

Michael VE2BVW

> runner wrote:
>
> > Hi,
> >
> > I am thinking about building an HF rig, so before I really start
> > warming up the ARRL Radio designer[:-)], I would like to find out
> > more about what can be done. Any hints, ideas, links, books etc, about
> > this subject would be greatly appreciated.
> > ......
> > Runner
>
> --------------DF87BBF738DE24F053A67ABA
> Content-Type: text/html; charset=us-ascii
> Content-Transfer-Encoding: 7bit
>
>
>
> Hi Runner,
>
I would suggest that you check with Wes Hayward, W7ZOI who did a series
> of papers in QST about Mixers, and front end dynamic range. Wes has
> recently released his latest project a spectrun anaylser so is not heard
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>
73, Winton at ZL3AO.
>

>
runner wrote:
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>
more about what can be done. Any hints, ideas, links, books etc, about
>
this subject would be greatly appreciated.
>
......
>
Runner

>
>
> --------------DF87BBF738DE24F053A67ABA--

3652. Cobra 148 10-meter mod

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-26 00:00:00 UTC
From: Art <kr4jo@coastalnet.com>
Message-ID: <38166871.6013@coastalnet.com>
Source record: 65996

Hi Everyone,

I am looking for anyone who has modified a cobra 148gtl ssb cb rig
to 10-meters. I do not want the cb freqs I just want to modify a
radio that I have so that I do not have to spend anymore money.
Read as cheap, miserly and just do not want to spend anymore than
I have to.

If I could get 28.300 to 29.000 I would be happy.

e-mail me at kr4jo@coastalnet.com

tnx and 73'
Art KR4JO

3653. Re: Wanted plans for DC 40 meter CW receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-26 00:00:00 UTC
From: Lyle Koehler <lyle@mlecmn.net>
Message-ID: <38166E77.A074C358@mlecmn.net>
Source record: 65997

> okieman wrote:
>
> I would like to find a fairly simple but efficient set of plans for a
> 40 meter direct
> conversion CW receiver for use with a QRP transmitter.

The receiver section of the "Forty-9er" transceiver might meet your needs. I used the trick of two crystals in parallel to get a tuning range of about 7 kHz, so that the rig could cover the 7040 QRP frequency and also hear W1AW. I also added an emitter follower between the NE602 mixer and the RFC2/C10 combination. The low impedance output of the follower boosts the sensitivity, and produces a peak in the audio response which can be set to your preferred beat note by selecting the proper value for C10.

Plans for the unmodified Forty-9er are available at
http://www.waterw.com/~knights/kltechg.html
--
Lyle, K0LR

http://www.computerpro.com/~lyle

3654. Re: Frontend for FM digital radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-26 00:00:00 UTC
From: rick@area.com
Message-ID: <7v5qeo$n33$1@vax.area.com>
Source record: 65998

In article <5QdR3.12104$7G2.72620@news1.online.no>,
Tomas Ahrne <dirac@takethisoutalgonet.se> wrote:
>
>I am sure you are right that normally you should have a tracking band pass
>filter, but the idea behind a DSP based rdaio is that you digitize the whole
>spectrum at once and do the rest of the filtering and down conversion in
>software. In this way you can control all parameters in software. This also
>means that any filter will have exactly linear phase which is impossible
>with analogue designs. The only filter that is not linear, then, would be
>the analogue band pass filter, but you can quite easily measure the gain and
>phase of it and correct it in software to become linear as well.

The tracking front end filter will have a bandwidth of 1 MHz or so.
Across any 200 kHz channel, it should essentially have flat group
delay.

>But you see, my problem is that I theoretically know how to design such a
>front end, but I don't have any experience in RF design. One thing is making
>a design on paper, but then the real world comes in and throws you a curve.

I'm still confused here. You don't want a tunable preselector, but
just a front end roofing filter. A simple 7 pole bandpass designed
right out of Zverev's Handbook with off the shelf components should be
fine for this purpose. (Use .01 dB Chebyshev).

>I am sure that an experienced RF designer knows how to make the gain stages
>to get the best S/N and lowest distorsion, where in the chain to put an AGC,
>the best way to make an AGC, if it is better to use RF transistors instead
>of ICs, what kind of inductors to use in the filter etc. etc.

As an experienced RF designer, I am trying to tell you that an all
DSP receiver with no analog preselection is going to be very poor
at strong signal handling, even if you use a +27 dBm LO mixer.
Put an RF amplifier in front of your mixer and apply AGC to it.
Then at least on strong signals the mixer won't overload so bad.

Rick N6RK

3655. HELP! Making dial glass

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-26 00:00:00 UTC
From: Eugene Rippen <soundval@foothill.net>
Message-ID: <7v5pmk$r8h$1@ns2.foothill.net>
Source record: 65999

I need to make a replacement dial glass.
The old one is broken into 3 pieces, but I have all
the pieces. It is for a Silvertone communications receiver.

The markings are white and on the inside of the glass.
My thought is to make a transfer/decal, using a
copy machine?
Problem, how do I produce a transfer/decal with only
the white markings with a CLEAR background
rather than a black background? (and with the adhesive on the front side)

I realize that I could change the backing plate from black to white, and
make a transfer/decal of black markings.
But, I really don't want to change things that much.

Gene WB6SZS

3656. THER REAL N0VFP HAHAHHAHA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-26 00:00:00 UTC
From: iou75@aol.com
Message-ID: <19991025205638.13547.00001175@ng-fq1.aol.com>
Source record: 66065

N0VFP
LLOYD A. DAVIES
710 S CLINTON ST APT 309
ATHENS AL 35611
USA
Detailed Info Update N0VFP Our Update Policy
Callsign: N0VFP Class: Technician GREEK Codes: HAI USA
Name: LLOYD A. DAVIES
Addr1: 710 S CLINTON ST APT 309
Addr2: ATHENS, AL 35611
Country: USA
Issued: 16 Jun 1999 Expires: 26 Jan 2003

Coordinates: 34ï¿½ 47' 49'' N, 86ï¿½ 58' 5'' W
County: Limestone County
Email: n0vfp@qsl.net
Born 1973, St Joesph, MO Confederate States of America (CSA)
Been Licensed since 1993

Have a college BOOK in Computer Operations

Other interests include

ModelING GIRLS UNDERWARE

Rock HARD COCK history

NAZI related information

Been a born again HOMO since 1984

Rev: N0VFP - Wed Nov 11 3:14:08 1998

Add or update biography for N0VFP

3657. Re: ANyone use these 2.4Ghz ATV modules?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-26 00:00:00 UTC
From: Bobby Atkinson <bobbys@prodigy.net>
Message-ID: <01bf1f54$7aa96920$0100a8c0@ZTU>
Source record: 66066

For $ 149.95 X-10 will throw in a color camera
with the 2.4 GHz xmit/rcvr pair.
Bobby K4BGA

Paul Breed <Paul@rasdoc.com> wrote in article
<3814AF40.AD5653AD@rasdoc.com>...
> Any experience with the following ATV products?
>
> http://www.4atv.com/atvprod.htm
>
> You can't beat the price.
>
>
> Paul
> (KL7JG)
>

3658. Re: What is the current state of the art in HF fron end design?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-26 00:00:00 UTC
From: Winton Bell <W.Bell@psyc.canterbury.ac.nz>
Message-ID: <38151B6D.7FD35CB@psyc.canterbury.ac.nz>
Source record: 66067

Hi Runner,

I would suggest that you check with Wes Hayward, W7ZOI who did a series of papers in QST about Mixers, and front end dynamic range. Wes has recently released his latest project a spectrun anaylser so is not heard to find.

73, Winton at ZL3AO.

runner wrote:

> Hi,
>
> I am thinking about building an HF rig, so before I really start
> warming up the ARRL Radio designer[:-)], I would like to find out
> more about what can be done. Any hints, ideas, links, books etc, about
> this subject would be greatly appreciated.
> ......
> Runner

3659. Re: What is the current state of the art in HF fron end design?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-26 00:00:00 UTC
From: Winton Bell <W.Bell@psyc.canterbury.ac.nz>
Message-ID: <38151B94.68A65EF8@psyc.canterbury.ac.nz>
Source record: 66068

Hi Runner,

I would suggest that you check with Wes Hayward, W7ZOI who did a series of papers in QST about Mixers, and front end dynamic range. Wes has recently released his latest project a spectrun anaylser so is not heard to find.

73, Winton at ZL3AO.

runner wrote:

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>
> I am thinking about building an HF rig, so before I really start
> warming up the ARRL Radio designer[:-)], I would like to find out
> more about what can be done. Any hints, ideas, links, books etc, about
> this subject would be greatly appreciated.
> ......
> Runner

3660. Re: What is the current state of the art in HF fron end design?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-26 00:00:00 UTC
From: Winton Bell <W.Bell@psyc.canterbury.ac.nz>
Message-ID: <38151C3C.33F993AF@psyc.canterbury.ac.nz>
Source record: 66069

Hi Runner,

I would suggest that you check with Wes Hayward, W7ZOI who did a series of papers in QST about Mixers, and front end dynamic range. Wes has recently released his latest project a spectrun anaylser so is not heard to find.

73, Winton at ZL3AO.

runner wrote:

> Hi,
>
> I am thinking about building an HF rig, so before I really start
> warming up the ARRL Radio designer[:-)], I would like to find out
> more about what can be done. Any hints, ideas, links, books etc, about
> this subject would be greatly appreciated.
> ......
> Runner

3661. HP 8482A Power Sensor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-26 00:00:00 UTC
From: phoa@astoria.pc.my
Message-ID: <397@astoria.pc.my>
Source record: 66070

Looking for one HP 8482A Power Sensor for RF power meter.

Willing to sell one unit pls email me.

Thanks

Phoa

3662. Re: Frontend for FM digital radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-26 00:00:00 UTC
From: Tomas Ahrne <dirac@takethisoutalgonet.se>
Message-ID: <5QdR3.12104$7G2.72620@news1.online.no>
Source record: 66071

Richard Karlquist <rick@area.com> > wrote:
> Rather than a fixed band pass filter, what you should use is a tracking
> band pass filter that tunes to the specific station. This will
> greatly improve the strong signal performance.
,
Rick,

Thanks for your answer.

I am sure you are right that normally you should have a tracking band pass filter, but the idea behind a DSP based rdaio is that you digitize the whole spectrum at once and do the rest of the filtering and down conversion in software. In this way you can control all parameters in software. This also means that any filter will have exactly linear phase which is impossible with analogue designs. The only filter that is not linear, then, would be the analogue band pass filter, but you can quite easily measure the gain and phase of it and correct it in software to become linear as well.

But you see, my problem is that I theoretically know how to design such a front end, but I don't have any experience in RF design. One thing is making a design on paper, but then the real world comes in and throws you a curve.

I know this very well from my own field. Had this been audio or video, I could have done it.

After a while you collect knowledge about what circuits work the best (although in theory they all should be the same when caculated with ideal components).

I am sure that an experienced RF designer knows how to make the gain stages to get the best S/N and lowest distorsion, where in the chain to put an AGC, the best way to make an AGC, if it is better to use RF transistors instead of ICs, what kind of inductors to use in the filter etc. etc.

This is what I need help with.

Best,

Tomas

3663. "One-Compactron Receiver. All bands" on-line!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-26 00:00:00 UTC
From: "JOSE V. GAVILA (EB5AGV/EC5AAU)" <eb5agv@ctv.es>
Message-ID: <38157085.F8B0FF47@ctv.es>
Source record: 66072

Hello Glowbuggers,

Recently I added to my WEB page an article, taken from the 1965 edition of the "GE Hobby Manual" (previously published in Popular Electronics in 1963), about a nice regen built with just one compactron tube (6AF11). If you are interested in this, take a look at my WEB page (address in signature), in the "Homebrewing Pages" section.

Hope you enjoy it!

Regards,

JOSE

--
---
73 EB5AGV / EC5AAU
JOSE V. GAVILA
Benetusser - VALENCIA (SPAIN)

** VISIT MY VINTAGE RADIO SITE - updated 21-October-1999 ***
http://www.geocities.com/SiliconValley/6992/

EuroBA eGroup: http://www.eGroups.com/list/euro_ba_swap

3664. Re: An Apology: ARRL Radio Designer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-26 00:00:00 UTC
From: "Gary P. Fiber" <gfiber@news.cmc.net>
Message-ID: <aKAVOLrVK1vFoAyahH6yCt4Doj+M@4ax.com>
Source record: 66073

On Mon, 25 Oct 1999 10:42:12 -0700, Jim Weir <jim@rst-engr.com> wrotf:

>I've been pretty thrashy about what I considered a shortcoming of the ARRL Radio
>Designer not working with my video board and system. I have roundly criticized
>ARRL for not having any interest in technical help, but "send it back" for a
>solution.
>
>For whatever reason, my system totally crashed and I was forced to reinstall
>EVERYTHING from scratch including the operating system, the video drivers, and
>most of the applications software (the data was backed up and I really didn't
>lose anything valuable).
>
>When I went to reinstall Designer, I find now that it works. Why it didn't work
>before, whether it will quit working in the future are conjecture. It works
>now, and I'd like to apologize to the ARRL for my fairly pointed and negative
>comments. I'm still not thrilled with tech support, but the system appears to
>be as advertised.
>
>Jim
>Jim Weir, VP Eng. RST Eng. WX6RST
>A&P, CFI, and other good alphabet soup

That seems to happen quite a bit these days. I support some software
for the company I work. Have seen more times than I can count a
complete reformat and reinstall of the Windows 95 / 98 OS clears what
appears to be the third party trouble. Most will go kicking and
screaming into a complete reinstall of their OS. I know it can be a
big job. I had one who owned an IBM Thinkpad, the software would not
see the serial port. He did a complete reinstall and the trouble
magically cleared. Glad it worked for you

Gary Fiber

3665. In need of FT-243 crystal sockets...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-26 00:00:00 UTC
From: imahumanradiostation@my-deja.com
Message-ID: <7v4bcppo1@nnrp1.deja.com>
Source record: 66074

I need about 10 to 15, FT-243 crystal sockets. I would be willing to buy any small quant. that you may have. Also, any help on where to find some would be greatly appreciated.

Thanks,

J

Sent via Deja.com http://www.deja.com/
Before you buy.

3666. ?est wire for making RF coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-26 00:00:00 UTC
From: Sotiris Antoniou <samant@ath.forthnet.gr>
Message-ID: <7v47kl$7md$1@medousa.forthnet.gr>
Source record: 66075
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.misc

Hi,

What's the best wire for making RF coils.
a) enameled copper wire ,
b) tinned copper wire or
c) silver wire.
the best as told is silver wire but more expensive then the other two.
Thanks.

Sotiris Antoniou .
samant@ath.forthnet.gr

3667. Build Radio Astronomy Stuff

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-26 00:00:00 UTC
From: joseph.buch@dol.net
Message-ID: <3815b313.7749423@news.dol.net>
Source record: 66076

I have a copy of the Proceedings of The IRE (Institute of radio Engineers) from January 1958. This is a special issue devoted entirely to Radio Astronomy. It contains over 350 pages of technical articles reflecting the state of the radio astronomy art in 1958. There are an additional 142 pages of advertisements for such exotic things as germanium transistors which also make interesting reading.

This monster issue contains papers by such world famous radio astronomers as C. M. Jansky, Grote Reber, and John Kraus.

There are articles about early lunar RADAR experiments with speculations on the character of the lunar surface deduced from the smearing of the echos; HF radioastronomy of Jupiter; construction of interferometers and polarimeters; sky maps and radiation brightness measurements of various radio sources; using lunar thermal noise to estimate the temperature of the moon; and using radio stars to study irregular ionospheric refraction and scintillation effects..

The January 1958 issue of the IRE Proceedings is not only an important historical reference, it is a short course on the science and engineering principles which amateur radio astronomers will still find useful today.

I have no idea what this tome is worth. I would like to see it go to some young person who will learn from it, preserve it, and pass it on to the next generation when the time comes to fold your antennas. Make me an offer by e-mail and describe your intended use for the document. I will consider both the price and your intended application in deciding who gets it. If no offers are received, it will go to ebay.

Joe Buch
joseph.buch@dol.net

3668. Re: valve / tube home brew

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-26 00:00:00 UTC
From: JW <jdwalton@home.com>
Message-ID: <3815D4C0.2FB7607@home.com>
Source record: 66077

I built the 6 and 2m exciter with 6360's from the 1964 handbook. I have seen these tubes for sale on EBay pretty inexpensively.

Bob wrote:

> valve / tube home brew is what I am wanting to try
> Has any one a suggestions as to what is a good all round valve to use on up
> to 2 meters
> or a H F one to start a receiver project poss. changing to a transmitter
> I want to get some experience with valve sets before I start to restore my
> 1949 ex WD 19 set
> Any advice is welcome Thanks Bob

3669. Re: An Apology: ARRL Radio Designer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-26 00:00:00 UTC
From: JW <jdwalton@home.com>
Message-ID: <3815D56A.1926E4C7@home.com>
Source record: 66078

Amen.

Since the kids at home sometimes use the high power Dells - downloading mpeg's etc I have found the same frustration.

On a new compaq I found that going through "msconfig" helped - darned thing would freeze in the middle of a circuit analysis.

"Gary P. Fiber" wrote:

> On Mon, 25 Oct 1999 10:42:12 -0700, Jim Weir <jim@rst-engr.com> wrotf:
>
> >I've been pretty thrashy about what I considered a shortcoming of the ARRL Radio
> >Designer not working with my video board and system. I have roundly criticized
> >ARRL for not having any interest in technical help, but "send it back" for a
> >solution.
> >
> >For whatever reason, my system totally crashed and I was forced to reinstall
> >EVERYTHING from scratch including the operating system, the video drivers, and
> >most of the applications software (the data was backed up and I really didn't
> >lose anything valuable).
> >
> >When I went to reinstall Designer, I find now that it works. Why it didn't work
> >before, whether it will quit working in the future are conjecture. It works
> >now, and I'd like to apologize to the ARRL for my fairly pointed and negative
> >comments. I'm still not thrilled with tech support, but the system appears to
> >be as advertised.
> >
> >Jim
> >Jim Weir, VP Eng. RST Eng. WX6RST
> >A&P, CFI, and other good alphabet soup
>
> That seems to happen quite a bit these days. I support some software
> for the company I work. Have seen more times than I can count a
> complete reformat and reinstall of the Windows 95 / 98 OS clears what
> appears to be the third party trouble. Most will go kicking and
> screaming into a complete reinstall of their OS. I know it can be a
> big job. I had one who owned an IBM Thinkpad, the software would not
> see the serial port. He did a complete reinstall and the trouble
> magically cleared. Glad it worked for you
>
> Gary Fiber

3670. Re: What's a good 2m tranceiver kit?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-26 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <3815B033.167E@eece.maine.edu>
Source record: 66079

Doug Smith wrote:
> Interesting. I didn't have any trouble with the provided wire (though I
> too prefer regular, stranded, hookup wire) but I did find it interesting
> stuff; I've not seen wire like that before.
>
> To be honest I didn't even think about the reverse-polarity situation!
> One well-placed diode will fix that though, and it can be put in a place
> (right on the RCA jack) where there's plenty of room for it.
> --
> Doug Smith W9WI
> Pleasant View (Nashville), TN EM66
> http://personal.bellsouth.net/~w9wi

Yeah, I fixed it with a simple in-line diode; probably could get around
the .7V drop if I used a fuse also, but it works fine now.
--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

3671. Re: ?est wire for making RF coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-26 00:00:00 UTC
From: Rich Grise <offduty@entheosengineering.com>
Message-ID: <3815C279.68D@entheosengineering.com>
Source record: 66080
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.misc

Sotiris Antoniou wrote:
>
> Hi,
>
> What's the best wire for making RF coils.
> a) enameled copper wire ,
> b) tinned copper wire or
> c) silver wire.
> the best as told is silver wire but more expensive then the other two.
> Thanks.
>
> Sotiris Antoniou .
> samant@ath.forthnet.gr

Actually, none of the above. The best is Litz wire, which is made up of a whole bunch of very small strands woven or braided such that in a given length, each wire occupies each position at least once. What this does is help overcome the "skin effect," which happens at high frequencies. For some reason, at high frequencies, the magnetic field repels electrons from the center of the wire, so most of the current flow is at the surface of the wire.

Failing that, enamel-coated copper wire. Tinned copper wire is uninsulated, so you'd get one big short, and I've never heard of silver wire, unless you mean the stuff jewelers use, which is also uninsulated.

If you have an open-air coil with some space between the windings, then silver-plated copper would be the best, because of the skin effect, above, but you'd probably have to do something to it to keep it from tarnishing.

Cheers!
Rich

3672. Re: Âest wire for making RF coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-26 00:00:00 UTC
From: Tom Bruhns <tomb@lsid.hp.com>
Message-ID: <3815E2E5.CCB66115@lsid.hp.com>
Source record: 66081
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.misc

"It depends." If you're working in the 10kHz to perhaps 2MHz range, Litz wire is good. See this url for selection of appropriate wire: http://www.neewcweb.com/litz/litz.htm -- look at the "technical info" and from there the "list of charts" I think it is. Beyond that, it depends on just what you're trying to do. Generally the highest Q coils above 2MHz or so will be air-core with as little low-loss supporting insulation as possible, with turns spaced about two wire diameters, center to center, and for a given coil volume, length about equal to diameter works best. For those coils, silver plated wire can work well, but there's some evidence that not all silver plating really improves the wire's RF resistance. In any event, the maximum improvement between pure polished copper and pure polished silver will be about three percent, the square root of the ratio of DC resistivities, probably not worth the effort of getting the silver. You're probably best to use polished bare copper wire which is given a light coating of low loss varnish (to keep it from corroding): a very thin coating of clear acrylic spray should be OK, even though acrylic is not particularly low loss. It's easier, and about as good, to use enamelled wire. Tinned wire is nice if you have to tap the coil, but it's not the lowest loss solution. You can make large coils with soft copper tubing since the RF current is practically all in the outer 0.1mm or so. You can also wind coils on forms, such as powdered iron toroids, and make coils much smaller and with lower external field than air-core, and with similar Q--though not generally as high a Q if size is no object. Enamel coated copper wire should be best for those, since insulation is important.

Cheers,
Tom

Sotiris Antoniou wrote:
>
> Hi,
>
> What's the best wire for making RF coils.
> a) enameled copper wire ,
> b) tinned copper wire or
> c) silver wire.
> the best as told is silver wire but more expensive then the other two.
> Thanks.
>
> Sotiris Antoniou .
> samant@ath.forthnet.gr

3673. how SET clock on this radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-26 00:00:00 UTC
From: mcalhoun@ksu.edu
Message-ID: <7v4n4l$mtn@unix1.cc.ksu.edu>
Source record: 66082
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Here's hoping someone will know how to set the clock on an old Sears
"AUTO REVERSE AM/FM STEREO 6 + 18 MEMORY" (written on cassette flap)
car radio (Model 643.509510) which I recently bought at a junk store.
It's so old that Sears Parts 800-number can't find anything about it.

The radio has a very heavy-duty feel and is removeable (by pulling on a
handle) from a plug-in "chassis". In addition to the three power (+12V,
GROUND, and CLOCK) and four (LEFT and RIGHT/FRONT and REAR) speaker wires
(all nicely labeled, so it was trivial to hook-up) and the antenna input,
there are two tiny coaxes (labeled LEFT and RIGHT) with RCA jacks.

FIRST QUESTION: are these liable to be
INPUTS (from some unspecified external device)
or OUTPUTS (to an amplifier, perhaps?)

The radio retains all memory-bank frequencies and the clock time when
it is removed from its "chassis".

On the front panel, in addition to the tape cassette hole (covered by
the flap mentioned above) and three buttons (EJECT and two labeled
PROG--probably direction? I haven't tried a tape yet) for the tape
player, it has:

CD - (input jack) - presumably (I haven't tried it yet)
an "auxiliary input"
ON/VOL - (rotary) - obvious use
FAD - (rotary) - "fades" sound from front to rear speakers
TONE - (slide) - obvious use
BALANCE - (slide) - "fades" sound from left to right speakers
All the rest are pushbutton switches:
BND - selects AM or FM or, in memory mode,
selects between AM to FM1, FM2, FM3 memory banks
M/S - selects between Mono and Stereo
RCL - Recall CLock?? replaces frequency with clocktime in display
for about 5 seconds or, if clocktime is showing, returns to
frequency display
ME - MEmory - used for storing dial frequency in one of six memories
1 thru 6 - memory-recall buttons
^ and v - changes dial frequency up or down
AS - Automatic Scan - scans entire frequency range starting with dial
frequency and stores six stations in memory (selection criteria
unknown--maybe the next strongest six?), and returns to the
original dial frequency.
PS - Programmed memory Scan - scans through current memory bank,
pausing about 5 seconds on each channel

first six

SECOND QUESTION: How do I SET the clock????

Suggestions will be appreciated.

--Myron.
--
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (Professor Emeritus) "Barbershop" tenor. CDL(PTX) W0PBV (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

3674. Re: ?est wire for making RF coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-26 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <3815E58F.CFCC552D@teleport.com>
Source record: 66083
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.misc

If you're winding very high Q coils, the tin on tinned wire might lower
the Q noticeably. Otherwise, none is noticeably better than the others.

Roy Lewallen, W7EL

Sotiris Antoniou wrote:
>
> Hi,
>
> What's the best wire for making RF coils.
> a) enameled copper wire ,
> b) tinned copper wire or
> c) silver wire.
> the best as told is silver wire but more expensive then the other two.
> Thanks.
>
> Sotiris Antoniou .
> samant@ath.forthnet.gr

3675. Re: In need of FT-243 crystal sockets...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-26 00:00:00 UTC
From: JW <jdwalton@home.com>
Message-ID: <38162600.F44E1470@home.com>
Source record: 66084

In the interim you can use octal sockets.

imahumanradiostation@my-deja.com wrote:

> I need about 10 to 15, FT-243 crystal sockets. I would be willing to buy
> any small quant. that you may have. Also, any help on where to find some
> would be greatly appreciated.
>
> Thanks,
>
> J
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

3676. BC109C

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-26 00:00:00 UTC
From: Bob Liesenfeld <wb0poq@visi.com>
Message-ID: <3815F928.7E132784@visi.com>
Source record: 66085

Hi gang,
Anyone know of a good source for BC109C transistors? I know I can get
a sub via ECG/NTE but I'm looking for a better (cheaper) source.

Tnx es 72 Bob
--
Genuine E-mail From the Land of the Everlasting Icicle...
Bob Liesenfeld
wb0poq@visi.com

3677. Re: LOOKING FOR A 3-1000Z TUBE

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-26 00:00:00 UTC
From: Ron Trepka <w8ron@stratos.net>
Message-ID: <38160C79.B127FCD9@stratos.net>
Source record: 66086

I have a new one , chimney and socket.
I don't have a fair price.
Let me know your offer.

Ron

TS950SDX wrote:

> IM IN NEED OF A NEW OR GOOD PULL
> 3-1000Z TUBE
>
> MUST BE GOOD
>
> THANKS JOE KF4TOH

3678. Wanted- High dynamic range detector circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-26 00:00:00 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <01bf1ff8$7f414e40$LocalHost@default>
Source record: 66087

I'm looking for a high dynamic range detector (100db+)
Working around 500khz.
Anyone have schematics available?
Or references?

Thanks
Mike

3679. Re: BC109C

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-26 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <38161924.892364310@news.online.no>
Source record: 66088

On Tue, 26 Oct 1999 13:55:36 -0500, Bob Liesenfeld <wb0poq@visi.com>
wrote:

>Hi gang,
> Anyone know of a good source for BC109C transistors? I know I can get
>a sub via ECG/NTE but I'm looking for a better (cheaper) source.
>
BC109C is a very old transistor, designed in early 60's, would be
better to use a more modern version like BC239C or BC549C or a
replacement

3680. Re: Wanted- High dynamic range detector circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-26 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <38161a90.892728196@news.online.no>
Source record: 66089

see notes below:
On Wed, 15 Sep 1999 12:11:49 GMT, JW <jdwalton@home.com> wrote:

>I'm sorry, the article which I was able to find was on the AD606 - "A
>High Precision Logarithmic IF Amplifier" by Dr. Ing Jirmann, DB1NV. -
>http://vhfcomm.co.uk/ifamp2.htm
>
>Also - search Analog's web site for a manual section "RF/IF Subsystems"
>or "Dynamic Range Compression". I don't havae the URL.
>
>Hans de Bok wrote:
>
>> jdwalton@home.com (JW) wrote in <37DE66CC.442AEBC0@home.com>:
>>
>> >I got some from Newark Electronics.
>> >
>> >There are some interesting schematics on the web using this chip -
>> >spectrum analyser etc.
>> >
>>
>> Can you give some URL's ?
>>
>> Thanks !
>>
>> Hans
>

On Wed, 15 Sep 1999 17:07:33 GMT, marsgal42@hotmail.com wrote:

>The URL to start with is http://www.analog.com
>
>The AD8307 data sheet includes a number of applications.
>Most AD606 applications are applicable too.
>
>--
>Laura Halliday VA3LDH "Que les nuages soient notre pied
>Grid: FN03gs a terre..." - Hospital/Shafte
>Satellite: VA3SFL on UO-22, KO-25
>
>

3681. Re: Âest wire for making RF coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-26 00:00:00 UTC
From: NO SPAM <NOSPAM@mail.rsccd.org>
Message-ID: <38162C48.77736B96@mail.rsccd.org>
Source record: 66090
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.misc

Sotiris Antoniou wrote:

> Hi,

> What's the best wire for making RF coils.
> a) enameled copper wire ,
> b) tinned copper wire or
> c) silver wire.
> the best as told is silver wire but more expensive then the other two.
> Thanks.

Maybe you should use D) Litz wire.

> Sotiris Antoniou .
> samant@ath.forthnet.gr

3682. Wanted plans for DC 40 meter CW receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-26 00:00:00 UTC
From: okieman <okieman@innocent.com>
Message-ID: <I_qR3.40881$E_1.2338587@typ11.nn.bcandid.com>
Source record: 66091

I would like to find a fairly simple but efficient set of plans for a 40 meter direct conversion CW receiver for use with a QRP transmitter.
Thanks...KC0EH...Chuck...

3683. Re: BC109C

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-26 00:00:00 UTC
From: pete owen <nutmeg@w-link.net>
Message-ID: <381643F7.3B561E1C@w-link.net>
Source record: 66092

Transistor??????????????????

J M Noeding wrote:

> On Tue, 26 Oct 1999 13:55:36 -0500, Bob Liesenfeld <wb0poq@visi.com>
> wrote:
>
> >Hi gang,
> > Anyone know of a good source for BC109C transistors? I know I can get
> >a sub via ECG/NTE but I'm looking for a better (cheaper) source.
> >
> BC109C is a very old transistor, designed in early 60's, would be
> better to use a more modern version like BC239C or BC549C or a
> replacement

3684. Re: Wanted- High dynamic range detector circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-27 00:00:00 UTC
From: rice@ironbark.bendigo.latrobe.edu.au
Message-ID: <rice-ya02408000R2710990911100001@news.latrobe.edu.au>
Source record: 66000

Recently, "AMDX" <AMDX@worldnet.att.net> wrote:

> I'm looking for a high dynamic range detector (100db+)
> Working around 500khz.

Mike,
I have recently been playing with the AD8307 log detector. They are ***impressive*** little devices. (Easy to get going & stable providing you use double sided PC board with one side used as a ground plane). The AD8307 data sheet has a circuit using an AD603 variable gain amplifier ahead of the AD8307 to achieve a 120db dynamic range. I haven't tried this.

From my experience with the AD8307 on its own, you are going to have to be ***VERY*** careful with layout & shielding. The AD8307 can easiily see leakage through the shield of cheap coax cable. You may need to consider double shielding of everything to get your 100db+ of dynamic range.

73 de Phil VK3BHR

3685. Mod info on pmr Kenwood tk 240/340(audio)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-27 00:00:00 UTC
From: G4JKQ <g4jkq@btinternet.com>
Message-ID: <7v5es2$g3s$1@neptunium.btinternet.com>
Source record: 66001
Cross-posted to: alt.ham-radio.hf,alt.ham-radio.mods,alt.ham-radio.packet,rec.radio.amateur.digital,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,uk.radio.amateur

I wonder if anyone can tell me how to increase the audio out an the above pmr Radio's. I obviously have located and turned up the deveation but the audio is very low. I guess there must be a surface mount to change but I do not have the circuit or a clue. If anyone knows how to increase the tx on either the vhf/uhf (basically the same) radios I would be most gratefull.

--
All the very best wishes from

Ted Bowen
e-mail g4jkq@btinternet.com
or ted.bowen@btinternet.com
web site www.btinternet.com/~g4jkq

3686. Need HF PA Ideas

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-27 00:00:00 UTC
From: masoste@skybest.com
Message-ID: <7v5mqd$33n$1@news3.infoave.net>
Source record: 66002

I have a yaesu FT-707 with no final amp board in it. (the low level driver, driver and final are gone.) I get about 7 to 10 mw at what used to be the input to the PA board. THe output filter board is intact, so I have PA output filtering available.

Has anyone seen a good circuit, (or even an available board) for a broad band amp, suitable for cw and ssb (no class C stuff) in this input power range, 3.5 to at leat 14 mhz, capable of 10 to 20 Watts output?

Bob AI8J
masoste@skybest.com

3687. HP 432 power meter cords to the sensor?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-27 00:00:00 UTC
From: Bruce Richardson <w9fzw9fz@ix.netcom.com>
Message-ID: <7v61ns$b7h$1@nntp4.atl.mindspring.net>
Source record: 66003

I've got a couple of power meters. I've slowly found a few bolometers/thermistors. I have one cord to the sensor but need more. Have any of you been down the road of securing the proper connectors and the proper cable and built up your own cables?

Bruce
W9FZ

3688. Re: ?est wire for making RF coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-27 00:00:00 UTC
From: De Guerin <da6bd@herts.ac.uk>
Message-ID: <Pine.SO4.4.02.9910271040140.16481-100000@gemini>
Source record: 66004
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.misc

Litz wire is best ..

Andre :)
We are Pentium of Borg. Division is futile. You will be approximated.

On Tue, 26 Oct 1999, Roy Lewallen wrote:

> If you're winding very high Q coils, the tin on tinned wire might lower
> the Q noticeably. Otherwise, none is noticeably better than the others.
>
> Roy Lewallen, W7EL
>
> Sotiris Antoniou wrote:
> >
> > Hi,
> >
> > What's the best wire for making RF coils.
> > a) enameled copper wire ,
> > b) tinned copper wire or
> > c) silver wire.
> > the best as told is silver wire but more expensive then the other two.
> > Thanks.
> >
> > Sotiris Antoniou .
> > samant@ath.forthnet.gr
>
>

3689. Re: Cobra 148 10-meter mod

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-27 00:00:00 UTC
From: bujiaj8@aol.com
Message-ID: <19991027071318.02094.00001253@ng-fu1.aol.com>
Source record: 66005

I don't know your answer but would like to tailgate here. I have a TRC-47 that I want to mod for 10 meters also. I have got an idea or two but am still new to ham radio. Please email with info.

Tnx
Bill (KD5FXT)

3690. Re: In need of FT-243 crystal sockets...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-27 00:00:00 UTC
From: joseph.buch@dol.net
Message-ID: <381717c1.13455801@news.dol.net>
Source record: 66006

imahumanradiostation@my-deja.com wrote:

>I need about 10 to 15, FT-243 crystal sockets. I would be willing to buy
>any small quant. that you may have. Also, any help on where to find some
>would be greatly appreciated.
>

Back in the old days we would use tube sockets to plug our crystals
into. The octal tube socket can accomodate two FT-243 crystals and
are probably more available than the two-pin ceramic sockets.

Joe Buch
joseph.buch@dol.net

3691. Re: Ham-Homebrew Digest V99 #278

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-27 00:00:00 UTC
From: occ6@siscom.NET
Message-ID: <000601bf2091$723fe500$3903fbd1@default>
Source record: 66007
Body handling: HTML body converted to readable text

Mendelson's surplis in Dayton Oh has FT 241 crystals URL is
HTTP://www.meci.com
----- Original Message -----
From: Ham-Homebrew Mailing List and Newsgroup
To:
Sent: Wednesday, October 27, 1999 7:30 AM
Subject: Ham-Homebrew Digest V99 #278

>
> Ham-Homebrew Digest Wed, 27 Oct 99 Volume 99 : Issue 278
>
> Today's Topics:
> ?est wire for making RF coils (2 msgs)
> "One-Compactron Receiver. All bands" on-line!
> =?iso-8859-1?Q?=C2est?= wire for making RF coils
> An Apology: ARRL Radio Designer
> BC109C (3 msgs)
> Build Radio Astronomy Stuff
> Class-S / Pulse Width Modulator ?
> Cobra 148 10-meter mod
> homebrew tube HF rcvr
> how SET clock on this radio?
> HP 432 power meter cords to the sensor?
> In need of FT-243 crystal sockets... (2 msgs)
> Need HF PA Ideas
> Wanted, SB-200 parts...
> Wanted- High dynamic range detector circuit (2 msgs)
> Wanted plans for DC 40 meter CW receiver
>
> Send Replies or notes for publication to:
> Send subscription requests to:
> Problems you can't solve otherwise to brian@ucsd.edu.
>
> Archives of past issues of the Ham-Homebrew Digest are available
> (by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".
>
> We trust that readers are intelligent enough to realize that all text
> herein consists of personal comments and does not represent the official
> policies or positions of any party. Your mileage may vary. So there.
> Loop-Detect: Ham-Homebrew:99/278
> --
>
> Date: Tue, 26 Oct 1999 10:31:59 -0700

> From: Roy Lewallen
> Subject: ?est wire for making RF coils
>
> If you're winding very high Q coils, the tin on tinned wire might lower
> the Q noticeably. Otherwise, none is noticeably better than the others.
>
> Roy Lewallen, W7EL
>
> Sotiris Antoniou wrote:
> >
> > Hi,
> >
> > What's the best wire for making RF coils.
> > a) enameled copper wire ,
> > b) tinned copper wire or
> > c) silver wire.
> > the best as told is silver wire but more expensive then the other two.
> > Thanks.
> >
> > Sotiris Antoniou .
> > samant@ath.forthnet.gr
> .
>
> ------------------------------
>
> Date: Tue, 26 Oct 1999 15:40:39 +0300
> From: "Sotiris Antoniou"
> Subject: ?est wire for making RF coils
>
> Hi,
>
> What's the best wire for making RF coils.
> a) enameled copper wire ,
> b) tinned copper wire or
> c) silver wire.
> the best as told is silver wire but more expensive then the other two.
> Thanks.
>
>
> Sotiris Antoniou .
> samant@ath.forthnet.gr
>
>
>
>
> .
>
> ------------------------------
>

> Date: Tue, 26 Oct 1999 11:12:37 +0200
> From: "JOSE V. GAVILA (EB5AGV/EC5AAU)"
> Subject: "One-Compactron Receiver. All bands" on-line!
>
> Hello Glowbuggers,
>
> Recently I added to my WEB page an article, taken from the 1965 edition
> of the "GE Hobby Manual" (previously published in Popular Electronics in
> 1963), about a nice regen built with just one compactron tube (6AF11).
> If you are interested in this, take a look at my WEB page (address in
> signature), in the "Homebrewing Pages" section.
>
> Hope you enjoy it!
>
> Regards,
>
> JOSE
>
> --
> --
> 73 EB5AGV / EC5AAU
> JOSE V. GAVILA
> Benetusser - VALENCIA (SPAIN)
>
> ** VISIT MY VINTAGE RADIO SITE - updated 21-October-1999 ***
> http://www.geocities.com/SiliconValley/6992/
>
> EuroBA eGroup: http://www.eGroups.com/list/euro_ba_swap
> .
>
> ------------------------------
>
> Date: Tue, 26 Oct 1999 10:20:37 -0700
> From: Tom Bruhns
> Subject: =?iso-8859-1?Q?=C2est?= wire for making RF coils
>
> "It depends." If you're working in the 10kHz to perhaps 2MHz range,
> Litz wire is good. See this url for selection of appropriate wire:
> http://www.neewcweb.com/litz/litz.htm -- look at the "technical info"
> and from there the "list of charts" I think it is. Beyond that, it
> depends on just what you're trying to do. Generally the highest Q coils
> above 2MHz or so will be air-core with as little low-loss supporting
> insulation as possible, with turns spaced about two wire diameters,
> center to center, and for a given coil volume, length about equal to
> diameter works best. For those coils, silver plated wire can work well,
> but there's some evidence that not all silver plating really improves
> the wire's RF resistance. In any event, the maximum improvement between
> pure polished copper and pure polished silver will be about three
> percent, the square root of the ratio of DC resistivities, probably not

> worth the effort of getting the silver. You're probably best to use
> polished bare copper wire which is given a light coating of low loss
> varnish (to keep it from corroding): a very thin coating of clear
> acrylic spray should be OK, even though acrylic is not particularly low
> loss. It's easier, and about as good, to use enamelled wire. Tinned
> wire is nice if you have to tap the coil, but it's not the lowest loss
> solution. You can make large coils with soft copper tubing since the RF
> current is practically all in the outer 0.1mm or so. You can also wind
> coils on forms, such as powdered iron toroids, and make coils much
> smaller and with lower external field than air-core, and with similar
> Q--though not generally as high a Q if size is no object. Enamel coated
> copper wire should be best for those, since insulation is important.
>
> Cheers,
> Tom
>
>
> Sotiris Antoniou wrote:
> >
> > Hi,
> >
> > What's the best wire for making RF coils.
> > a) enameled copper wire ,
> > b) tinned copper wire or
> > c) silver wire.
> > the best as told is silver wire but more expensive then the other two.
> > Thanks.
> >
> > Sotiris Antoniou .
> > samant@ath.forthnet.gr
> .
>
> ---
>
> Date: Tue, 26 Oct 1999 13:23:03 GMT
> From: JW
> Subject: An Apology: ARRL Radio Designer
>
> Amen.
>
> Since the kids at home sometimes use the high power Dells - downloading
mpeg's etc I
> have found the same frustration.
>
> On a new compaq I found that going through "msconfig" helped - darned
thing would
> freeze in the middle of a circuit analysis.
>
> "Gary P. Fiber" wrote:

>
> > On Mon, 25 Oct 1999 10:42:12 -0700, Jim Weir wrotf:
> >
> > >I've been pretty thrashy about what I considered a shortcoming of the ARRL Radio
> > >Designer not working with my video board and system. I have roundly criticized
> > >ARRL for not having any interest in technical help, but "send it back" for a
> > >solution.
> > >
> > >For whatever reason, my system totally crashed and I was forced to reinstall
> > >EVERYTHING from scratch including the operating system, the video drivers, and
> > >most of the applications software (the data was backed up and I really didn't
> > >lose anything valuable).
> > >
> > >When I went to reinstall Designer, I find now that it works. Why it didn't work
> > >before, whether it will quit working in the future are conjecture. It works
> > >now, and I'd like to apologize to the ARRL for my fairly pointed and negative
> > >comments. I'm still not thrilled with tech support, but the system appears to
> > >be as advertised.
> > >
> > >Jim
> > >Jim Weir, VP Eng. RST Eng. WX6RST
> > >A&P, CFI, and other good alphabet soup
> >
> > That seems to happen quite a bit these days. I support some software
> > for the company I work. Have seen more times than I can count a
> > complete reformat and reinstall of the Windows 95 / 98 OS clears what
> > appears to be the third party trouble. Most will go kicking and
> > screaming into a complete reinstall of their OS. I know it can be a
> > big job. I had one who owned an IBM Thinkpad, the software would not
> > see the serial port. He did a complete reinstall and the trouble
> > magically cleared. Glad it worked for you
> >
> > Gary Fiber
>
> .
>
> ---
>
> Date: Tue, 26 Oct 1999 13:55:36 -0500

> From: Bob Liesenfeld
> Subject: BC109C
>
> Hi gang,
> Anyone know of a good source for BC109C transistors? I know I can get
> a sub via ECG/NTE but I'm looking for a better (cheaper) source.
>
> Tnx es 72 Bob
> --
> Genuine E-mail From the Land of the Everlasting Icicle...
> Bob Liesenfeld
> wb0poq@visi.com
> .
>
> ------------------------------
>
> Date: Tue, 26 Oct 1999 21:55:23 GMT
> From: LA8AK@online.no (J M Noeding)
> Subject: BC109C
>
> On Tue, 26 Oct 1999 13:55:36 -0500, Bob Liesenfeld
> wrote:
>
> >Hi gang,
> > Anyone know of a good source for BC109C transistors? I know I can get
> >a sub via ECG/NTE but I'm looking for a better (cheaper) source.
> > >
> BC109C is a very old transistor, designed in early 60's, would be
> better to use a more modern version like BC239C or BC549C or a
> replacement
> .
>
> ------------------------------
>
> Date: Tue, 26 Oct 1999 17:14:47 -0700
> From: pete owen
> Subject: BC109C
>
> Transistor??????????????????
>
> J M Noeding wrote:
>
> > On Tue, 26 Oct 1999 13:55:36 -0500, Bob Liesenfeld
> > wrote:
> >
> > >Hi gang,
> > > Anyone know of a good source for BC109C transistors? I know I
can get
> > >a sub via ECG/NTE but I'm looking for a better (cheaper) source.

> > >
> > BC109C is a very old transistor, designed in early 60's, would be
> > better to use a more modern version like BC239C or BC549C or a
> > replacement
>
> .
>
> ------------------------------
>
> Date: Tue, 26 Oct 1999 14:01:36 GMT
> From: joseph.buch@dol.net (Joe Buch)
> Subject: Build Radio Astronomy Stuff
>
> I have a copy of the Proceedings of The IRE (Institute of radio
> Engineers) from January 1958. This is a special issue devoted
> entirely to Radio Astronomy. It contains over 350 pages of technical
> articles reflecting the state of the radio astronomy art in 1958.
> There are an additional 142 pages of advertisements for such exotic
> things as germanium transistors which also make interesting reading.
>
> This monster issue contains papers by such world famous radio
> astronomers as C. M. Jansky, Grote Reber, and John Kraus.
>
> There are articles about early lunar RADAR experiments with
> speculations on the character of the lunar surface deduced from the
> smearing of the echos; HF radioastronomy of Jupiter; construction of
> interferometers and polarimeters; sky maps and radiation brightness
> measurements of various radio sources; using lunar thermal noise to
> estimate the temperature of the moon; and using radio stars to study
> irregular ionospheric refraction and scintillation effects..
>
> The January 1958 issue of the IRE Proceedings is not only an important
> historical reference, it is a short course on the science and
> engineering principles which amateur radio astronomers will still find
> useful today.
>
> I have no idea what this tome is worth. I would like to see it go to
> some young person who will learn from it, preserve it, and pass it on
> to the next generation when the time comes to fold your antennas.
> Make me an offer by e-mail and describe your intended use for the
> document. I will consider both the price and your intended
> application in deciding who gets it. If no offers are received, it
> will go to ebay.
>
>
> Joe Buch
> joseph.buch@dol.net
> .
>

> ------------------------------
>
> Date: Mon, 25 Oct 1999 08:38:33 +0100
> From: phil
> Subject: Class-S / Pulse Width Modulator ?
>
> Hi Steve,
> >> Have found it difficult to find much design info circuits on PWM.
> >>
> >> Have put together Raab's class-E 700w pa for 160m and matched his best
> >> efficiency of 90%+ using a pair of IRFP450's.
> >>
> >> Now it's time to modulate!
> >>
> >> Anybody out there experimenting with or using AM solid state part or
> >> fully digital modulating techniques?
>
> >I know of t least US hams who have built fully functioning solid state
PDM
> >AM rigs - WA1GFZ and KA1SI. Sorry, I don't have an email address for
> >either but their snail mail addresses should be in the callbook.
> >
> >You can see photos of the WA1GFZ tranmitter at
> >
> >http://www.thebizlink.com/am/pix/htm/gfzpdm1.htm
> >
> >Tons of other info on AM activities available at the same site. Top level
> >address is
> >
> >http://www.thebizlink.com/am
>
> Thank you for the info above.
>
> (((73)))
>
> Phil G4ZOW
> .
>
> ------------------------------
>
> Date: Tue, 26 Oct 1999 22:50:26 -0400
> From: Art
> Subject: Cobra 148 10-meter mod
>
> Hi Everyone,
>
> I am looking for anyone who has modified a cobra 148gtl ssb cb rig
> to 10-meters. I do not want the cb freqs I just want to modify a
> radio that I have so that I do not have to spend anymore money.

> Read as cheap, miserly and just do not want to spend anymore than
> I have to.
>
> If I could get 28.300 to 29.000 I would be happy.
>
> e-mail me at kr4jo@coastalnet.com
>
> tnx and 73'
> Art KR4JO
> .
>
> ------------------------------
>
> Date: Tue, 26 Oct 1999 19:18:16 -0500
> From: "NANCY GIANAKOPOULOS"
> Subject: homebrew tube HF rcvr
>
> What you are seeing is the image response from your mixer. When you mix a
> local oscillator signal into one port of a mixer, and an RF signal into
> another port, the resulting output is two identical sidebands; one at the
LO
> signal + the RF signal, and the other at the LO signal - the RF signal.
The
> preselector in the front end of your receiver selects the desired
sideband,
> either one can be selected; the unwanted sideband is the image. The image
> will removed 2 time the IF from the desired frequency. It would take a
> great deal of RF selectivity to remove this image response, with an IF of
> 455 KHz, for this reason, modern receivers generally use an upconverting
> design. As an example, if a high IF of 45MHz is used, your image response
> will be 90MHz away. Another way of looking at this is that the desired
band
> of frequencies might be 0 to 30MHz, while the image band would be at 90 to
> 120MHz. A good low-pass filter that cuts off at 33MHz would put the image
> band far enough "down the filter slope" that these undesired signals would
> not be detected.
>
> Pete Gianakopoulos
> Grogancat wrote in message
> news:19991018165322.05328.00000128@ng-ck1.aol.com...
> > Howdy you-all.
> >
> > I have tried building an all american five that uses the following
lineup
> for
> > HF
> > superhet-style variable tuning condenser (made for the medium waves)
> > 12BE6 converter
> > 12BA6 IF amp

> > 12AV6 detector/agc
> >
> > I used bank wound coil formulae for the RF and
> > Osc coils... got it working covering about 7000 kc to
> > 13000 kc. Added a BFO too. Works great except
> > that I notice stations appear twice on the dial. I
> > thought this might be the osc and rf preselector
> > crossing each other but stations appear twice a
> > few kc away both at the top of the dial and at the
> > bottom. I would think I would see this phenomenon
> > happen only near the crossover point where you would
> > expect to hear the station at the -455 and +455 kc
> > sides of the preselector.
> > Any body have an idea what I am seeing? Tried using
> > a non-superhet style condenser i.e. the plates for the
> > osc section are not specially cut to compensate for the
> > crossover phenomenon at medium waves, but I see this
> > problem occur using this new condenser.
> >
> > Thanks in advance, you radio pal tony
>
>
> .
>
> ------------------------------
>
> Date: 26 Oct 1999 12:07:33 -0500
> From: mcalhoun@ksu.edu (Myron A Calhoun)
> Subject: how SET clock on this radio?
>
> Here's hoping someone will know how to set the clock on an old Sears
> "AUTO REVERSE AM/FM STEREO 6 + 18 MEMORY" (written on cassette flap)
> car radio (Model 643.509510) which I recently bought at a junk store.
> It's so old that Sears Parts 800-number can't find anything about it.
>
> The radio has a very heavy-duty feel and is removeable (by pulling on a
> handle) from a plug-in "chassis". In addition to the three power (+12V,
> GROUND, and CLOCK) and four (LEFT and RIGHT/FRONT and REAR) speaker wires
> (all nicely labeled, so it was trivial to hook-up) and the antenna input,
> there are two tiny coaxes (labeled LEFT and RIGHT) with RCA jacks.
>
> FIRST QUESTION: are these liable to be
> INPUTS (from some unspecified external device)
> or OUTPUTS (to an amplifier, perhaps?)
>
> The radio retains all memory-bank frequencies and the clock time when
> it is removed from its "chassis".
>
> On the front panel, in addition to the tape cassette hole (covered by

> the flap mentioned above) and three buttons (EJECT and two labeled
> PROG--probably direction? I haven't tried a tape yet) for the tape
> player, it has:
>
> CD - (input jack) - presumably (I haven't tried it yet)
> an "auxiliary input"
> ON/VOL - (rotary) - obvious use
> FAD - (rotary) - "fades" sound from front to rear speakers
> TONE - (slide) - obvious use
> BALANCE - (slide) - "fades" sound from left to right speakers
> All the rest are pushbutton switches:
> BND - selects AM or FM or, in memory mode,
> selects between AM to FM1, FM2, FM3 memory banks
> M/S - selects between Mono and Stereo
> RCL - Recall CLock?? replaces frequency with clocktime in display
> for about 5 seconds or, if clocktime is showing, returns to
> frequency display
> ME - MEmory - used for storing dial frequency in one of six memories
> 1 thru 6 - memory-recall buttons
> ^ and v - changes dial frequency up or down
> AS - Automatic Scan - scans entire frequency range starting with
dial
> frequency and stores six stations in memory (selection criteria
> unknown--maybe the next strongest six?), and returns to the
> original dial frequency.
> PS - Programmed memory Scan - scans through current memory bank,
> pausing about 5 seconds on each channel
> first six
>
> SECOND QUESTION: How do I SET the clock????
>
> Suggestions will be appreciated.
>
> --Myron.
> --
> # Five boxes preserve our freedoms: soap, ballot, witness, jury, and
cartridge
> # PhD EE (Professor Emeritus) "Barbershop" tenor. CDL(PTX) W0PBV (785)
539-4448
> # NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle,
Pistol)
> .
>
> ------------------------------
>
> Date: Wed, 27 Oct 1999 00:14:39 -0500
> From: "Bruce Richardson"
> Subject: HP 432 power meter cords to the sensor?
>

> I've got a couple of power meters. I've slowly found a few
> bolometers/thermistors. I have one cord to the sensor but need more.
Have
> any of you been down the road of securing the proper connectors and the
> proper cable and built up your own cables?
>
> Bruce
> W9FZ
>
>
> .
>
> ------------------------------
>
> Date: Tue, 26 Oct 1999 13:47:06 GMT
> From: imahumanradiostation@my-deja.com
> Subject: In need of FT-243 crystal sockets...
>
> I need about 10 to 15, FT-243 crystal sockets. I would be willing to buy
> any small quant. that you may have. Also, any help on where to find some
> would be greatly appreciated.
>
> Thanks,
>
> J
>
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.
> .
>
> ------------------------------
>
> Date: Tue, 26 Oct 1999 19:06:53 GMT
> From: JW
> Subject: In need of FT-243 crystal sockets...
>
> In the interim you can use octal sockets.
>
> imahumanradiostation@my-deja.com wrote:
>
> > I need about 10 to 15, FT-243 crystal sockets. I would be willing to buy
> > any small quant. that you may have. Also, any help on where to find some
> > would be greatly appreciated.
> >
> > Thanks,
> >
> > J
> >

> > Sent via Deja.com http://www.deja.com/
> > Before you buy.
>
> .
>
> ------------------------------
>
> Date: Wed, 27 Oct 99 02:05:46 GMT
> From: masoste@skybest.com (Bob Mason)
> Subject: Need HF PA Ideas
>
> I have a yaesu FT-707 with no final amp board in it. (the low level
driver,
> driver and final are gone.) I get about 7 to 10 mw at what used to be the
> input to the PA board. THe output filter board is intact, so I have PA
output
> filtering available.
>
> Has anyone seen a good circuit, (or even an available board) for a broad
> band amp, suitable for cw and ssb (no class C stuff) in this input power
> range, 3.5 to at leat 14 mhz, capable of 10 to 20 Watts output?
>
> Bob AI8J
> masoste@skybest.com
> .
>
> ------------------------------
>
> Date: 25 Oct 1999 07:11:38 GMT
> From: Skipp
> Subject: Wanted, SB-200 parts...
>
> re: wanted... Heathkit SB-200 parts (HV board and whatever)
>
> Hello there,
>
> I'm trying to repair a Heathkit SB-200 amplifier, struck by the golden
> screwdriver (previous owners). If you have a spare HV pc board (not a
> charcoal brickette) from a repair or Harbach upgrade, I'd like to buy your
> old board. As long as it's in most any reasonable shape (no holes larger
> than a pencil eraser...)
>
> Please contact me at the address below my name if you can help.
>
> thanks
>
> skipp
>
> skipp@pilot.ucdavis.edu

> .
>
> ------------------------------
>
> Date: 26 Oct 1999 20:25:11 GMT
> From: "AMDX"
> Subject: Wanted- High dynamic range detector circuit
>
> I'm looking for a high dynamic range detector (100db+)
> Working around 500khz.
> Anyone have schematics available?
> Or references?
>
> Thanks
> Mike
> .
>
> ------------------------------
>
> Date: Tue, 26 Oct 1999 21:55:24 GMT
> From: LA8AK@online.no (J M Noeding)
> Subject: Wanted- High dynamic range detector circuit
>
> see notes below:
> On Wed, 15 Sep 1999 12:11:49 GMT, JW wrote:
>
> >I'm sorry, the article which I was able to find was on the AD606 - "A
> >High Precision Logarithmic IF Amplifier" by Dr. Ing Jirmann, DB1NV. -
> >http://vhfcomm.co.uk/ifamp2.htm
> >
> >Also - search Analog's web site for a manual section "RF/IF Subsystems"
> >or "Dynamic Range Compression". I don't havae the URL.
> >
> >Hans de Bok wrote:
> >
> >> jdwalton@home.com (JW) wrote in <37DE66CC.442AEBC0@home.com>:
> >>
> >> >I got some from Newark Electronics.
> >> >
> >> >There are some interesting schematics on the web using this chip -
> >> >spectrum analyser etc.
> >> >
> >>
> >> Can you give some URL's ?
> >>
> >> Thanks !
> >>
> >> Hans
> >

>
> On Wed, 15 Sep 1999 17:07:33 GMT, marsgal42@hotmail.com wrote:
>
> >The URL to start with is http://www.analog.com
> >
> >The AD8307 data sheet includes a number of applications.
> >Most AD606 applications are applicable too.
> >
> >--
> >Laura Halliday VA3LDH "Que les nuages soient notre pied
> >Grid: FN03gs a terre..." - Hospital/Shafte
> >Satellite: VA3SFL on UO-22, KO-25
> >
> >
>
>
> .
>
> ---
>
> Date: Tue, 26 Oct 1999 18:42:32 -0500
> From: "okieman"
> Subject: Wanted plans for DC 40 meter CW receiver
>
> This is a multi-part message in MIME format.
>
> ------=_NextPart_000_00BC_01BF1FE1.DCBC64E0
> Content-Type: text/plain;
> charset="iso-8859-1"
> Content-Transfer-Encoding: quoted-printable
>
> I would like to find a fairly simple but efficient set of plans for a 40 =
> meter direct
> conversion CW receiver for use with a QRP transmitter.
> Thanks...KC0EH...Chuck...
>
> ------=_NextPart_000_00BC_01BF1FE1.DCBC64E0
> Content-Type: text/html;
> charset="iso-8859-1"
> Content-Transfer-Encoding: quoted-printable
>
>
>
>
>
I would like to find a fairly simple but efficient =
> set of=20
> plans for a 40 meter direct

>
conversion CW receiver for use with a QRP=20
> transmitter.

>
Thanks...KC0EH...Chuck...

>
> ------=_NextPart_000_00BC_01BF1FE1.DCBC64E0--
>
> .
>
> ------------------------------
>
> End of Ham-Homebrew Digest V99 #278
> ******************************
>

3692. Re: BC109C

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-27 00:00:00 UTC
From: pete owen <nutmeg@w-link.net>
Message-ID: <38172C88.9BD1F911@w-link.net>
Source record: 66008

Read the post again.....I think he must mean "transmitter"

Pete

Dan Rae wrote:

> pete owen wrote:
>
> > Transistor???????????????????
> > >
>
> What's that supposed to mean?
>
> J-M's advice was good and correct. The BC109C is an old 300 MHz Ft npn high gain (
> beta 400 -800) TO18 device very common in european designs around 20 years ago. It
> was even second sourced in the US by Motorola.
>
> Dan AC6AO G3NCR

3693. Re: Need HF PA Ideas

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-27 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <I6GR3.20768$5W2.632953@news6.giganews.com>
Source record: 66009

A single 6L6 should work fine. Or use a 12BY7 into a pair of 6146s.

73, Bob K6DDX

3694. Re: Cobra 148 10-meter mod

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-27 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <38173696.15FB@eece.maine.edu>
Source record: 66010

BUJIAJ8 wrote:
>
> I don't know your answer but would like to tailgate here. I have a TRC-47 that
> I want to mod for 10 meters also. I have got an idea or two but am still new
> to ham radio. Please email with info.
>
> Tnx
> Bill (KD5FXT)

I've done a bit of looking around in the past on this idea (but I don't
have a cb to convert--that is what holds me back from doing it myself).
Try looking around on cb mod pages; simply web search and a little bit
of digging will find a bunch mods for both radios.
--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

3695. Re: Need HF PA Ideas

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-27 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <3817348B.19E7@ixpres.com>
Source record: 66011

Bob Mason wrote:
>
> I have a yaesu FT-707 with no final amp board in it. (the low level driver,
> driver and final are gone.) I get about 7 to 10 mw at what used to be the
> input to the PA board. THe output filter board is intact, so I have PA output
> filtering available.
>
> Has anyone seen a good circuit, (or even an available board) for a broad
> band amp, suitable for cw and ssb (no class C stuff) in this input power
> range, 3.5 to at leat 14 mhz, capable of 10 to 20 Watts output?
>
> Bob AI8J
> masoste@skybest.com

Bob OM,
Look in any of the Doug Demaw W1FB books. There are lots of ways to
get 20W out, using inexpensive power mosfets in the final, and class A,
2N5109, 2N3966, etc drivers. For CW, Class C is the way to go of
course.
You could also build a vacuum-tube amp and driver, such as the classic
12BY7 driving a pair of 6146's. That would give you 100 watts out. SWR
proof, wide-range matching ability, lots of power gain.

73 and GL,
Don, W6JL

--
ï¿½ï¿½à¡±ï¿½

3696. Re: Re: ?est wire for making RF coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-27 00:00:00 UTC
From: Tom Bruhns <tomb@lsid.hp.com>
Message-ID: <38173D73.F77D25AD@lsid.hp.com>
Source record: 66012
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.misc

De Guerin wrote:
>
> Litz wire is best ..

AFAIK, only over a limited range of frequencies, typically mid-kHz to very low MHz. See http://www.neewcweb.com/litz/litz.htm for more info.

Cheers,
Tom

3697. Available : Parts for Yaesu FT-2700RH ,2m/70cms FM transceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-27 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19991027120820704 32@zetnet.co.uk>
Source record: 66013

To those homebrewers/repairers who require parts for Yaesu FT-2700RH
2m/70cms FM transceiver

The Sutherland & District Amateur Radio Club (SADARC) located near
Golspie in the north of Scotland , has been donated a faulty
FT-2700RH transceiver to repair other equipment using some of its components.

The 2 RF Power modules and casing have now been used ,but all others
components are still available ,perhaps to others who no longer can
get components/sub assemblies to repair their defective unit.

These components are now available for the cost of postage plus a
donation to SADARC.

Some items :
+Loudspeaker 8Ohms - 2Watts flange size 80 x 80 mm

++Front panel with display circuitry complete with knobs (complete
sub-assembly)

+++Tx board

++++RX board

+++++Lithium back-up battery on control board (micro processor is defective)

Apart from the loudspeaker , no components can be garanteed OK ,
although the risk of being defective is low.
The unit had to be scrapped only because the defective microprocessor
is no longer available.

For enquiries you can contact :

Secretary SADARC
Inver by Tain , Ross-shire IV20 1RX - Scotland UK

e-mail : gm0csz.kn6wh@ukrs.org

3698. 4D32 specs needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-27 00:00:00 UTC
From: w1xyz@aol.com
Message-ID: <19991027162704.01326.00001830@ng-bh1.aol.com>
Source record: 66014

Got several of 'em cheap - more than I'll use for my 32V2 - so I want to build an AM Tx with a couple of them in parallel.

Anybody got the spec sheet for a 4D32?

Thanks
Bob
W1XYZ
fax 978 440 8180

3699. Re: Cobra 148 10-meter mod

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-27 00:00:00 UTC
From: Jack Taylor <n7oo@theriver.com>
Message-ID: <klKR3.21150$5W2.643932@news6.giganews.com>
Source record: 66015

I don't know about the Cobra 148 but on my Cobra 142 all that was necessary was to change a crystal and peak the RF stages in the receiver and transmitter. Makes a slick unit on 10 meters. Mine was modified and used as a 1200 baud packet node during the last solar cycle. Initially had a 75 watt amplifier on it, but could tell no perceptible difference between it and barefoot operation so discontinued using the amp. A nice feature of the Cobra 142 is it's solid state switching and even with very heavy packet use the rig held up without any problems.

73 de Jack

3700. Re: BC109C

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-27 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <381773a4.981080860@news.online.no>
Source record: 66016

On Wed, 27 Oct 1999 09:47:05 -0700, pete owen <nutmeg@w-link.net>
wrote:

>Read the post again.....I think he must mean "transmitter"
>
>Pete
>
like BC-457, BC-375, BC-645 ?
Who has info abt BC-109C command set, or did it exist at all? BC-221
is the lowest number mentioned in (Surplus Conversion Manual Vol 1
(1948) and Vol 2 (1948)

>Dan Rae wrote:
>
>> pete owen wrote:
>>
>> > Transistor???????????????????
>> >
>>
>> What's that supposed to mean?
>>
>> J-M's advice was good and correct. The BC109C is an old 300 MHz Ft npn high gain (
>> beta 400 -800) TO18 device very common in european designs around 20 years ago. It
>> was even second sourced in the US by Motorola.
>>
>> Dan AC6AO G3NCR
>

3701. Re: Need HF PA Ideas

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-27 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <381777d5.982154005@news.online.no>
Source record: 66017

On Wed, 27 Oct 1999 09:47:10 -0700, "Bob" <balbert@cnmnetwork.com>
wrote:

>A single 6L6 should work fine. Or use a 12BY7 into a pair of 6146s.
>
or 807 ?

3702. PSK

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-27 00:00:00 UTC
From: David deSouza <dave@vfpnet.demon.co.uk>
Message-ID: <nJ4IFGADo3F4EwFp@vfpnet.demon.co.uk>
Source record: 66018

Hi guys.

Just to let you know we have a newish newsgroup dedicated to psk mode.
You are welcome to join in.

psk31-subscribe@egroups.com

or take a look

http://www.egroups.com/group/psk31

Cheers

Dave G3VFP
--
David deSouza

3703. WTB: HW-8 Manual

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-27 00:00:00 UTC
From: Auggie <edtom@mnsinc.com>
Message-ID: <N7MR3.3407$pp1.71710@dfw-read.news.verio.net>
Source record: 66019

Anyone have an HW-8 manual or good copy for sale? Tnx Ed KC4FD

3704. Re: 4D32 specs needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-27 00:00:00 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <38178BC4.B217FA2F@dialpoint.net>
Source record: 66020

You should be able to treat them the same as two 6146 tubes in the same envelope.

W1xyz wrote:
>
> Got several of 'em cheap - more than I'll use for my 32V2 - so I want to build
> an AM Tx with a couple of them in parallel.
>
> Anybody got the spec sheet for a 4D32?
>
> Thanks
> Bob
> W1XYZ
> fax 978 440 8180

3705. WTB: Northstar Horizon or Ithaca InterSystems DPA-1

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-27 00:00:00 UTC
From: Alan <ChipsnDips@snet.net>
Message-ID: <7v86nq$ojm@news1.snet.net>
Source record: 66021
Cross-posted to: rec.ham-radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I'm looking to acquire one of the 70's era S-100 bus computer systems like the Northstar Horizon or Ithaca InterSystems DPA-1. If you have an S-100 based unit like that please contact me and see what we can work out. Purchase only, I don't have a trade. Also would be interested in an S-100 based modem if you have one. You can contact me a chipsndips@snet.net.

Thanks

3706. ATV Balloon question?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-27 00:00:00 UTC
From: Paul Breed <Paul@rasdoc.com>
Message-ID: <3817AC82.3A0260D@rasdoc.com>
Source record: 66022

How much power is necessary to get a useable ATV signal from a balloon
at 60K ft?

What sort of receiver setup do the ATV ballooners use?

How much gain, what kind of preamp etc.....

What kind of antenna polarization?

Do the ATV balloons usually use 70cm, or some other band?

Are the lowpower <1W 2M CW transmissions easily heard at altitude?

Paul (KL7JG)

3707. Re: ATV Balloon question?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-27 00:00:00 UTC
From: Larry Steiner <larry_steiner@hotmail.com>
Message-ID: <7v8b39$1ne$1@bgtnsc02.worldnet.att.net>
Source record: 66023

Hi Paul,
I have lifted a camera and transmitter with a large balloon to about 120 feet via a fixed location kevlar string. (tied it to my Jeep's bumper). I was xmitting on 426mhz. Power was about 200mw. The antenna used to transmit was a wire extended out horz. Because a balloon moves with the wind this created phasing. The solution was a "Wagon wheel" antenna. It provides no gain but pics up a pattern from the sky and removes any phasing problems. With a preamp to make up for coax loss, I got about 200 yards range.

73's
Larry N1URE
www.Larry-Steiner.net

Paul Breed <Paul@rasdoc.com> wrote in message
news:3817AC82.3A0260D@rasdoc.com...
>
> How much power is necessary to get a useable ATV signal from a balloon
> at 60K ft?
>
> What sort of receiver setup do the ATV ballooners use?
>
> How much gain, what kind of preamp etc.....
>
> What kind of antenna polarization?
>
>
> Do the ATV balloons usually use 70cm, or some other band?
>
>
> Are the lowpower <1W 2M CW transmissions easily heard at altitude?
>
>
> Paul (KL7JG)

3708. Re: ATV Balloon question?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-27 00:00:00 UTC
From: Larry Steiner <larry_steiner@hotmail.com>
Message-ID: <7v8bhr$8eu$1@bgtnsc02.worldnet.att.net>
Source record: 66024

Larry Steiner <larry_steiner@hotmail.com> wrote in message news:...
> Hi Paul,
> I have lifted a camera and transmitter with a large balloon to about 120
> feet via a fixed location kevlar string. (tied it to my Jeep's bumper). I
> was xmitting on 426mhz. Power was about 200mw. The antenna used to
> transmit was a wire extended out horz. Because a balloon moves with the
> wind this created phasing. The solution was a "Wagon wheel" antenna. It
> provides no gain but pics up a pattern from the sky and removes any
phasing
> problems. With a preamp to make up for coax loss, I got about 200 yards
> range.
>
> 73's
> Larry N1URE
> www.Larry-Steiner.net
>
> Paul Breed <Paul@rasdoc.com> wrote in message
> news:3817AC82.3A0260D@rasdoc.com...
> >
> > How much power is necessary to get a useable ATV signal from a balloon
> > at 60K ft?
> >
> > What sort of receiver setup do the ATV ballooners use?
> >
> > How much gain, what kind of preamp etc.....
> >
> > What kind of antenna polarization?
> >
> >
> > Do the ATV balloons usually use 70cm, or some other band?
> >
> >
> > Are the lowpower <1W 2M CW transmissions easily heard at altitude?
> >
> >
> > Paul (KL7JG)
>
>

3709. Re: Wanted- High dynamic range detector circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-28 00:00:00 UTC
From: JW <jdwalton@home.com>
Message-ID: <3817D71F.B36F3D0D@home.com>
Source record: 66025

"Communications Quarterly" most recent issue discussed the AD8307.

Phil Rice wrote:

> Recently, "AMDX" <AMDX@worldnet.att.net> wrote:
>
> > I'm looking for a high dynamic range detector (100db+)
> > Working around 500khz.
>
> Mike,
> I have recently been playing with the AD8307 log detector. They are
> ***impressive*** little devices. (Easy to get going & stable providing you
> use double sided PC board with one side used as a ground plane). The AD8307
> data sheet has a circuit using an AD603 variable gain amplifier ahead of
> the AD8307 to achieve a 120db dynamic range. I haven't tried this.
>
> From my experience with the AD8307 on its own, you are going to have to be
> ***VERY*** careful with layout & shielding. The AD8307 can easiily see
> leakage through the shield of cheap coax cable. You may need to consider
> double shielding of everything to get your 100db+ of dynamic range.
>
> 73 de Phil VK3BHR

3710. Re: BC109C

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-28 00:00:00 UTC
From: WIZ <WIZ@prodigy.net>
Message-ID: <01bf20eb$1e806e80$211ffed1@newmicronpc>
Source record: 66026

Pete, YOU should read the post again. He mentioned
NTE and EGC - suppliers of transistors (and other
components) NOT transceivers. 73 Ed AF2P

pete owen <nutmeg@w-link.net> wrote in article
<38172C88.9BD1F911@w-link.net>...
> Read the post again.....I think he must mean "transmitter"
>
> Pete
>
>

3711. Re: Wanted plans for DC 40 meter CW receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-28 00:00:00 UTC
From: WIZ <WIZ@prodigy.net>
Message-ID: <01bf20f0$5660fd60$211ffed1@newmicronpc>
Source record: 66027

The link below has an extra g in it. I got there
by removing the g after k1tech
73 Ed AF2P

http://www.waterw.com/~knights/kltechg.html

Lyle Koehler <lyle@mlecmn.net> wrote in article
<38166E77.A074C358@mlecmn.net>...
snip
> >
> Plans for the unmodified Forty-9er are available at
> http://www.waterw.com/~knights/kltechg.html
> --
> Lyle, K0LR
>
> http://www.computerpro.com/~lyle
>

3712. Re: Cobra 148 10-meter mod

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-28 00:00:00 UTC
From: It's me <RMAYER@kscable.com>
Message-ID: <x1QR3.5185$AC1.82818@typhoon2.kc.rr.com>
Source record: 66028

To Mod. or USE a CB to 10 meters You must have at least a General ticket.
be careful
n0oun

Jack Taylor <n7oo@theriver.com> wrote in message
news:klKR3.21150$5W2.643932@news6.giganews.com...
> I don't know about the Cobra 148 but on my Cobra 142 all that was
necessary
> was to change a crystal and peak the RF stages in the receiver and
> transmitter. Makes a slick unit on 10 meters. Mine was modified and used
> as a 1200 baud packet node during the last solar cycle. Initially had a
75
> watt amplifier on it, but could tell no perceptible difference between it
> and barefoot operation so discontinued using the amp. A nice feature of
> the Cobra 142 is it's solid state switching and even with very heavy
packet
> use the rig held up without any problems.
>
> 73 de Jack
>
>
>
>

3713. Re: valve / tube home brew

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-28 00:00:00 UTC
From: It's me <RMAYER@kscable.com>
Message-ID: <_9QR3.5188$AC1.81536@typhoon2.kc.rr.com>
Source record: 66029

I have the Diagram and instructions for a 6L6 Transmitter per 1940-1950.
Also the Big H 1930 . Also I have the paperwork etc for a 1914 spark
rig..... BUT don't fire it up !! Whatever meter band you build it for
.... it uses the WHOLE BAND!!
I.m making up a list of all I have.
send e-mail if you want a copy, I'll scan it and save it as a .JPEG

RMAYER@kscable.com

Bob <merryprankster@cwcon.net> wrote in message
news:HkZQ3.45$cf2.28@news1-hme0...
> valve / tube home brew is what I am wanting to try
> Has any one a suggestions as to what is a good all round valve to use on
up
> to 2 meters
> or a H F one to start a receiver project poss. changing to a transmitter
> I want to get some experience with valve sets before I start to restore my
> 1949 ex WD 19 set
> Any advice is welcome Thanks Bob
>
>

3714. High current JFETS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-28 00:00:00 UTC
From: mnewman@clear.net.nz
Message-ID: <3817caa3.4523143@news.clear.net.nz>
Source record: 66030

Whatever happened to those high current JFETS that were around in the early 80's and used in high dynamic range rf applications?

ie CP640, CP650 etc by Teledyne Crystalonics.
P 8001, P 8002 by TI (in Germany I think)

They were used in common gate mode, specified as low-noise (approx 2 dB @ 50 Mhz), usable to 300 Mhz, matched to 50 ohm with VSWR < 1.5:1, with Idss up to 1 amp or so, and a high dynamic range.

What are the best alternative devices marketed today?
Are there any similar devices produced today?

MikeN zl1bnb

3715. WTB: BC-610 coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-28 00:00:00 UTC
From: k9sqg@aol.com
Message-ID: <19991028032702.02692.00002117@ng-fr1.aol.com>
Source record: 66031

Need 75 and 160 meter like new coils.

73

Evan

3716. Need plans for 10 meter SSB/CW QRP'ish transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-28 00:00:00 UTC
From: Lawrence Gruber <lawrence@javanet.com>
Message-ID: <38180BEC.47CA@javanet.com>
Source record: 66032

I'm in search for detailed plans for building a 10 meter
transmitter capable of SSB and CW modes with a power output
of, say, 2 to 20 watts. A VFO would be preferable.

I see that Far Circuits (http://www.cl.ais.net/farcir)
supplies pcb's for two articles in 73's mag. The first
is Feb '91 for a 10 meter 'SB' transmitter. And the
other is July '92 for a 10 meter DSB transmitter.

As I don't have access to these back issues of 73's mag.,
I can't evaluate these designs.

If anyone has suggestions and a construction article, I'd
be most willing to send you a few bucks in return for you
sending me a copy of the plans.

Oh, no license yet, but very soon. I'm also quite experienced
at electronic construction, including R.F. stuff.

I will be using a Drake R8B for the receiver.

You can contact me via. email at: lawrence@javanet.com

Regards,

Larry Gruber
Medford, MA

3717. Need article in 73's magazine back issue--will pay $$ 2/91 & 7/92

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-28 00:00:00 UTC
From: Lawrence Gruber <lawrence@javanet.com>
Message-ID: <38181059.619E@javanet.com>
Source record: 66033
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.misc,rec.ham-radio

I'm in search for detailed plans for building a 10 meter
transmitter capable of SSB and CW modes with a power output
of, say, 2 to 20 watts. A VFO would be preferable.

I see that Far Circuits (http://www.cl.ais.net/farcir)
supplies pcb's for two articles in 73's mag. The first
is Feb '91 for a 10 meter 'SB' transmitter. And the
other is July '92 for a 10 meter DSB transmitter.

As I don't have access to these back issues of 73's mag.,
I can't evaluate these designs.

I'd be most willing to send you a few bucks in return for you
sending me a copy of the plans.

Oh, no license yet, but very soon. I'm also quite experienced
at electronic construction, including R.F. stuff.

I will be using a Drake R8B for the receiver.

You can contact me via. email at: lawrence@javanet.com

Regards,

Larry Gruber
Medford, MA

(posted at: rec.radio.amateur.homebrew, rec.radio.amateur,
rec.radio.amateur.misc, rec.ham-radio)

3718. Re: Cobra 148 10-meter mod

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-28 00:00:00 UTC
From: Mike <m.j.willis@rl.ac.uk>
Message-ID: <7v930m$kjg@newton.cc.rl.ac.uk>
Source record: 66034

It has been done in the UK many times, though the rules have now changed. It was a good way of getting rid of illegal, in UK law, SSB CB radios. You need to change some crystals to give you the new band. You need to re-tune the VCO and you need to replace the PROM so channels are ordered sensibly. There were kits and articles in magazines about 10-15 years ago.

3719. Re: Cobra 148 10-meter mod

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-28 00:00:00 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3818179F.A7621EBD@dialpoint.net>
Source record: 66035

Not as long as you use it in the tech plus band. Has to be used ssb or
a digital mode, not on AM.

It's me wrote:
>
> To Mod. or USE a CB to 10 meters You must have at least a General ticket.
> be careful
> n0oun
>
> Jack Taylor <n7oo@theriver.com> wrote in message
> news:klKR3.21150$5W2.643932@news6.giganews.com...
> > I don't know about the Cobra 148 but on my Cobra 142 all that was
> necessary
> > was to change a crystal and peak the RF stages in the receiver and
> > transmitter. Makes a slick unit on 10 meters. Mine was modified and used
>

3720. Re: BC109C

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-28 00:00:00 UTC
From: maciek <bal@mediaservice.com.pl>
Message-ID: <7v9901$6nu$1@news.onet.pl>
Source record: 66036

BC 109 -popular low noise audio transistor. I will find a data and send tomorrow.
M

3721. Re: Need article in 73's magazine back issue--will pay $$ 2/91 & 7/92

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-28 00:00:00 UTC
From: "Laszlo I. Morocz" <kf4pv@SPAMMENOTlmorocz.com>
Message-ID: <NuXR3.397$_C.1772@jump.innerx.net>
Source record: 66037

You can order back issues and copies of articles directly from 73. I've done this a few times myself. Also, for better quality copies, check your local libraries. Even if they don't have the issues you need, they can many times get the issues or copies on interlibrary loan. And don't forget university and college libraries, including community and junior colleges. They usually have superb interlibrary loan services, and often extend "townie" privileges to non-student residents of their communities. You'd be amazed what you can get on the hardcopy web.

73 de KF4PV/3, Laszlo

--
To reply, remove the text SPAMMENOT from the e-mail address.
Lawrence Gruber wrote in message <38181059.619E@javanet.com>...
>I'm in search for detailed plans for building a 10 meter
>transmitter capable of SSB and CW modes with a power output
>of, say, 2 to 20 watts. A VFO would be preferable.
>
>I see that Far Circuits (http://www.cl.ais.net/farcir)
>supplies pcb's for two articles in 73's mag. The first
>is Feb '91 for a 10 meter 'SB' transmitter. And the
>other is July '92 for a 10 meter DSB transmitter.
>
>As I don't have access to these back issues of 73's mag.,
>I can't evaluate these designs.
>
>I'd be most willing to send you a few bucks in return for you
>sending me a copy of the plans.
>
>Oh, no license yet, but very soon. I'm also quite experienced
>at electronic construction, including R.F. stuff.
>
>I will be using a Drake R8B for the receiver.
>
>You can contact me via. email at: lawrence@javanet.com
>
>Regards,
>
>Larry Gruber
>Medford, MA
>
>(posted at: rec.radio.amateur.homebrew, rec.radio.amateur,
>rec.radio.amateur.misc, rec.ham-radio)

3722. HF PA; FET (IRF 640), Valve or ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-28 00:00:00 UTC
From: "Nigel L. Rotherham" <nigel.r@netline.co.za>
Message-ID: <38185FED.427E307F@netline.co.za>
Source record: 66038

Hi everyone :-)

I need to up the output of my ICOM 740 when running a portable station for scouts (JOTA) etc. and cannot use a better aerial system so hence the title, HF PA FET....

I have done a little research and see that quite a few enthusiasts are building FET based PA's without too many problems. Cost is an important factor and having located what 'could' be a suitable device at an affordable price I would appreciate ANY feedback from subscribers to this list regarding their own experience in building / operating a solid state HF PA.

I reckon a 250 W ~ 500 W design will be quite acceptable and as the devices I can obtain are only rated at 120 W I will have to parallel up a few! (2x2 or 3x3). The device I have in mind is the IRF 640. Has anyone used this FET? What should I expect re highest usable frequency? From the data sheets it seems as tho power FETS have a very high input capacitance :-(

Any alternative suggestions (bi-polar, valve or ???) or idea's are MOST welcome. If preferred, replies can be direct to nigel.rsa@netline.co.za BUT PLEASE REMOVE THE ANT-SPAM 'SA' FROM MY NAME! i.e. nigel.r is the correct name... <big grin>!

Many thanks in advance from sunny South Africa. Till the next time, KEEP SMILING :-)

Nigel R

ZS 6 RN

3723. FS: RF and High Voltage components plus much more

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-28 00:00:00 UTC
From: bw201@torfree.net
Message-ID: <FKBn8L.H7u.0.sheppard@torfree.net>
Source record: 66039
Cross-posted to: rec.radio.swap,alt.ham-radio.marketplace,alt.energy.high-voltage,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.misc,misc.industry.electronics.marketplace,alt.electronics,alt.radio.pirate,sci.electronics.repair

If you are looking for RF components such as variable capacitors and inductors, High Voltage capacitors, rectifiers, vacuum relays, Xenon Flashtubes, PhotoFlash capacitors, Piezoelectric blocks, Ferrite cores and beads, transformers, noise diodes, professional quality knobs, industrial limit (Micro) switches, and lots of other stuff, please check out my 28 year's worth of accumulation I am selling at

http://www3.sympatico.ca/aquariusr/sale1.htm

Thanks

Bob Levitt

3724. Mods to TS500 (CW Filter)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-28 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <lsx1wJALLJG4Ewab@falstaf.demon.co.uk>
Source record: 66040

Dear All,
I have just acquired a TS500. This is a nice, but rather old (abt 30 years) HF transceiver and it works very nicely.

Only problem is that it is a little unselective on CW, I guess that it must have a 1kHz or similar bandwidth.

Has anyone, back in the dim and distant past, built a 300Hz or similar CW filter for this or similar sets?. I am interested in adding one as a switchable mod.

Rgds

Robin

Robin Birch robin@falstaf.demon.co.uk

M1ASU/2E0ARJ/M5ABD Old computers and radios always welcome

3725. Re: 4D32 specs needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-28 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <38189E73.7E43@ixpres.com>
Source record: 66041

W1xyz wrote:
>
> Got several of 'em cheap - more than I'll use for my 32V2 - so I want to build
> an AM Tx with a couple of them in parallel.
>
> Anybody got the spec sheet for a 4D32?
>
> Thanks
> Bob
> W1XYZ
> fax 978 440 8180

Bob OM,

I would just use any older ARRL handbook's tube pages. They are
similar to a pair of 6146's in one envelope, are they not? That should
be all you need to design an amplifier using them.

73 and GL,
Don, W6JL

--
ï¿½ï¿½à¡±ï¿½

3726. Re: High current JFETS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-28 00:00:00 UTC
From: Harke Smits <harke.smits@net.hcc.nl>
Message-ID: <3818A29C.F3B4ACAE@net.hcc.nl>
Source record: 66042

Hi Mike,

Sometimes you will find the U310 (a high Idss fet in a metal enclosure,
gate to case) in some parts ads. (kentelectronics@hetnet.nl) Even the
P8002 may be obtained sometimes. I am not aware of any actual production.
If you need one or two.. just ask.

73 de Harke PA0HRK

Mike Newman wrote:

> Whatever happened to those high current JFETS that were around in the
> early 80's and used in high dynamic range rf applications?
>
> ie CP640, CP650 etc by Teledyne Crystalonics.
> P 8001, P 8002 by TI (in Germany I think)
>
> They were used in common gate mode, specified as low-noise (approx 2
> dB @ 50 Mhz), usable to 300 Mhz, matched to 50 ohm with VSWR < 1.5:1,
> with Idss up to 1 amp or so, and a high dynamic range.
>
> What are the best alternative devices marketed today?
> Are there any similar devices produced today?
>
> MikeN zl1bnb

3727. Re: Frontend for FM digital radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-28 00:00:00 UTC
From: Tomas Ahrne <dirac@takethisoutalgonet.se>
Message-ID: <1E1S3.14641$7G2.94638@news1.online.no>
Source record: 66093

Richard Karlquist <rick@area.com> wrote in message
news:7v5qeo$n33$1@vax.area.com...
> The tracking front end filter will have a bandwidth of 1 MHz or so.
> Across any 200 kHz channel, it should essentially have flat group
> delay.

OK, do you have such a design or know where I could get one?

> >But you see, my problem is that I theoretically know how to design such a
> >front end, but I don't have any experience in RF design. One thing is
making
> >a design on paper, but then the real world comes in and throws you a
curve.
>
> I'm still confused here. You don't want a tunable preselector, but
> just a front end roofing filter. A simple 7 pole bandpass designed
> right out of Zverev's Handbook with off the shelf components should be
> fine for this purpose. (Use .01 dB Chebyshev).

Yes, you are right, and I as I said earlier I could make such a design, but
since I don't have enough experience in RF design it would probably not be
good enough. I am looking at using an AD with SFDR (Spurious Free Dynamic
Range) of 100 dB. I don't think you just throw together some RF components
and get a front end that can match this performance.

> As an experienced RF designer, I am trying to tell you that an all
> DSP receiver with no analog preselection is going to be very poor
> at strong signal handling, even if you use a +27 dBm LO mixer.
> Put an RF amplifier in front of your mixer and apply AGC to it.
> Then at least on strong signals the mixer won't overload so bad.

Can you show me such a design, what components to use etc?

I am not sure that an all DSP receiver will be that bad. I won't use it for
DX-ing, just for getting high-quality FM where the transmitter of interest
is rather close.

The AD in question that I am looking at using has an S/N of 75 dB.Not very
much, ... but in the digital down conversion process you get what is called
processing gain. I will use a sampling rate of 56 MHz and down convert it to
about 200 kHz. The gain you get is 10*log10(56MHz/200 kHz)=24.5 dB.Now you
have an S/N of 99.5 dB. Not so bad.

You can probably gain even more by using a tracking band-pass filter to
track the FM signal and gain another 15-20 dB. A total of 115-120 dB.

Now, if you have several very strong signals you have a problem since you have to have enough headroom in the AD converter to allow for them to superimpose without clipping the AD. If there are 20 strong signals in the area (let's say they are of equal strength) you must scale down the input by 1/20 which is -26 dB.

With band-pass filter tracking you could get 90-100 dB S/N, and without it 74 dB.

Would you consider this to be enough?

The figures I am talking about are before demodulation. Maybe I should not use the term S/N, but C/N?

How much does demodulation improve this?

Any help on all the above would be appreciated.

But if I could get any more specific help on the RF stage, I would appreciate that a lot. Schematics, links etc.

Best,

Tomas Ahrne

3728. Re: HELP! Making dial glass

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-28 00:00:00 UTC
From: Tom Bruhns <tomb@lsid.hp.com>
Message-ID: <3818A8E8.22CB27ED@lsid.hp.com>
Source record: 66094

Haven't done this, so I don't know if it will really work...but here goes:

There are ALPS printers that transfer from a film ribbon. You can get all sorts of different colors, including metallic, and I'm sure white. Print with this onto a piece of transparency material, and cut out the material to match the (newly-cut) glass. Attach to the back of the glass.

There's a possibility that you could actually transfer the printing to the glass...

Another hope would be to find some 3M INT ("Image-n-Transfer") material, which is photosensitive and makes a dry-transfer, and use that to transfer directly to the glass. I believe it was available in white...but AFAIK, it hasn't been made in some time.

Of course, you could screen-print the glass, or have it screen printed...just what level of effort do you want to go to to restore the thing?

Cheers,
Tom

Eugene Rippen wrote:
>
> I need to make a replacement dial glass.
> The old one is broken into 3 pieces, but I have all
> the pieces. It is for a Silvertone communications receiver.
>
> The markings are white and on the inside of the glass.
> My thought is to make a transfer/decal, using a
> copy machine?
> Problem, how do I produce a transfer/decal with only
> the white markings with a CLEAR background
> rather than a black background? (and with the adhesive on the front side)
>
> I realize that I could change the backing plate from black to white, and
> make a transfer/decal of black markings.
> But, I really don't want to change things that much.
>
> Gene WB6SZS

3729. Re: pulling a crystal off frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-28 00:00:00 UTC
From: Tom Bruhns <tomb@lsid.hp.com>
Message-ID: <3818AD11.E0EF7751@lsid.hp.com>
Source record: 66095

Sorry, I didn't see the original...hope this reply gets through...

I've recently done some work making a VCXO for a phase locked loop, and had to make the range wide enough to accomodate all possible manufacturing errors...so anyway, I've recently thought about and experimented with how to pull crystals. Adding more capacitance in parallel really isn't the way to go. You rapidly reach a point of dimishing returns. Realize that by adding more capacitance, you're pulling _toward_ the crystal inherent series resonance frequency. You want to go instead to _less_ capacitance. And there's a trick to that: you really want to go to greater capacitive reactance, and that gets a lot easier to do if you parallel the variable capacitor (say 5pF to 40pF) with an inductance to resonate it at the crystal frequency at the low-capacitance end (really a bit more inductance than that, cuz you don't really want to go to infinite reactance...). In the limit, the oscillation frequency goes to "infinity." Of course, you pay a price. The more the oscillation frequency depends on the external circuit, the less the crystal is in control and the less stable the whole thing is. But if you use enough inductance to get to an "effective minimum capacitance" of, say, 1pF, that should give you plenty of range on a 10MHz crystal. For example, I got 5kHz range on a 13MHz rock with an effective load ranging from about 20pF down to 5pF. Hope all this makes sense and is useful... (It's also happened to be remarkably linear freq versus varicap control voltage, over a 3kHz range or so: would make a very nice true FM modulator!)

Cheers,
Tom

WAYNE CHENG wrote:
>
> I have found on a Japanese ham home page on using two crystals in parallel
> with about 22uH inseries and a variable capacitor 22 to 100pF..It does
> shift over +/_5khz and more on Freq.higher than 10mhz..Look in www.ac6v.comm
> in homebrew..73..VE7HCW..Wayne..sk..
> Jim wrote in message
> <12267-38001473-129@storefull-115.iap.bryant.webtv.net>...
> several years ago i built a crystal converter from a plan in radio
> electronics magazine. it was for listening to shortwave on an am car
> radio. now i have a newer car with a digital radio. it steps in even
> steps that are too large to get some sw stations tuned in well. i wonder
> if i could draw the various crystals off frequency with a variable cap
> in parallel with them. does anyone know about this? will a crystal pull
> off frequency enough to help this problem? how much capacitance is
> required? 50pf? 100pf? if this would work then i could use the variable

> cap like a fine tune control to get between the 10khz steps. on another
> angle, will two crystals oscillate together in the same circuit? could
> i use a 5khz crystal with the other ones to get the frequency offset
> that i need? will they work together or will i need another mixer
> circuit to combine them? (a pre-mixer mixer?) are there any other ways
> to skin this cat? any input is welcome

3730. Re: Principle of RF Power Level Meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-28 00:00:00 UTC
From: Tom Bruhns <tomb@lsid.hp.com>
Message-ID: <3818B0EA.4B2BC962@lsid.hp.com>
Source record: 66096

At very low levels, it's probably not quite fair to say the diode is a "peak detector." The response is linear output _voltage_ versus sinewave input _power_, at low levels and when lightly loaded. I'm sure that's described in gory detail in the HP/Agilent ap note. It's a good thing to beware of, though...especially on signals that are narrow pulses with low duty cycle.

Cheers,
Tom

Jim Pennell wrote:
>
> One other detail about Thermistors Vs diode detectors is that the
> thermistor detector is an RMS detector and a diode is a peak detector with a
> correction factor thrown in by the display device and may not be accurate,
> depending on modulation technique of the signal being measured.
>
> Although, for low level signals, diodes work quite nicely. Still, this
> difference CAN sneak up on a user.

3731. Re: Principle of RF Power Level Meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-28 00:00:00 UTC
From: Tom Bruhns <tomb@lsid.hp.com>
Message-ID: <3818AFA5.6A671EE0@lsid.hp.com>
Source record: 66097

Al Lorona wrote:

> Yes, you're right on the money. You'll find low-barrier Schottky diodes
> in the most sensitive power sensors commonly available. With lots of
> averaging and a little bit of patience, levels as low as -70 dBm can be
> measured.

I have a little field strength meter I built for sniffing fox transmitters. It uses an HP/Agilent (our new name...time to start getting used to it. ;-) zero-bias detector diode...biggest problem is that it's rated at 1 (ONE) volt peak reverse voltage! But I can "see" signals as low as 30 microvolts, which is a bit less than -70dBm, with it. It has a logarithmic meter readout, so I can hunt from that level to close to a volt, then take off the antenna...

Actually getting to that level reasonably reliably took some thinking. The diode output is amplified by a MOSFET-input chopper-stabilized op amp. Important to have both low input bias current and low offset voltage.

Cheers,
Tom

3732. Scope arcs...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-28 00:00:00 UTC
From: Tom Bruhns <tomb@lsid.hp.com>
Message-ID: <3818B38E.F61AD48F@lsid.hp.com>
Source record: 66098

Not that I really need any sympathy, but just thought I'd share an interesting (or is that "distressing"?) thing that happened to me recently... I turned on my 'scope (some off-brand that shall remain nameless...;-) which I had gotten well-used a year or so ago to make some simple measurements a couple weeks ago. But instead of seeing the pretty blue trace pop up on the screen, instead, I _heard_ pops, inside. Hmmm. Oh, well, perhaps it just got moist and dusty. I'll take it apart and clean things up... But upon doing that, I discovered that the arcs were actually INSIDE the CRT. And I was hearing them. Hmmm...methinks there's a bit too much pressure inside that CRT. No cracks that have become visible to me yet; it hadn't been jarred AFAIK. I'm sure it's way too expensive a tube to bother replacing, though perhaps someone repairs scope tubes...or perhaps there's a good mate for this scope that's lame in some other way, and as a pair they could go happily through their golden years together. (If "1743" makes any half-dead scope you have around perk up its anodes, let me know and maybe we can play matchmaker.)

Cheers,
Tom

3733. Re: High current JFETS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-28 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <38188b55.2530892@news.online.no>
Source record: 66099

On Thu, 28 Oct 1999 04:19:05 GMT, mnewman@clear.net.nz (Mike Newman) wrote:

>Whatever happened to those high current JFETS that were around in the
>early 80's and used in high dynamic range rf applications?
>
> ie CP640, CP650 etc by Teledyne Crystalonics.
> P 8001, P 8002 by TI (in Germany I think)
>
>They were used in common gate mode, specified as low-noise (approx 2
>dB @ 50 Mhz), usable to 300 Mhz, matched to 50 ohm with VSWR < 1.5:1,
>with Idss up to 1 amp or so, and a high dynamic range.
>
>What are the best alternative devices marketed today?
>Are there any similar devices produced today?
>
>MikeN zl1bnb
>
>

BF246 is a TO92 version, have seen it mentioned in the Dutch magazine "Electron" to file off one side and use thermal compound with this device for better cooling, the device you are looking for may probably be BF246C - having the highest forward conductance

for mixer termination J310 will work, provided you follow G4DGU's advice (Mutek) to use only 18 ohm source resistor (for 20mmho)
I've used some BF246C; with -6V gate voltage the current drain is 20mA, believe the forward conductance is then close to 20mmho

Believe Motorola made it but I never found it in their manuals, while BF245 was there

73 Jan-Martin LA8AK

3734. Re: Mods to TS500 (CW Filter)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-28 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <3818bc9b.15146862@news.online.no>
Source record: 66100

On Thu, 28 Oct 1999 19:15:39 +0100, Robin Birch
<robin@falstaf.demon.co.uk> wrote:

>Dear All,
>I have just acquired a TS500. This is a nice, but rather old (abt 30
>years) HF transceiver and it works very nicely.
>
>Only problem is that it is a little unselective on CW, I guess that it
>must have a 1kHz or similar bandwidth.
>
>Has anyone, back in the dim and distant past, built a 300Hz or similar
>CW filter for this or similar sets?. I am interested in adding one as a
>switchable mod.
>
>Rgds
>
>Robin
>____
well,
in my experience it was the worst transceiver I ever owned, the audio
was very bad, but a very simple modification cured this, in fact it
consisted of a resistor (and capacitor) in the AGC. The quality was
just unbelievable, better than many other receivers I had, except my
own Drake 2-B

I made some simple filters using 77mH toroids, see ARRL handbook, they
used 88mH while I used European standard coil for similiar purpose

73
Jan-Martin LA8AK

ps. send email if you wish the circuit, but I will need some time to
trace it and scan it first.

3735. Re: HELP! Making dial glass

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-28 00:00:00 UTC
From: Tom Bruhns <tomb@lsid.hp.com>
Message-ID: <3818D98E.4585022F@lsid.hp.com>
Source record: 66101

Another possibility...someone just posted an ad in
sci.electronics.design saying they do custom decals...I visited the web
site and it seems like they could make what you want in the form of a
clear overlay for the back of the glass. I think they might do it for
under $20, if I understand the web site right. May be worth checking
out: http://www.mich.com/~bjlavoie/decals.html

Cheers,
Tom

Eugene Rippen wrote:
>
> I need to make a replacement dial glass.
> The old one is broken into 3 pieces, but I have all
> the pieces. It is for a Silvertone communications receiver.
>
> The markings are white and on the inside of the glass.
> My thought is to make a transfer/decal, using a
> copy machine?
> Problem, how do I produce a transfer/decal with only
> the white markings with a CLEAR background
> rather than a black background? (and with the adhesive on the front side)
>
> I realize that I could change the backing plate from black to white, and
> make a transfer/decal of black markings.
> But, I really don't want to change things that much.
>
> Gene WB6SZS

3736. Portable Power Supply for Handheld transceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-28 00:00:00 UTC
From: J COWIE <cowietexas@worldnet.att.net>
Message-ID: <7vapso$9f7$1@bgtnsc02.worldnet.att.net>
Source record: 66102

I am interested in creating an alternative power supply for my handheld transceiver when I go out hiking. I thought of solar power but do not know if that is practical. If anyone could point me in the right direction as to where I could obtain a device, or diagram, that is practical, that would be a real life saver.
The specs on the tranceiver are as follows:
A nickel-cadium battery 9.6v@650
milliamps/hour.
Is there a semi-conductor that would make the constuction simple enough; I am not a electronic parts technician. (Too bad they do not teach us school teachers that as well.)
Shawn
KD5HLM
horsehaar@yahoo.com is the min e-mail address.

3737. Re: pulling a crystal off frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-28 00:00:00 UTC
From: rick@area.com
Message-ID: <7vb1bp$98b$1@vax.area.com>
Source record: 66103

In article <3818AD11.E0EF7751@lsid.hp.com>,
Tom Bruhns <tomb@lsid.hp.com> wrote:
>
>want to go instead to _less_ capacitance. And there's a trick to that:
>you really want to go to greater capacitive reactance, and that gets a
>lot easier to do if you parallel the variable capacitor (say 5pF to
>40pF) with an inductance to resonate it at the crystal frequency at the

The standard way of doing this is to put the inductor in *series* with
the capacitor, not parallel. And the crystal is in series with the LC.
Be sure to use an L with high enough SRF. For extreme pulling, it
must be a high Q inductor too. Like a #67 toroid.

Where you might want to use a parallel inductor is directly across
the crystal to neutralize the holder capacitance.

>10MHz crystal. For example, I got 5kHz range on a 13MHz rock with an
>effective load ranging from about 20pF down to 5pF. Hope all this makes
>sense and is useful... (It's also happened to be remarkably linear freq
>versus varicap control voltage, over a 3kHz range or so: would make a

You can do quite a bit better than 5 kHz at 13 MHz. More like 10 or
20 kHz. I once pulled a 20 MHz crystal over a 100 kHz range.
You are ultimately limited on the low end by inductor Q and on the
high end by the spurious anharmonic resonances a few 1/10's of
a percent above series resonance

Rick Karlquist N6RK
rick@area.com

3738. High OIP Amplifiers & Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-28 00:00:00 UTC
From: Charles Reichert <kd9jq@imaxx.net>
Message-ID: <3819214B.33D59B14@imaxx.net>
Source record: 66104

As promised I placed the two High OIP Amplifier
circuits & info on my Web Page at;

http://www.imaxx.net/~kd9jq

73 Chuck KD9JQ

3739. Re: Wanted- High dynamic range detector circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-28 00:00:00 UTC
From: Charles Reichert <kd9jq@imaxx.net>
Message-ID: <3819209A.A193A2B6@imaxx.net>
Source record: 66105

As promised I placed the two High OIP Amplifiers
circuits & info on my Web Page at;

http://www.imaxx.net/~kd9jq

73 Chuck KD9JQ

AMDX wrote:
>
> I'm looking for a high dynamic range detector (100db+)
> Working around 500khz.
> Anyone have schematics available?
> Or references?
>
> Thanks
> Mike

3740. Contract Engineer Position in Denver Area

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-28 00:00:00 UTC
From: "Ronald F. Bauer" <rbauer3@mindspring.com>
Message-ID: <38188F4C.73171C26@mindspring.com>
Source record: 66106

I apologize if this is not the proper forum for this, but I am looking for 3-4 skilled Engineers with 2+ years experience performing hardware/software test & integration using C/C++ and Ada. Experience with satellite or communications systems a plus. This is a long term contract position in the Denver area. Anyone interested may either contact me directly or visit our web site at http://www.ess-us.com to learn more. Thank you for your time.

Best Regards,
Ron Bauer
Sr. Mgr. - ESS, Inc.
(480) 348-3990

3741. PLEASE HELP WITH MICOR REPEATER TUNE UP

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-29 00:00:00 UTC
From: hq54@aol.com
Message-ID: <19991028202134.07994.00001607@ng-ft1.aol.com>
Source record: 66107

Hi All,

I am having a problem tuning up my Micor UHF repeater. When I tune the receiver with a HAM freq crystal, or a 456.*** crystal, I get about .2 microvolts, but when I attempt to use a 467.9875 crystal, I can't get the receiver any better then .4 microvolts. Has anyone seen this before, and if so, what didyou, can be done to correct it. Any help would be greatly appreciated.

Thanx
Mike

3742. Re: BC109C

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-29 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <3818daa4.22837293@news.online.no>
Source record: 66108

one guy thought transistor meant transmitter.....
later another believes transmitter means transceiver
.....

On 28 Oct 1999 02:19:57 GMT, "WIZ" <WIZ@prodigy.net> wrote:

>Pete, YOU should read the post again. He mentioned
>NTE and EGC - suppliers of transistors (and other
>components) NOT transceivers. 73 Ed AF2P
>
>pete owen <nutmeg@w-link.net> wrote in article
><38172C88.9BD1F911@w-link.net>...
>> Read the post again.....I think he must mean "transmitter"
>>
>> Pete
>>
>>

3743. HP431/432 Power Meter Cables

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-29 00:00:00 UTC
From: hbrown@voicenet.COM
Message-ID: <3.0.32.19991029102425.0077f6cc@popmail.voicenet.com>
Source record: 66109
Body handling: HTML body converted to readable text

I saw a request on info on the cable used for connecting power sensors to the HP 431 and 432 series of power meters.

I saved info on the connectors that I received as e-mail several years ago that may help in homebrewing your own. HP may still have the cable available since they had the 432 meter in their catalog last year. I'm sure that it will not fit into many homebrewers budgets though.

The posting from 1995:

> From jwicklun@halcyon.com Tue May 23 11:43:08 1995

> Date: Tue, 23 May 95 07:38:05 PDT

> From: Jay Wicklund <

> Subject: FW: HP-431C cable assy

> To: hbrown@resd.vf.ge.com

> X-Mailer: Chameleon ARM_55, TCP/IP for Windows, NetManage Inc.

> Mime-Version: 1.0

> Content-Type> : > TEXT/PLAIN> ; > CHARSET=US-ASCII>

> Content-Length: 891

>

> I purchased a set of connectors from Connector World Supply, INc.

> in Seattle, Washington. I'm sure that there are a lot of places

> to get them, but that was the closest for me. The connectors are

> made by Amphenol. I found the connectors listed in an old

> Amphenol catalog listed under series 91 (they were meant as

> microphone connectors).

>

> 91-MC6M is a male cable plug and mates to the 431C

> 91-MC6F1 is a female cable plug and mates to the sensor.

>

> Note, the two won't mate because the shells are both "plug" style.

>

> Connector World Supply, Inc.

> 312 N. 104th

> Seattle, WA 98133

> (206)789-7525

>

> They took my Master Card.

>

> Good Luck, let me know how you make out.....Jay

>

Visit the Mt. Airy VHF Radio Club at:

0000,0000,fefehttp://www.ij.net/packrats/

Check the June 1999 VHF Contest Photos at the Web
site

Info on VHF/Microwave Nets, Beacons & Subscription to Cheesebits

Beacons at 50.080, 144.284, 222.065, 432.295, 903.071,
1,296.251, 2,304.037, 3456.220, 5,760.200 and 10,368.200 MHz from FM29JW

3744. Re: What is the current state of the art in HF fron end design?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-29 00:00:00 UTC
From: "Charles H. Reichert" <reichert@cig.mot.com>
Message-ID: <3819AF57.822D3ABC@cig.mot.com>
Source record: 66110

As promised I placed the two High OIP Amplifier
circuits & info on my Web Page at;

http://www.imaxx.net/~kd9jq

73 Chuck KD9JQ

Charles Reichert wrote:
>
> I found the one article by Ulrich L. Rohde DJ2LR
> from the November 1979 issue of HR page 34
> and a sheet I made up with a working schematic/equations
> using the 2N5109.
>
> The other is a schematic of the design based on U.S. Patent
> 3,891,834; 1975. I'm assuming that this is printable for
> general consumption since 17 years has passed.
>
> I'll clean them up this week and put them on my web page.
>
> 73 Chuck KD9JQ
>
>
> Charles Reichert wrote:
> >
> > I have buried in my files a coupls of articles on high intercept
> > RF Amp stages using a bipolar. I found a flaw in the circuits
> > and re-drew themn. I've never actually built these but can fax
> > you the article/corrected sheets.
> >
> > Chuck KD9JQ
> > http://www.imaxx.net/~kd9jq
> >
> > runner wrote:
> > >
> > > Hi,
> > >
> > > I am thinking about building an HF rig, so before I really start
> > > warming up the ARRL Radio designer[:-)], I would like to find out
> > > more about what can be done. Any hints, ideas, links, books etc, about
> > > this subject would be greatly appreciated.
> > >
> > > I am very curious about the best currently achieved results in HF
> > > receiver front end design. For now,I would put aside the rest of the
> > > RX chain (I followed a lot of discussion about DSP/phase techniques

> > > here lately).
> > >
> > > So for now I am looking at the best linear RF amps and mixers. For the
> > > amps, the best figures I have yet seen are for some push-pull amps :
> > > about 40-45dBm IP3. Have any of you gurus seen better figures+designs?
> > > I would imagine that it could be possible to get a pair of V-MOS FETs,
> > > run them in A-class (with large heat sinks), put a xformer feedback
> > > around and use two of those in push-pull mode... similar to
> > > transmitter amps, but for receive... Am I off track here? If this
> > > works, I would guess we could get over 50dBm IP3?
> > >
> > > Now, with mixers, I am a bit on the fuzzy side here. I have seen the
> > > "Tayloe" mixer some time ago and it looks pretty impresive. Have any
> > > of you tried to replicate the results? I like diode ring mixers, or
> > > their variations, using other kinds of switching elements, eg. D-MOS
> > > FETs. These are linear, but have a fundamental disadvantage, the 5-7dB
> > > loss. So, when using them, if one wants to get sensitivity, a preamp
> > > is needed, and that reduces the linearity, which is counterproductive.
> > > Are there any active high performance mixers? With what I know now,
> > > if I was about to build a mixer, I woul do something similar as the
> > > amp suggested above: a couple of essentially super linear amps, but
> > > instead of DC supply, I would switch them on/off really hard. Perhaps
> > > a square wave between slightly negative bias (to switch the devices
> > > off quickly) and full A-class current?
> > >
> > > Sorry for the long posting here... I seem to need feedback for my
> > > back-of the envelope thinking.
> > >
> > > runner

--
Regards,

Charles Reichert

Motorola NSS ACE phone: 847-632-6669 Work
IL-82 3436S fax: 847-632-7428 Work
1501 W. Shure Drive email: qa2696@email.mot.com
Arlington Hgts, IL. 60004

3745. Re: HELP! Making dial glass

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-29 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <3819F537.5F2D2E4C@bellsouth.net>
Source record: 66111

Tom Bruhns wrote:
> There are ALPS printers that transfer from a film ribbon. You can get
> all sorts of different colors, including metallic, and I'm sure white.
> Print with this onto a piece of transparency material, and cut out the
> material to match the (newly-cut) glass. Attach to the back of the
> glass.

You can buy laser-printable transparency film. (3M CG5000, I found it at Office Depot) It's designed for making transparencies for overhead projectors. You print on it just like paper, but you get the black marks on the clear plastic sheets. Since the B&W photocopy process is essentially the same thing, I would think these would work fine in a copier too. Though if you scanned the broken glass into a computer, you could use a paint program to edit out the cracks and make a neater transparency.
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

3746. Toner Transfer-2 sided board

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-29 00:00:00 UTC
From: af389@lafn.ORG
Message-ID: <3819B30E.1988AF57@lafn.org>
Source record: 66112

Hi,
I need some recommendations from you who have made a
2 sided pcboard with TONER TRANSER scheme, either with LASER or INKJET
printer. I have made single-sided pcboards with this scheme.

I am using PnP TONER TRANSFER FILM to create a small pcboard
that will be two sided. I plan to etch the board in two steps.

Place image on side one and insulate side two copper, then
etch the board. Next, coated unteched copper, apply coating to
etched side for 2nd etch protection,
heat board to apply 2nd side image to unetched copper.
Etch, drill, finsih board.

My question concerns
"what coating to use for insulating the bare copper."

Depending upon when I apply coating, I could be heating the
coated board while transfering toner. Will plastic coatings melt?
Do you do TONER TRANSFER before applying coating?

"What products are you folks using for "COATING"?
Varathane....liquid plastic from spray can?
Krylon...from spray can?
OTHER?????

What solvents do you use to remove the "COATING"
so copper can be made CLEAN enough to ACCPET 2nd
TONER TRANSFER image.

Some folks have used GLOSSY PHOTO paper for INKJETS by EPSON.
Can you folks also comment on what coating you use?
Do you avoid heating plastic coating? If yes, HOW?
Thanks for any help.

73, W6MIK
--
David Shalita (Dave)
af389@lafn.org
Van Nuys, CA

3747. Systron Donner Spectrum Analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-29 00:00:00 UTC
From: km5n.nospam@earthlink.net
Message-ID: <MPG.12839e744206d4dd989684@news.earthlink.net>
Source record: 66113
Cross-posted to: sci.electronics.equipment,sci.electronics.misc,misc.industry.electronics.marketplace,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

I recently fell into a great deal (I think...). Picked up a
Systron Donner SA for $25. It powers up, and responds to input, but
something is awry and I don't know enough about SAs to figure out if it's
me or the scope.
Anyway, I desperately need an Operator / Service manual for it,
and they are not available from the usual manual sources. The components
are:

712-1 Display
809-1 RF unit .01 - 12 GHz

and I *think* the overall combination is referred to as a 762-2A, or
something close.

Does anyone have the manual(s) that they can let go? Or any
advice on the unit, even if you don't have the manuals. Any and all
assistance is always welcome.

Thanks!

Adam Adkins
km5nm-at-earthlink-dot-net
(apologies for the spam misdirection)

3748. Re: Portable Power Supply for Handheld transceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-29 00:00:00 UTC
From: davem@groucho.cs.ubc.ca
Message-ID: <7vcqch$44i@groucho.cs.ubc.ca>
Source record: 66114

"J COWIE" <cowietexas@worldnet.att.net> writes:
>I am interested in creating an alternative power supply for my handheld
>transceiver when I go out hiking. I thought of solar power but do not know
>if that is practical. If anyone could point me in the right direction as to
>where I could obtain a device, or diagram, that is practical, that would be
>a real life saver.
> The specs on the tranceiver are as follows:
> A nickel-cadium battery 9.6v@650
>milliamps/hour.
> Is there a semi-conductor that would make the constuction simple
>enough; I am not a electronic parts technician. (Too bad they do not teach
>us school teachers that as well.)

What is the radio, and what are its power requirements?

The battery pack spec just tells you that it puts out 9.6 V (but the
radio may operate OK on considerably higher and lower voltages as well),
and that its capacity is 600 mAh (that's milliamps *times* hours, not
milliamps divided by hours). You also need to know what maximum current
the radio draws when transmitting.

Then, what kind of "alternative" did you have in mind? You can use
a solar panel to recharge a NiCd pack, as long as the solar panel
provides enough current to recharge the NiCds in a reasonable time,
and you aren't using the radio continuously. To see if this is
feasible, you need to know how much current is put out by a solar
panel of a size that you are willing to carry, and how often you'd
want to use the radio.

If you aren't going to be hiking for really long periods, it may be
more practical to just take along an AA battery pack for your radio,
and enough AA alkaline cells for the amount of operating you expect
to do. Use lithium AAs if weight is very important and cost is not.

Dave

3749. Re: pulling a crystal off frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-29 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <38195ee1.56694771@news.online.no>
Source record: 66115

it reminds me of an experiment where I connected the xtal across a
tuned circuit in a Hartley oscillator. Used a 7022kHz HC6/U xtal from
JAN, and tuning capacitance was 100pF, don't remember all details.
When the xtal 'locked' it could be tuned over at least 20kHz range,
perhaps larger, but became more unstable on the sides, so it was
somewhat difficult to control the locking with the somewhat too simple
circuit. Have thought of building a more controllable circuit using
smaller tuning capacitor value and adjusting it to operate within
lock-range only

73 jan-martin LA8AK

On Thu, 28 Oct 1999 13:07:45 -0700, Tom Bruhns <tomb@lsid.hp.com>
wrote:

>Sorry, I didn't see the original...hope this reply gets through...
>
>I've recently done some work making a VCXO for a phase locked loop, and
>had to make the range wide enough to accomodate all possible
>manufacturing errors...so anyway, I've recently thought about and
>experimented with how to pull crystals. Adding more capacitance in
>parallel really isn't the way to go. You rapidly reach a point of
>dimishing returns. Realize that by adding more capacitance, you're
>pulling _toward_ the crystal inherent series resonance frequency. You
>want to go instead to _less_ capacitance. And there's a trick to that:
>you really want to go to greater capacitive reactance, and that gets a
>lot easier to do if you parallel the variable capacitor (say 5pF to
>40pF) with an inductance to resonate it at the crystal frequency at the
>low-capacitance end (really a bit more inductance than that, cuz you
>don't really want to go to infinite reactance...). In the limit, the
>oscillation frequency goes to "infinity." Of course, you pay a price.
>The more the oscillation frequency depends on the external circuit, the
>less the crystal is in control and the less stable the whole thing is.
>But if you use enough inductance to get to an "effective minimum
>capacitance" of, say, 1pF, that should give you plenty of range on a
>10MHz crystal. For example, I got 5kHz range on a 13MHz rock with an
>effective load ranging from about 20pF down to 5pF. Hope all this makes
>sense and is useful... (It's also happened to be remarkably linear freq
>versus varicap control voltage, over a 3kHz range or so: would make a
>very nice true FM modulator!)
>
>Cheers,
>Tom
>
>WAYNE CHENG wrote:

>>
>> I have found on a Japanese ham home page on using two crystals in parallel
>> with about 22uH inseries and a variable capacitor 22 to 100pF..It does
>> shift over +/_5khz and more on Freq.higher than 10mhz..Look in www.ac6v.comm
>> in homebrew..73..VE7HCW..Wayne..sk..
>> Jim wrote in message
>> <12267-38001473-129@storefull-115.iap.bryant.webtv.net>...
>> several years ago i built a crystal converter from a plan in radio
>> electronics magazine. it was for listening to shortwave on an am car
>> radio. now i have a newer car with a digital radio. it steps in even
>> steps that are too large to get some sw stations tuned in well. i wonder
>> if i could draw the various crystals off frequency with a variable cap
>> in parallel with them. does anyone know about this? will a crystal pull
>> off frequency enough to help this problem? how much capacitance is
>> required? 50pf? 100pf? if this would work then i could use the variable
>> cap like a fine tune control to get between the 10khz steps. on another
>> angle, will two crystals oscillate together in the same circuit? could
>> i use a 5khz crystal with the other ones to get the frequency offset
>> that i need? will they work together or will i need another mixer
>> circuit to combine them? (a pre-mixer mixer?) are there any other ways
>> to skin this cat? any input is welcome

3750. Re: HP 432 power meter cords to the sensor?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-29 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <3819607c.57106159@news.online.no>
Source record: 66116

On Wed, 27 Oct 1999 00:14:39 -0500, "Bruce Richardson"
<w9fzw9fz@ix.netcom.com> wrote:

>I've got a couple of power meters. I've slowly found a few
>bolometers/thermistors. I have one cord to the sensor but need more. Have
>any of you been down the road of securing the proper connectors and the
>proper cable and built up your own cables?
>
>Bruce
>W9FZ
>
>
DK2UO made a connector for my HP431C

73
Jan-Martin LA8AK

3751. Re: 137MHz WXSAT Receiver ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-29 00:00:00 UTC
From: 2findit <no_spam@please.com>
Message-ID: <csnS3.274$Ow5.2735@dfw-read.news.verio.net>
Source record: 66117
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Greetings 137 MHz enthusiasts..

I've been looking for a newsgroup for weather satellite related discussions and have yet to locate one. So, I'll pose a few of my questions here which are probably easily answered by the folks that have been doing APT reception for some time.

1. What antenna has actually provided good clean imaging?
I've been looking at the various offerings here in the states regarding turnstile antennas and have wondering if they all perform nearly the same? A few of them such as the Vanguard APT-2 (http://www.multi-fax.com/apt_2.htm) actually has the preamp built into the antenna - bad idea? Others include Hamtronics & Woodhouse APT-2CP at the Hamtronics site below (about 75% down the page). Finally the "Swagurtenna" at (http://www.swagur.com/) - tag APT Antennas (left column) and scroll the right page. Any comments on these offerings sure welcome.

2. What receiver (or kit) is recommended here in the states?
Have looked at everything from Hamtronics' R139 (http://www.hamtronics.com/r139.html) to modifying a new $79 Radio Shack synthesized scanner. Comments?

3. What preamp (if any) is recommended at 137 MHz? Kit?
I've noticed that these have also been made available through kits such as Down East Microwave or, again through Hamtronics etc.

I've been nosing around a bit looking for additional information through the various Web sites and news groups. One very nice offering I've noticed is Swagur Enterprises / Time-Step's Web site (http://www.time-step.com/apt/apt.htm) locating their PROscan receiver. At this web site scrolling down about 75% of the page lets one see the inside and outside of a rather nice design. It should be at $399 in the states through Swagur Enterprises. However, it appears that the Hamtronics offering is about half that cost while inexpensive consumer scanners are less than $90 new in the states now.

Appreciate insight regarding APT trials and tribulations.

Cheers,
Gary

Good 75 ohm coax vs. 50 ohm coax...??

Simon Lewis wrote in message ...
>In article <7uiit5$t3j$3@lure.pipex.net>, Gary Peach
><xcg34@dial.pipex.com> writes
>>
>>Simon Lewis wrote ...
>>> 49 quid from remote imaging group. as good as anything
commercial.
>>
>>137 MHz I can do, The link to the PC via the sound card already
exists for
>>PSK31 and Hell, is there any FREE Wefax decoding Software,
>>and whilst I'm asking how about Amtor Software and RTTY
>>I can do the Amtor with an AMT-1 but reconfiguring would be better
with a
>>suite of decoding PC software.
>>
>>Gary7SLL
>>
>>
>
>you need a wide BW at 137 MHz though Gary. Needs to be 80 KHz or
so.
>
>There is loads of PC software for downloading to do APT service,
try
>WXSAT as one good one.
>
>Not sure about AMTOR but quite a few RTTY decoders available.
>
>73 Simon GM4PLM
>+---
--+
>| Simon Lewis GM4PLM Editor - EMN
|
>| European Microwave News - Supporting Microwave Radio Across
Europe |
>| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk
|
>| Fax Service- 0870 0520972
|
>+---
--+
>

3752. FS:OIL FILLED HV CAPS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-29 00:00:00 UTC
From: "john williams (remove X to reply)" <Xac6ts@n2.net>
Message-ID: <381A1302.59764597@n2.net>
Source record: 66118

FS: Oil filled caps
2000VDC @4mfd $15.00 ea.shipped 10 or more at a time shipping included.
Less than 10 units $17.00 ea. shipped 48 states.

--
PAGE AT-> http://www.angelfire.com/ca2/home4biz/index.html

---/---
---/---
----/----
-----/-----

AC6TS John Williams
LAT. 33.06.15 LON. -117.03.36 7.030Mhz CW
DM13KC 14.030Mhz CW

3753. Re: pulling a crystal off frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-29 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <381a0627.99522966@news.online.no>
Source record: 66119

On 28 Oct 1999 19:38:49 -0700, rick@area.com (Richard Karlquist)
wrote:

> I once pulled a 20 MHz crystal over a 100 kHz range.
>You are ultimately limited on the low end by inductor Q and on the
>high end by the spurious anharmonic resonances a few 1/10's of
>a percent above series resonance
>
>
>Rick Karlquist N6RK
>rick@area.com

Tom mentioned another configuration operating into paralell resonnance
xtals while you are talking about series resonnance, but you did not
tell us which sort of xtals give best results. Older overtone xtals
are often better than modern xtals made specifically to have very
narrow tuning range

3754. Ham Radio magazine (1975)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-29 00:00:00 UTC
From: Bryan Fields <kb9mci@urbancom.net>
Message-ID: <38195F6E.2985E6E5@urbancom.net>
Source record: 66120

Hi i need to know if any one out there can copy me an article out of Ham Radio magazine that was written sometime in 1975-1976. the article was on a 100W atv amp. it was written by Rick Olsen, N6NR. that is all the info i have on it.

If any one would be happy to make me a copy i will pay for copy costs and shipping.

Thank you,

Bryan, KB9MCI

3755. Re: question about VFO design

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-29 00:00:00 UTC
From: Terry Sanford <tsanford@roadrunner.nf.net>
Message-ID: <381A2244.4D97CDC4@roadrunner.nf.net>
Source record: 66121

Nick Caruso wrote:

> A simple question (I hope):
>
> I'm building a VFO. .... they ....all seem to have very restricted tuning ranges,
> often less than 1MHz.

> plan to build an HF VFO that tunes from 7 to 8 MHz a
>
> I've got a reduction-drive equipped 25-145pF air variable behemoth cap stamped
> "ARC" on one end, assumed to be of WWII vintage, so it seems like I should be
> able to get decent tuning over a 1 MHz range.
>
> Is this reasonable?
> XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

The 'range' of your variable capacitor is from 25 to 145 pf? That is a ratio of 1 to 5 (roughly) Since frequency is proportional to the sqr.root of L and C. in a tuned circuit you should be able to get a frequency range of a little over 1 to 2. In theory you could go from, say, 6 to 12 megahertz.
frequency =1 divided by (2 times pi multiplied by the sqr.rt of L times C).
In a broadcast AM band receiver for example the oscillator tracks (approximately) from about one megahertz (455 khz + 560 khz = 1000 khz) to a little over two megahertz (1700 khz + 455 = 2155 khz); a ratio of somewhat over two to one. So, in a broadcast receiver the oscillator tuning capacitor must track from a low capacitance of, say, 120 pf to a high of say 500 pf.A ratio of about 1 to 4..
The range of 7 to 8 mhz is a much lower ratio So even with much other capacitance etc. in the frequency determining circuit the frequency range should be achievable.
It's almost 50 years since I did the theory on this but I think that's correct?
Good luck with your project.
Terry S.

>
> t

3756. Re: 4D32 specs needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-29 00:00:00 UTC
From: Terry Sanford <tsanford@roadrunner.nf.net>
Message-ID: <381A275E.43331DA3@roadrunner.nf.net>
Source record: 66122

W1xyz wrote:

> Anybody got the spec sheet for a 4D32?
>
> Thanks
> Bob
> W1XYZ

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Bob: Sorry no.
But when I went looking in my old, old, tube book, to see if I had anything I did find an RCA spec sheet for 4-125A/4D21. dated 1946.
SO, if anybody wants the specs on a 4D21? Please email me.
Good luck.
Terry S.
BTW I also found spec sheet for Western Electric D-86326 vacumn tube. ("similar to the 101D") circa. the 1920s! The D-86326 heater required one amp at 4.5 volts; four and a half watts; for one tube! I had donated that tube to a Telephone Pioneers display, complete with its original box, about 10 years ago.

3757. Re: 4D32 specs needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-29 00:00:00 UTC
From: Dick Koehl <koehl@anl.gov>
Message-ID: <R6uS3.19$p5.481943@ronws01.ce.mediaone.net>
Source record: 66123

Bob:
1954 Radio Amateur Handbook, p.V59, 4D22/4D32
Pd=50W max, fil=6.3V,3.75A Eb(max)=750V, Eg2(max)=350V, Pg2(max)=14W.
Cin=28pf, Cg-p=0.27pf, Cout=13pf, Max F for full rating= 60 Mhz.
Class/Mode Eb Eg2 Eg1 Ib Ig2 Ig1 Rg2 Pin
Pout
C CW 750 300 -100 240 26 12 -
1.5 135
600 300 -100 215 30 10 -
1.25 100
C AM 600 - -100 220 28 10 10K
1.25 100
550 - -100 175 17 6
15K 0.6 70
AB2 audio 600 250 -25 100/ 26 70 -
0.45 125 3K p-p

The 4D22 is a 25Vct filament. Volts and Power are max., current =mA.
Suppressor grid tied to cathode.

73, Dick K9FFK
365
W1xyz wrote in message <19991027162704.01326.00001830@ng-bh1.aol.com>...
>Got several of 'em cheap - more than I'll use for my 32V2 - so I want to
build
>an AM Tx with a couple of them in parallel.
>
>Anybody got the spec sheet for a 4D32?
>
>Thanks
>Bob
>W1XYZ
>fax 978 440 8180

3758. ATTENTION! Amateur Radio Operators CBers etc, FROM QRSRADIO

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-29 00:00:00 UTC
From: QRSradio@kbk.NET
Message-ID: <360.242246.879531@RadioMail.com>
Source record: 66124

ATTENTION! Amateur Radio Operators, CB ER's etc, FROM QRSRADIO1

This mail is never sent unsolicited.
You or someone you know enter your Callsign and E-mail address
in QRSRADIO1s Amateur Radio database. To keep you upto date on
important
Happening's in the world of Two-way radio.

If this letter reached you in error please please
please accept our apologies.
Thank You.

Jump into the 21st Century
With The Communicators Handbook 2050
If you are a Ham, CB'er, DX'er, S.W.L Etc.,
Call 718-482-3437 for more information
On communications most Revolutionary
Happening since the invention of two-way radio.

OR Check out the book on Amazon.com's Web site. Or on CRB
Research Books Inc. Web Site

At : http://www.crbbooks.com

http://www.Amazon.com

(Tip look for the book in the Shortwave books of crbbooks.com)

or call your local Library and ask for The Communicators
Handbook 2050.

Supplies are severely LIMITED
Only 200 in the world.
this book will help all radio lovers,

It's Very important that you as a ham just look at this Book.

No one can deny that the radio hobby has suffered over the last
few
Years in this age of the home computer and new radio laws.

This is as REAL as it gets
On (November-10-1999) this book will go out of print.
And no one will know about it,

It's time for you to help stop the suffering, of the radio hobby.
Please support your local Ham Club & Store.

THANK YOU
Jeff 73.

Ps. Question Y is it that hams can talk on the radio but not on
the net by email???

This is for Ham, CB'er, DX'er, & S.W.L only!

If this letter reached you in error please please please accept
our apologies.
Thank You.

this message complies with the proposed United States Federal
requirements

we do not wish to mail to anyone except those who have
Specifically requested we do so, like you did.

3759. Re: question about VFO design

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-30 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <381a27fe.108188103@news.online.no>
Source record: 66125

believe I have a Kenwood VFO covering 8.2-9.2MHz for TR-7010 and other
2m transceivers anno 1975, perhaps you find a similar secondhand VFO
for very low price, should be quite easy to retune

On Fri, 29 Oct 1999 20:10:04 -0230, Terry Sanford
<tsanford@roadrunner.nf.net> wrote:

>
>
>Nick Caruso wrote:
>
>> A simple question (I hope):
>>
>> I'm building a VFO. .... they ....all seem to have very restricted tuning ranges,
>> often less than 1MHz.
>
>> plan to build an HF VFO that tunes from 7 to 8 MHz a
>>
>> I've got a reduction-drive equipped 25-145pF air variable behemoth cap stamped
>> "ARC" on one end, assumed to be of WWII vintage, so it seems like I should be
>> able to get decent tuning over a 1 MHz range.
>>
>> Is this reasonable?
>> XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
>
>The 'range' of your variable capacitor is from 25 to 145 pf? That is a ratio of 1 to
>5 (roughly) Since frequency is proportional to the sqr.root of L and C. in a tuned
>circuit you should be able to get a frequency range of a little over 1 to 2. In
>theory you could go from, say, 6 to 12 megahertz.
>frequency =1 divided by (2 times pi multiplied by the sqr.rt of L times C).
>In a broadcast AM band receiver for example the oscillator tracks (approximately)
>from about one megahertz (455 khz + 560 khz = 1000 khz) to a little over two
>megahertz (1700 khz + 455 = 2155 khz); a ratio of somewhat over two to one. So, in a
>broadcast receiver the oscillator tuning capacitor must track from a low capacitance
>of, say, 120 pf to a high of say 500 pf.A ratio of about 1 to 4..
>The range of 7 to 8 mhz is a much lower ratio So even with much other capacitance
>etc. in the frequency determining circuit the frequency range should be achievable.
>It's almost 50 years since I did the theory on this but I think that's correct?
>Good luck with your project.
>Terry S.
>
>
>>
>> t
>

3760. About amplifier BV130.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-30 00:00:00 UTC
From: rebeca <rrm17@alu.ua.es>
Message-ID: <381A25F4.7431F5F1@alu.ua.es>
Source record: 66126

Hello to all, this is the first time I send a message.
Please I need a schematic diagram from amplifier from ZETAGY BV-130, if you can send me via e-mail I´m very happy to can repair this from my radio-station.

My e-mail is: sergiobc@worldonline.es

3761. Re: Cobra 148 10-meter mod

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-30 00:00:00 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <RoTUXWA2RrG4Ew43@g3ohx.demon.co.uk>
Source record: 66127

Please forgive my interuption, but I would challenge the use of the word 'good'!

Ihe 'Clause aa' regulation was a shot in the dark with a scatter-gun, and killed off most of the amateur interest in cheap 10m activity and self-training in radio vis-a-vis synthesizers, VCOs etc. I don't think it made any real difference to illegal activity (and probably made things worse on frequencies other than the 'traditional' illegal CB hunting ground).

Sorry - couldn't resist a little bitch. Carry on!

Ian.

In article <7v930m$kjg@newton.cc.rl.ac.uk>, Mike <m.j.willis@rl.ac.uk> writes
>It has been done in the UK many times, though the rules have now changed. It
>was a good way of getting rid of illegal, in UK law, SSB CB radios. You
>need to change some crystals to give you the new band. You need to re-tune
>the VCO and you need to replace the PROM so channels are ordered sensibly.
>There were kits and articles in magazines about 10-15 years ago.
>
>

--
Ian Jackson

3762. Re: pulling a crystal off frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-30 00:00:00 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <QoLUXQAWRrG4Ew4P@g3ohx.demon.co.uk>
Source record: 66128

It was once pointed out to me that crystals do NOT really oscillate in a parallel mode. A crystal can be represented by a series-tuned circuit with a big L and a small C (say, C1). Across this, in parallel, is a much greater C2 (predominantly the metallization on the surfaces of the crystal). For example, in a 50MHz, 3rd overtone crystal, C1 is about 0.1pF and C2 is about 5pF. Because C1 is so small, any additional external capacitor (by itself, as a frequency puller) has hardly any effect.

When the frequency is determined by the throughput of CURRENT, it is determined by the series resonance of L and C1. When the frequency is determined by the VOLTAGE across the crystal, it is determined by the resonance of L, C1 and C2 IN SERIES. This, of course, slightly HF of the resonance of L and C1. You can easily determine the characteristics of a crystal by feeding a signal from a generator (50 ohm) through the crystal into a 50 ohm RF voltmeter (with suitable sweep equipment, you can get a frequency vs amplitude plot).

As a result of the above, the frequency-amplitude plot shows the familiar 'blow-suck' shape ('blow' = max amp, 'suck' = min). Because the suck lies very close on the HF side of the blow, the frequency of the maximum throughput tends to get pushed LF of the frequency where it would be if C2 did not exist. You can stop this by tuning-out (neutralizing) C2 by parallel inductor. When you have the value of the inductor correct, there is only ONE resonance, ie that of L and C1, and the (series-resonant) oscillator moves HF.

I found that you can shift the frequency quite a bit by adjusting the parallel inductor, but probably not sufficient to make it a good VFO. However, I feel that the neutralizing of C2 probably gives the most stable and flexible pulling characteristics when you add a series-tuned pulling circuit to the crystal.

Am I correct?

Ian.

In article <381a0627.99522966@news.online.no>, J M Noeding
<LA8AK@online.no> writes
>On 28 Oct 1999 19:38:49 -0700, rick@area.com (Richard Karlquist)
>wrote:
>
>
>> I once pulled a 20 MHz crystal over a 100 kHz range.
>>You are ultimately limited on the low end by inductor Q and on the
>>high end by the spurious anharmonic resonances a few 1/10's of

>>a percent above series resonance
>>
>>
>>Rick Karlquist N6RK
>>rick@area.com
>
>Tom mentioned another configuration operating into paralell resonnance
>xtals while you are talking about series resonnance, but you did not
>tell us which sort of xtals give best results. Older overtone xtals
>are often better than modern xtals made specifically to have very
>narrow tuning range

--
Ian Jackson

3763. QST Hints & Kinks - Connecting TNC to HF radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-30 00:00:00 UTC
From: Gary Partain <gary@NOSPAMsics.com>
Message-ID: <98634D4BE7F6DDC7.AE3BA4B51CD27B74.8315D9BBC500E2CD@lp.airnews.net>
Source record: 66129
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

Hi Gents,

I need a circuit or method of connecting my TNC to the AUX connector of my IC-746 HF rig, and at the same time allow me to connect my mic to the front, without incurring signal loss. A friend tells me that there was a Hints and Kinks article in QST in the first 6 months of 1999 that talked about that very thing. Does anyone happen to know what month that article was published?

Thanks!

Please respond to W5HQ@NOSPAMhome.com - minus the "NOSPAM"
Gary Partain, W5HQ

3764. Re: pulling a crystal off frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-30 00:00:00 UTC
From: douglas dwyer <doug@ddwyer.demon.co.uk>
Message-ID: <dgW8eCAn4xG4Ew5M@ddwyer.demon.co.uk>
Source record: 66130

In article <38195ee1.56694771@news.online.no>, J M Noeding
<LA8AK@online.no> writes
>it reminds me of an experiment where I connected the xtal across a
>tuned circuit in a Hartley oscillator. Used a 7022kHz HC6/U xtal from
>JAN, and tuning capacitance was 100pF, don't remember all details.
>When the xtal 'locked' it could be tuned over at least 20kHz range,
>perhaps larger, but became more unstable on the sides, so it was
>somewhat difficult to control the locking with the somewhat too simple
>circuit. Have thought of building a more controllable circuit using
>smaller tuning capacitor value and adjusting it to operate within
>lock-range only
There are various techniques for increased crystal pulling
Flat plate crystals will pull best
So 20 mhs fundementals are good.
below 10Mhz crystals are contoured and pull less.
Spurious responses are a real problem and will cause jumps in pulling.
Crystals pull below series resonance and have less spurious here.
Tuning out the crystal self capacitance help pulling above series
resonance. Dont use overtone crystals if you want maximum fractional
change.
For compromise pulling ceramic resonators will pull much more crystals
but will be more stable than LC.

--
douglas dwyer

3765. FS Filament trans

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-30 00:00:00 UTC
From: Matt Erickson <kk5dr@hotmail.com>
Message-ID: <381B218F.BBF86990@hotmail.com>
Source record: 66131

```
7.5vac @ 21A. with CT sec. , 240/120vac pri.
Good for 4-1000A & 3-1000Z tubes , 3CX1200A7 too.
$50 shipped conus
```

3766. FS or TRD Vac relays, 12vdc

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-30 00:00:00 UTC
From: Matt Erickson <kk5dr@hotmail.com>
Message-ID: <381B2248.936EF7B4@hotmail.com>
Source record: 66132

I have (2) KiloVac KM-13 dpdt vac realys.
Rated at 12kv @ 10amps contacts.
Great T/R for those "BIG" amps.
$100 each shipped conus.
or TRADE for ;
Jennings 26.5vdc coil relays
(1) RF10B & (1)RB3 or (2)RJ1A

3767. Re: QST Hints & Kinks - Connecting TNC to HF radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-30 00:00:00 UTC
From: DavidC <eDoc@netzero.net>
Message-ID: <s1mf6u1jiqi40@freenews.remarq.com>
Source record: 66133
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

You might do an Internet search on "mods Icom". I use
www.searchspaniel.com and select AltaVista, Excite and
DejaNews to search all at the same time. The others tend to
duplicate or always come up empty.

The same issue came up with the IC-735 and I *used* to know
the solution from several years ago when I had one ... but you know
how that is ... use it or lose it, I've forgotten the simple fix!

Also, you might E-mail IcomAmerica. I received wonderful tech
support from them via E-mail in the past.

- 73, DavidC K1YP

****

> I need a circuit or method of connecting my TNC to the AUX connector
> of my IC-746 HF rig, and at the same time allow me to connect my mic
> to the front, without incurring signal loss. A friend tells me that
> there was a Hints and Kinks article in QST in the first 6 months of
> 1999 that talked about that very thing. Does anyone happen to know
> what month that article was published?
>
> Thanks! Gary Partain, W5HQ

* Sent from RemarQ http://www.remarq.com * The Internet's Discussion Network *
* The fastest and easiest way to search and participate in Usenet - Free! *

3768. WTB: Globe Chief Deluxe

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-30 00:00:00 UTC
From: kr5f <kr5f@hf.org>
Message-ID: <A3381F892C1665D3.FABA8FD7B973C6DA.50D5C897F3621F23@lp.airnews.net>
Source record: 66134

Looking for a Globe Chief Deluxe - Contact me direct at kr5f@hf.org

/lee - kr5f

3769. Is there a source for 40 kHz ceramic IFs?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-30 00:00:00 UTC
From: 2findit <no_spam@please.com>
Message-ID: <FBLS3.6035$Ow5.8534@dfw-read.news.verio.net>
Source record: 66135

Greetings..

Is it possible to locate 40 kHz ceramic IFs at any of the
electronics part distribution houses here in the states? Considering
APT reception with a receiver that's currently too narrow.

Cheers,
Gary

3770. FS Merrimac 4 port power divider

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-30 00:00:00 UTC
From: Roger Leone <arleone@inreach.com>
Message-ID: <ObPS3.3386$n51.121470@news.inreach.com>
Source record: 66136

For sale: Merrimac PD-40-10

This is a power divider with 4 outputs...allows up to 4 receivers to share one antenna.

I don't have manufacturer's specs, but with all 4 outputs terminated with 50 ohm loads, the input showed flat SWR from below 2 mHz to just over 21 mHz. The load became slightly reactive above 21 but should be useable through the full HF range. Oddly, the SWR is flat again around 70 - 72 mHz.

Have 2 available now and may be able to get more soon.

Price is $10. Unit is small (approx 2"X3") and should be relatively cheap to ship.

Thanks

3771. Dial Drives

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-31 00:00:00 UTC
From: Corky <corkyNOcoSPAM@myremarq.com.invalid>
Message-ID: <11f733ec.982c07be@usw-ex0102-016.remarq.com>
Source record: 65943

Does anyone have a source for dial drives or verniers that can be fitted
to air variable capacitors.

* Sent from RemarQ http://www.remarq.com The Internet's Discussion Network *
The fastest and easiest way to search and participate in Usenet - Free!

3772. Re: ATTENTION! Amateur Radio Operators CBers etc, FROM QRSRADIO

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-31 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <381C89F6.B4383FDC@bellsouth.net>
Source record: 65944

"Barry L. Ornitz" wrote:
> WHAT A LIE! I assume many of you got this in personal email too. I
> complained about similar email eight months ago - and I was SPAMMED again.
> Only this time, the Virginia Anti-SPAM law applies and I can sue the
> sender.

I received a spam copy. (this is the first one I've received from this source) The spam complaint has already been filed, including copies to amazon.com and crbbooks.com. I would presume Amazon, being basically an Internet business, is not interested in selling books written by people who have no consideration for Netiquette.

Good luck with the suit. This is the only way we're going to stop these crooks.

(and since it apparently has not been obvious to everyone reading... the fact that I post in ham radio related newsgroups does NOT constitute permission to email me ads!)
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

3773. Tektronix BLUE

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-31 00:00:00 UTC
From: JW <jdwalton@home.com>
Message-ID: <381C756E.D55880B1@home.com>
Source record: 65945

Anyone care to suggest a Krylon or other match for Tektronix Blue.

Jack

3774. Re: WTB: Northstar Horizon or Ithaca InterSystems DPA-1

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-31 00:00:00 UTC
From: Marvin Born <MBORN@WBNS.COM>
Message-ID: <381C564F.AC8D646@WBNS.COM>
Source record: 65946
Cross-posted to: rec.ham-radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Check some of the larger TV stations. There was a weather computer by Color Graphics that was S-100 based. Since TV people throw nothing away, there may be some of them hidding somewhere.

KF8XU

Tracy Nelson wrote:

> Alan wrote:
> > I'm looking to acquire one of the 70's era S-100 bus computer systems like
>
> If you don't have any luck here, you might want to try the good folks on
> alt.folklore.computers. They tend to keep track of old hardware.

3775. device equivalents: USA vs GB transistor names??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-31 00:00:00 UTC
From: gagnon@gagnon.fakeu-net.com
Message-ID: <381c5570.5026043@news.u-net.com>
Source record: 65947
Cross-posted to: sci.electronics.basics,rec.radio.amateur.homebrew

can anyone point me to a website that might have suggestions for
semiconductor device equivalents and replacements and also listings of
USA versus UK transistor name equivalents??

Your help would be appreciated.

Larry Gagnon

3776. Re: device equivalents: USA vs GB transistor names??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-31 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <3DBK7BAN2GH4EwGI@falstaf.demon.co.uk>
Source record: 65948
Cross-posted to: sci.electronics.basics,rec.radio.amateur.homebrew

In article <381c5570.5026043@news.u-net.com>, Larry Gagnon
<gagnon@gagnon.fakeu-net.com> writes
>can anyone point me to a website that might have suggestions for
>semiconductor device equivalents and replacements and also listings of
>USA versus UK transistor name equivalents??
>
>Your help would be appreciated.
>
>Larry Gagnon
AFAIK we use 2Nxxxx names for modern devices widely over here. Do you
mean the BCxxx BFYxxx and so on?

Rgds

Robin

--
Robin Birch robin@falstaf.demon.co.uk

M1ASU/2E0ARJ/M5ABD Old computers and radios always welcome

3777. Re: Tektronix BLUE

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-31 00:00:00 UTC
From: Jack Taylor <n7oo@theriver.com>
Message-ID: <ut_S3.44846$7I4.811354@news5.giganews.com>
Source record: 65949

I got a near perfect match for Hallicrafters gray by taking a sample to a nearby paint store offering computer color matches. Perhaps you could do a similar result for Tektronix Blue.

73 de Jack

JW wrote in message <381C756E.D55880B1@home.com>...
>Anyone care to suggest a Krylon or other match for Tektronix Blue.
>
>Jack
>

3778. WTB Ceramic rods, etc.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-31 00:00:00 UTC
From: Matt Erickson <kk5dr@hotmail.com>
Message-ID: <381C9984.1ABD9439@hotmail.com>
Source record: 65950

I need ceramic rods for my amp project;
1/2", 1" dia. 4-6" long.
Also need ceramic standoffs, any length, with threaded ends.

3779. Re: VHF 2m HT "adjustment"

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-31 00:00:00 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <7vi515$1d3@nnrp1.farm.idt.net>
Source record: 65951

Eric 48156 <ribzoo@execpc.com> wrote in message
news:381bd6e1$0$449@news.execpc.com...
> Dear anyone,
> I am an active member in the Civil Air Patrol, and very involed in
> ground SAR. I am going to get a good quality HT in the 144mHz -148mHz
> range. However, any of you fellow CAP members know that the CAP range is
> from 144- 149.175...
> I was wondering if anyone could give me info or advice to help in my quest
> to have all the freqs. possible. I am a military radio op. so any mods i
> make to my radio are perfectly legal. But i dont know how! Any help would
> be great... THANK YOU!

You did not say which HT you would get. Each model/manufacture the mod's are
different.

I have some mod's and info for the Yaesu FT-50 and the Kenwood TH-G71A.

http://members.aol.com/aeimn/ft50/
http://www.angelfire.com/ca/ke6gwf/

--
73,

Leland C. Scott
KC8LDO

ARRL member
NCI member

"You ask what Morse Code is good for? I'll tell you. Morse
Code is used exclusively by Electronics Based life forms to
communicate amongst themselves using advanced Organic
Digital Signal Processors, running state of the art Artificial
Intelligence Software, to perform the highly complex
transmit encryption, receive decryption and error correction
functions."

3780. Radio Shack Frequency Counter ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-31 00:00:00 UTC
From: alg460@aol.com
Message-ID: <19991031165459.24120.00000717@ng-cm1.aol.com>
Source record: 65952

Does anyone know if the $79 Radio Shack frequency counter can be used to measure in circuit frequencies with test leads attached to it or does it only work with the supplied antenna on radiated signals.

Tony

3781. Re: Scope arcs...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-31 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <7viht6dmq0@208.207.71.148>
Source record: 65953

Tom,
I had the same experience years ago with my first Heath SB610 monitorscope. I could see the arcing inside the neck of the CRT. Perusing the schematic, I noticed that one side of the tube filament was grounded, returning to a grounded supply lead from the power xformer, while the CRT cathode was sitting aroung 1800VDC. ???? 1800VDC from cathode to filament???? An open invitation for arcing. The fix was to lift both the grounds, the xformer lead and the tube filament lead, and run an insulated wire from the xformer to the tube socket, eliminating that close-proximity to 1800VDC. I used it for years afterward and it never arced again.

Maybe you have a similar situation.

73, Dick W0EX

Tom Bruhns wrote:
>
> Not that I really need any sympathy, but just thought I'd share an
> interesting (or is that "distressing"?) thing that happened to me
> recently... I turned on my 'scope (some off-brand that shall remain
> nameless...;-) which I had gotten well-used a year or so ago to make
> some simple measurements a couple weeks ago. But instead of seeing the
> pretty blue trace pop up on the screen, instead, I _heard_ pops,
> inside. Hmmm. Oh, well, perhaps it just got moist and dusty. I'll
> take it apart and clean things up... But upon doing that, I discovered
> that the arcs were actually INSIDE the CRT. And I was hearing them.
> Hmmm...methinks there's a bit too much pressure inside that CRT. No
> cracks that have become visible to me yet; it hadn't been jarred AFAIK.
> I'm sure it's way too expensive a tube to bother replacing, though
> perhaps someone repairs scope tubes...or perhaps there's a good mate for
> this scope that's lame in some other way, and as a pair they could go
> happily through their golden years together. (If "1743" makes any
> half-dead scope you have around perk up its anodes, let me know and
> maybe we can play matchmaker.)
>
> Cheers,
> Tom

3782. High Temp Radio transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-31 00:00:00 UTC
From: Constantine Nicholas Flevaris <cfleva1@uic.edu>
Message-ID: <Pine.A41.4.10.9910311542160.463416-100000@tigger.cc.uic.edu>
Source record: 65954
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hello,
I'd like to know if anyone knows where i can get some information on radio transmitters designed to handle high temperatures. I am doing a project and part of it will require a low power radio transmitter in a high heat environment, like 300 degrees Farenheit. Does anyone know where i can look for this info, or does anyone have info on such a device? I appreciate any assistance. Please reply to cfleva1@tigger.uic.edu.
Thank you,
Constantine Flevaris

3783. Dial Drives

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-31 00:00:00 UTC
From: Corky <corkyNOcoSPAM@myremarq.com.invalid>
Message-ID: <09920fb9.1e75d4d2@usw-ex0101-008.remarq.com>
Source record: 65955

Does anyone know of a source for dial drives that can be used with
air variable tuning capacitors.

* Sent from RemarQ http://www.remarq.com The Internet's Discussion Network *
The fastest and easiest way to search and participate in Usenet - Free!

3784. Greenlee Chasis Punches for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-31 00:00:00 UTC
From: hmn <w2ufo@banet.net>
Message-ID: <381CE879.64AFE5CB@banet.net>
Source record: 65956

I have the following Greenlee punches in their original individual
packages. I will only sell these as a set. I WILL NOT break them up.

1 pc 2 3/4"
2 pcs 1 1/2"
2 pcs 1"
1 pc 1 1/4"
1 pc 2 1/4"
2 pcs 5/8" round
1 pc 5/8 " square
1 pc 7/8"
1 pc 1 1/8"
1 pc 3/4"

price for all above $250.00 + shipping. Please note the carton holding
all above is not very large but pretty heavy, so I suggest anyone
purchasing these should request UPS shipment (You pay the freight).
Payment accepted as bank check or postal money order only.

--

"Always Available Through Technology"

Be sure to visit the web site of w2ufo & w2xyl
just by clicking on http://www.qsl.net/w2ufo

3785. Help...I need Pot!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-31 00:00:00 UTC
From: Lee Smith <ckvnfm@mb.sympatico.ca>
Message-ID: <QZ6T3.354$Gd6.14856@news1.mts.net>
Source record: 65957

Hello Folks:

Now that I have your attention with the curious header...I am in need of a lead to the manufacturer of a pot that is made up of various sections stacked up with a switch on the rear. I am restoring a piece of broadcast equipment (Howe model 7000) and many of the rotary pots are worn out in the switch that takes audio into the cue system.

On the back is the info:

A-B
Mod Pot
Mexico

Can anyone tell me who made this, and if there is a website or address I could write to?

Regards,
Lee Smith
VE4ANC

3786. Re: VHF 2m HT "adjustment"

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-31 00:00:00 UTC
From: DavidC <eDoc@netzero.net>
Message-ID: <s1pvkmo8iqi69@freenews.remarq.com>
Source record: 65958
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

If you do a search of the Internet on "radio mods" you will
discover many sites with details for many different radios.

Among my favorites is:
http://www.mods.dk/search.htm

You might also try these Ham-specific search engines and sites:
http://www.qth.com/stamper/search/bafoof.htm
http://www.geocities.com/CapeCanaveral/Hall/8701/hamlynx.htm

- 73, DavidC K1YP
****

Eric 48156 <ribzoo@execpc.com> wrote in message
news:381bd6e1$0$449@news.execpc.com...
> Dear anyone,
> I am an active member in the Civil Air Patrol, and very involed in
> ground SAR. I am going to get a good quality HT in the 144mHz -148mHz
> range. However, any of you fellow CAP members know that the CAP range is
> from 144- 149.175...
> I was wondering if anyone could give me info or advice to help in my quest
> to have all the freqs. possible. I am a military radio op. so any mods i
> make to my radio are perfectly legal. But i dont know how! Any help would
> be great... THANK YOU!
>
> Eric 48156 ribzoo@execpc.com

* Sent from RemarQ http://www.remarq.com * The Internet's Discussion Network *
* The fastest and easiest way to search and participate in Usenet - Free! *

3787. Equipment for Sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-31 00:00:00 UTC
From: radiodoc37@aol.com
Message-ID: <19991030214210.18732.00000417@ng-co1.aol.com>
Source record: 66137

Equipment For Sale 10/30/99

Siltronics Model 90 VFO -6
$70.00

HomeBrew Wattmeter Ikigawa large scale meter and case, Gold Line coupler, 20/200/2000 watt scale reads forward and reverse power $40.00

National NC46 Receiver, Immaculate internally, works perfectly, soemone repainted the cabinet and it shows brush strokes. Faceplate is a 7 on a 1-10 scale some silkscreening slightly worn. This unit is like new internally with manual $75.00

Shure 522 Dynamic desk Microphone, With High/Low impedence switch. A nice looking mic, better styling then the 444.
$60.00

Yaesu FT708R UHF handheld with PL. Drop in charger model NC-8, YM24A speaker Mic, GOOD nicad battery, leather holster,
$100.00

Sears road talker 40 This is the base/Mobile unit with the slanted face. 40 channel AM/SSB with stock mic.
$80.00

McCormick TAC310 commercial VHF mobile radio. Loaded with packet frequencies. Eprom programmable. Great recieve and TX, perfect dedicated Packet radio $70.00

Siltronics 1011C, Recieves great, no 8950 in the final with manual, selling AS IS $75.00

Homebrew 10 meter amplifier , made from a military PA deck, homebrew supply, open chassis design. uses three 24 volt filiment versions of the 6146 tube.
$150.00

Yaesu FT23R 2 meter handheld with optional touch tone pad, receives but has intermitent RX. with original box selling AS IS $50.00

Bird SLug 5000W peak mode 1000W avg power 50-125 Mhz $60.00

Bird Slug 10,000W peak mode 1000W avg power 50-125 Mhz $60.00

Johnsom Viking Model 1 AM/CW transmitter with manual $150.00

Motorola UHF Power amplifier Model N1275A 450-470 Mhz $50.00

Browning MK III receivers and transmitters Abandoned project Sell the whole lot for $375.00 Email for details

Tram D201 in good condition with manual $300.00

All items do not include shipping from 93063 Zip code.
References available upon request.
Items shipped upon receipt of MO or after personal check clears
Pictures available upon request.
(805) 526-5487

Mike

3788. Re: ATTENTION! Amateur Radio Operators CBers etc, FROM QRSRADIO

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-31 00:00:00 UTC
From: "Barry L. Ornitz" <ornitzz@dpnet.net>
Message-ID: <sbPS3.6278$i3.382229@news21b.ispnews.com>
Source record: 66138

QRSradio@kbk.NET wrote in message <360.242246.879531@RadioMail.com>...
>
>ATTENTION! Amateur Radio Operators, CB ER's etc, FROM QRSRADIO1
>
>This mail is never sent unsolicited.

>
>this message complies with the proposed United States Federal
>requirements
>
> we do not wish to mail to anyone except those who have
> Specifically requested we do so, like you did.

WHAT A LIE! I assume many of you got this in personal email too. I complained about similar email eight months ago - and I was SPAMMED again. Only this time, the Virginia Anti-SPAM law applies and I can sue the sender.

The KBK.Net address is not a valid user name according to mail I received back. This message was actually sent from news1.ucsd.edu.

I suggest everyone receiving this SPAM complain to the sending system. For this Usenet message, complain to abuse@ucsd.edu. For private email SPAM, you will need to complain to the sending system. You can determine this from the IP address.

By the way, filing lawsuits against SPAMMERS is _extremely_ effective. My thanks to Virginia for passing their Anti-SPAM law. Check it out if you are a Virginia resident.

"CHAPTER 905
An Act to amend and reenact 8.01-328.1, 18.2-152.2, 18.2-152.4, and 18.2-152.12
of the Code of Virginia, relating to personal jurisdiction; Virginia Computer
Crimes Act; unsolicited bulk electronic mail. "

Dr. Barry L. Ornitz WA4VZQ ornitz@dpnet.net

3789. VHF 2m HT "adjustment"

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-31 00:00:00 UTC
From: ribzoo@execpc.com
Message-ID: <381bd6e1$0$449@news.execpc.com>
Source record: 66139

Dear anyone,
I am an active member in the Civil Air Patrol, and very involed in ground SAR. I am going to get a good quality HT in the 144mHz -148mHz range. However, any of you fellow CAP members know that the CAP range is from 144- 149.175...
I was wondering if anyone could give me info or advice to help in my quest to have all the freqs. possible. I am a military radio op. so any mods i make to my radio are perfectly legal. But i dont know how! Any help would be great... THANK YOU!

Eric 48156 ribzoo@execpc.com

3790. AD9850: where to buy ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-31 00:00:00 UTC
From: Giovanni Mazzola <g.mazzola@tin.it>
Message-ID: <7vgp6rkjf1@nslave1.tin.it>
Source record: 66140

I'd like to buy an AD9850 (DDS from Analog Devices).
Can anybody please suggest me a reseller ?
Thanks in advance.
Giovanni, IT9XXS.

3791. APLAC simualtion software?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-31 00:00:00 UTC
From: Peter Bolch <nc-bolchpe@netcologne.de>
Message-ID: <7vgtqloup1@news.netcologne.de>
Source record: 66141

Hi,

does anyone here use the simulation program APLAC? It is said to be a professional universal simulation program especially suited for RF (including harmonic balance). There is a restricted (number of components < 12) demo version available. But as the demo is more than 12 MB I'd like to know whether the program is worth beeing downloaded.

Peter

3792. Re: AD9850: where to buy ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-10-31 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <7vhhpk$8k1$1@nnrp1.deja.com>
Source record: 66142

In article <7vgp6rkjf1@nslave1.tin.it>,
"Giovanni Mazzola" <g.mazzola@tin.it> wrote:
> I'd like to buy an AD9850 (DDS from Analog Devices).
> Can anybody please suggest me a reseller ?
> Thanks in advance.
> Giovanni, IT9XXS.
>
>
Future Electronics (http://www.future-active.com/)
Pionner_Standadrd Electronics (http://www.pios.com/)
Newark Electronics (http://www.newark.com/)
But remember: there are MANY suffixes for this IC. You have to decide
which you want.
--
Greetings,

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Before you buy.

3793. VN88 Vmos- fet equivalent ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-01 00:00:00 UTC
From: Kari Back <kback@my-deja.com>
Message-ID: <7vjf4q$gb3$1@nnrp1.deja.com>
Source record: 65959

Hi all

Is there now any equivalent type for old Siliconix Vmos-fet VN 88
(TO-220 case) for HF amplifier construction.
This is 90V 1.6A device.

MRF 134 would be otherwise useful but at much higher cost.

Thanks,
Kari

Sent via Deja.com http://www.deja.com/
Before you buy.

3794. RE : APLAC simualtion software?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-01 00:00:00 UTC
From: luke@trio.COM.AU
Message-ID: <199911010146.RAA22703@mailbox1.ucsd.edu>
Source record: 65960

Hi Peter,

>does anyone here use the simulation program APLAC? It is said to be a
>professional universal simulation program especially suited for RF
>(including harmonic balance).

I use Aplac at home for all my amateur experimentation simulations,
except for low speed transient and DC response, where I use
MicroCap Demo. It is an excellent program, and the manuals
are very detailed and available for download too.

>There is a restricted (number of components
>12) demo version available. But as the demo is more than 12 MB I'd like to
>know whether the program is worth beeing downloaded.

I don't know what version of Aplac your refering to, but mine
has a memory restriction, not a component restriction.
You can get the latest from www.aplac.com.

The only downside is that it uses a node based text language,
not a schematic entry. Even so, its worth the extra
effort. Esp. for something thats free!

Regards,
Luke

3795. Need very low phase noise XO at 110 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-01 00:00:00 UTC
From: Tomas Ahrne <dirac@takethisoutalgonet.se>
Message-ID: <bhcT3.2178$0H3.15223@news1.online.no>
Source record: 65961

I am building a digital FM radio, and after some signal conditioning the signal goes to an AD converter clocked by a divided by 2 110 MHz XO (AD sampling frequency 55 MHz).

The S/N you get from the AD converter is very much dependendent on the clock jitter, and jitter and phase noise are closely coupled. The AD is 14 bits, but has an S/N of about 75 dB.

The formula for the resultant S/N when using a clock signal with a certain amount of jitter, t, and signal frequency, f, is:

S/N=20*log[1/(2*pi*f*t)].

A standard off-the-shelf XO might have a phase noise of -110 dBc at 1kHz away from the carrier. This gives a jitter of about 6.5 ps.

For broadcast FM, f is max 108 MHz. This gives:

S/N=47 dB.

So you see, I am ruining the AD converter SN.

S/N from jitter should be at around -80 dB so as not to degrade the S/N of the AD converter. For that I need jitter to be < 0.15 ps, a factor of 6.5/.15=43.3 better than what I have.

This would mean that I need the phase noise to be 20*log(43.3)=32.7 dB better. I know that the calculation between jitter and phase noise is more complicated than this, but this is a rough estimate.

Can anyone help me with a design or have pointers to web sites or know of a good book, etc.

Best,

Tomas Ahrne

3796. Re: Dial Drives

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-01 00:00:00 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <7vjjbu$k01$1@nnrp1.deja.com>
Source record: 65962

In article <09920fb9.1e75d4d2@usw-ex0101-008.remarq.com>,
Corky <corkyNOcoSPAM@myremarq.com.invalid> wrote:
> Does anyone know of a source for dial drives that can be used with
> air variable tuning capacitors.
>

Maplin has Jackson ones in their catalogue, as well as the usual
vernier drives. www.maplin.co.uk

73, Leon
--
Leon Heller, G1HSM
Tel: (Mobile) 079 9098 1221 (Work) +44 1327 357824
Email: leon_heller@hotmail.com
Web: http://www.geocities.com/SiliconValley/Code/1835

Sent via Deja.com http://www.deja.com/
Before you buy.

3797. Re: Dial Drives

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-01 00:00:00 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <7vjjd4$k0c$1@nnrp1.deja.com>
Source record: 65963

In article <09920fb9.1e75d4d2@usw-ex0101-008.remarq.com>,
Corky <corkyNOcoSPAM@myremarq.com.invalid> wrote:
> Does anyone know of a source for dial drives that can be used with
> air variable tuning capacitors.
>

Maplin has Jackson ones in their catalogue, as well as the usual
vernier drives. www.maplin.co.uk

73, Leon
--
Leon Heller, G1HSM
Tel: (Mobile) 079 9098 1221 (Work) +44 1327 357824
Email: leon_heller@hotmail.com
Web: http://www.geocities.com/SiliconValley/Code/1835

Sent via Deja.com http://www.deja.com/
Before you buy.

3798. Re: ATTENTION! Amateur Radio Operators CBers etc, FROM QRSRADIO

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-01 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <381D5588.65B58C39@corecomm.net>
Source record: 65964

Doug Smith wrote:
> I received a spam copy. (this is the first one I've received from this
> source) The spam complaint has already been filed, including copies to
> amazon.com and crbbooks.com. I would presume Amazon, being basically an
> Internet business, is not interested in selling books written by people
> who have no consideration for Netiquette.

As a matter of fact, Amazon themselves spammed for quite some time. They
stopped only grudgingly and stipulated their right to start again at any
time, if I remember correctly.

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+

3799. Re: Dial Drives

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-01 00:00:00 UTC
From: Harry SM0VPO <harryvpo@hotmail.com>
Message-ID: <7vjkt1$pr3@newstoo.ericsson.se>
Source record: 65965

Yes, there are loads of such things at AES. they have a catalogue on line at
http://www.tubesandmore.com

regrads from Harry - SM0VPO
http://sm0vpo.8m.com

Corky wrote in message <11f733ec.982c07be@usw-ex0102-016.remarq.com>...
>Does anyone have a source for dial drives or verniers that can be fitted
>to air variable capacitors.

3800. Re: Help...I need Pot!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-01 00:00:00 UTC
From: Harry SM0VPO <harryvpo@hotmail.com>
Message-ID: <7vjkt0$pr3@newstoo.ericsson.se>
Source record: 65966

You could make a temporary "fix" to the tracks of pots that have a "dicky track". Clean off the track with solvent then scribbe on the track surface with an HB woodworking pencil. Use a 2B pencil for pots with a lower value.

Harry
http://sm0vpo.8m.com

Lee Smith wrote in message ...
>... I am restoring a piece of broadcast
>equipment (Howe model 7000) and many of the rotary pots are worn out in the
>switch that takes audio into the cue system.

3801. 100's of projects

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-01 00:00:00 UTC
From: Harry SM0VPO <harryvpo@hotmail.com>
Message-ID: <7vjm5r$7r4@newstoo.ericsson.se>
Source record: 65967
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave,uk.radio.amateur,uk.rec.radio.cb

100's of winter projects at Harry's Homebrew Homepage http://sm0vpo.8m.com.

I have done a lot of updating recently and included a 4-watt AF amplifier as well as coil-winding using PCBs so that anyone can wind the same coil! Not an easy task, remember Harry's laws?:

1 - No two people can wind the same inductor with the same instructions and materials.
2 - Coil winding data is a constant that varies from person to person.

Of course, the article is illustrated with photographs of a 20uH inductor (+150pf = 4MHz).

There are loads of antenna projects, transmitters, receivers and even a little booze, if you think "homebrew" has another meaning.

I have my own message board which is in daily use by home constructors with problems or suggestions. If you could help to answer some of the questions there I would be eternally gratefull.

best regards from Harry - SM0VPO

3802. Re: Radio Shack Frequency Counter ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-01 00:00:00 UTC
From: davem@groucho.cs.ubc.ca
Message-ID: <7vjnug$j6r@groucho.cs.ubc.ca>
Source record: 65968

alg460@aol.com (ALG460) writes:
>Does anyone know if the $79 Radio Shack frequency counter can be used to
>measure in circuit frequencies with test leads attached to it or does it only
>work with the supplied antenna on radiated signals.

It should work with a signal picked up via an oscilloscope probe. It
even has a switch to eliminate the 50 ohm input load when using a
high-impedance source like this.

However, the signal amplitude has to be high enough to trigger
the input circuitry. Don't expect it to work on the microvolt-level
signals found in receiver input circuits.

Dave

3803. Tayloe mixer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-01 00:00:00 UTC
From: Ken Johnson <vk7krj@southcom.com.au>
Message-ID: <381d8e41@casper.southcom.com.au>
Source record: 65969

Hi, Can someone point me to any detailed info. on the Tayloe mixer? I have searched for references to it but found only one document which unfortunately does not have any diagrams or circuit details. I though it appeared in QST but a search of their indexes turned up nothing. I even emailed Dan Tayloe but have had no response so far. I know it appeared in tech topics (Radcom) but once again there is no reference to it on the RSGB web page. I would be grateful if someone could give me the references so I can look up the relevant issue/s (or better, download it from the web).

--
Thanks, Ken,vk7krj
vk7krj@southcom.com.au

3804. Re: Help...I need Pot!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-01 00:00:00 UTC
From: JW <jdwalton@home.com>
Message-ID: <381DC07F.302EEED0@home.com>
Source record: 65970

Allen Bradley "Mod Pots" are carried by many of the big distributors: Allied, Newark, etc.

Lee Smith wrote:

> Hello Folks:
>
> Now that I have your attention with the curious header...I am in need of a
> lead to the manufacturer of a pot that is made up of various sections
> stacked up with a switch on the rear. I am restoring a piece of broadcast
> equipment (Howe model 7000) and many of the rotary pots are worn out in the
> switch that takes audio into the cue system.
>
> On the back is the info:
>
> A-B
> Mod Pot
> Mexico
>
> Can anyone tell me who made this, and if there is a website or address I
> could write to?
>
> Regards,
> Lee Smith
> VE4ANC

3805. Re: ANyone use these 2.4Ghz ATV modules?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-01 00:00:00 UTC
From: Bobby Atkinson <bobbys@prodigy.net>
Message-ID: <01bf246c$c327da20$0100a8c0@ZTU>
Source record: 65971

The version with a micless camera is being offered for 99.95

Note
To Jim N2VNO: I answered your email twice but your return address
was no good, probably altered to prevent spam. And answers...
Cheers, Bobby

Bobby Atkinson <bobbys@prodigy.net> wrote in article
<01bf1f54$7aa96920$0100a8c0@ZTU>...
> For $ 149.95 X-10 will throw in a color camera
> with the 2.4 GHz xmit/rcvr pair.
> Bobby K4BGA
>
> Paul Breed <Paul@rasdoc.com> wrote in article
> <3814AF40.AD5653AD@rasdoc.com>...
> > Any experience with the following ATV products?
> >
> > http://www.4atv.com/atvprod.htm
> >
> > You can't beat the price.
> >
> >
> > Paul
> > (KL7JG)
> >
>

3806. Re: VHF 2m HT "adjustment"

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-01 00:00:00 UTC
From: Paul <pmartin@bright.net>
Message-ID: <381D9D1F.A0DD066@bright.net>
Source record: 65972
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

The Alinco DJ191 is easy. Cut 1 wire and it's open from 138 to 170 mhz.
73, Paul

3807. Re: High current JFETS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-01 00:00:00 UTC
From: Paul <pmartin@bright.net>
Message-ID: <381D9E1F.8405DF9@bright.net>
Source record: 65973

> for mixer termination J310 will work, provided you follow G4DGU's
> advice (Mutek) to use only 18 ohm source resistor (for 20mmho)
> I've used some BF246C; with -6V gate voltage the current drain is
> 20mA, believe the forward conductance is then close to 20mmho
>

Keep in mind that the J310(plastic) has half the current rating of it's
metal encased brother the U310.
73. Paul

3808. Re: Ham Radio magazine (1975)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-01 00:00:00 UTC
From: w4pqwhs@aol.com
Message-ID: <19991101100105.02782.00000833@ng-fy1.aol.com>
Source record: 65974

Bryan did you get the article that you wanted? I have all Ham Radios and could copy the article for you Harold W4PQW

3809. BULLETIN BOARD FOR FREE ADS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-01 00:00:00 UTC
From: Netminder <netminder@lakeisabella.net>
Message-ID: <7vk9sder1@holly.prod.itd.earthlink.net>
Source record: 65975
Cross-posted to:
rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

```
Free Bulletin Board for BUY / SELL / TRADE
for radio and computer related items.

http://www.lakeisabella.net/amateur/
```

3810. Re: Help...I need Pot!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-01 00:00:00 UTC
From: bw201@torfree.net
Message-ID: <FKIvtD.C8z.0.queen@torfree.net>
Source record: 65976

"Mod Pot" is the trade name for Allen-Bradley "A-B" for their modular
combination of potentiometers and/or switches.

Lee Smith (ckvnfm@mb.sympatico.ca) wrote:
: Hello Folks:

: Now that I have your attention with the curious header...I am in need of a
: lead to the manufacturer of a pot that is made up of various sections
: stacked up with a switch on the rear. I am restoring a piece of broadcast
: equipment (Howe model 7000) and many of the rotary pots are worn out in the
: switch that takes audio into the cue system.

: On the back is the info:

: A-B
: Mod Pot
: Mexico

: Can anyone tell me who made this, and if there is a website or address I
: could write to?

: Regards,
: Lee Smith
: VE4ANC

3811. IF filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-01 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <381DB8F3.41C6@eece.maine.edu>
Source record: 65977

Hi all,

In the near future, for a nice homebrew project, I'd like to use some sort of decent SSB IF filter. Where do I get 'em? I mean, DigiKey has 10.7/455 versions, but I kinda doubt that a cheap little package like that will work well for SSB. Or would these filters work well with tuned coupling circuits (is that what all the IF cans are for?)?
Thanks.
--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

3812. Aplac

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-01 00:00:00 UTC
From: hbrown@voicenet.COM
Message-ID: <3.0.32.19991101110626.0140c0c4@popmail.voicenet.com>
Source record: 65978
Body handling: HTML body converted to readable text

I have not used Aplac yet but according to the Version 7.5 Evaluation Manual, there is a schematic input capability using Aplac Editor. Back in the Version 6.X days they had a separate program for schematic entry called NASSE.

I beleive that Aplac is "semi" independent these days since they have their own web page and they are called the APLAC Solutions Corporation.

Check their homepage at http://www.aplac.com/

73, Harry, W3IIT

Visit the Mt. Airy VHF Radio Club at:

0000,0000,fefehttp://www.ij.net/packrats/

Check the June 1999 VHF Contest Photos at the Web
site

Info on VHF/Microwave Nets, Beacons & Subscription to Cheesebits

Beacons at 50.080, 144.284, 222.065, 432.295, 903.071,
1,296.251, 2,304.037, 3456.220, 5,760.200 and 10,368.200 MHz from FM29JW

3813. List Of Stamp Applications [991027]

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-01 00:00:00 UTC
From: cjX@hth.com
Message-ID: <3819d50d.9315035@news.sverige.net>
Source record: 65979
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

Hi,

Below is the latest index of L.O.S.A and you can download the
complete L.O.S.A from the following places...

WWW:

http://www.hth.com/losa/

FTP:

ftp://ftp.parallaxinc.com/pub/text/losa.txt

1.0 What is L.O.S.A all about?

This list was started back in -95 when I heard about (more or less)
uniqe problems that was solved by using a BASIC Stamp. Especially Guy
Gustavson's story (see #001) about how he saved his beloved cat Kesha
gave me the inspiration to start writing L.O.S.A. I hope Kesha still
is alive and having a great life. Now 4 years later there are 150+
applications described and I hope you will enjoy reading all (or
parts) of them.

The main purpose of this list is to get an idea of what other people
are using their BASIC Stamps for and maybe get some inspiration or
hints for your own projects. Some of the projects described in the
list also have links to source code and schematics for download.

1.1 How can I contribute to this list ?

If you have done something (big or small) with the BASIC Stamp that
you are willing to tell others please use the form given below and
write a short description, nothing fancy is needed just a simple
explanation. If you have source code to share that's even better but
it's not necessary.

Visit the following Web site and fill in the contribution form...

http://www.hth.com/losa/

1.2 Why are some links dud's ?

Since people changes their e-mail and web addresses some links may be
dud's. If you previously contributed with one (or more) of the
applications please take a quick look and check your e-mail address

and/or web-links. I'm only able to keep the list updated if I'm
informed about changes, thanks in advance.

1.3 List of contributions

> = Indicates a new or updated application since last time.

001 Robo-Cat
002 Logic Rudder
003 Interfacing MAX186 8 channel 12bit A/D
004 Scrolling LED Sign
005 Tone Decoder
006 Pager
007 HexWalker Mobile Robot
008 Robo Bug
009 EXPBOT Robot controlled by Stamp
010 Andrews Ever Evolving Lego Robot
011 Factory Monitoring System
012 Wave to the Cats/Desk Temperature
013 Gamer's Die Roller
014 Stamp II Serial I/O
015 Voice and CW Fox Hunt Transmitter IDer
016 Lift (elevator) Controller
017 Paging with the Stamp
018 Switching Sytem
019 Door Entry Card Reader
020 Telephone Card Reader
021 DTMF Decoder
022 Ion chamber radiation monitor
023 Barn Monitor
024 Dallas one-wire interface
025 Sculpture control
026 Commercial clothes dryer controler
027 Morse Code Keyer
028 Traffic Light Controller
029 Automotive Lamp Control
030 Single Switch Scanning Device for Disabled
031 Bell timer for school bell control
032 RIMS controller for beer making
033 Stamp 1 and ISD 25XX Sound Chip Application
034 Camera Wireless Controller
035 Simple Battery Check using the BS2-IC
036 Photocell MIDI Controller
037 DCF-Clock
038 Radio-controlled Digital Clock
039 Weather Station I
040 Private Aid To Navigation
041 Stamp II in Space
042 MAT32 long integer math routines
043 Distinctive Ring Detector

044 Extended Stamp Memory
045 Debate Stoplite
046 Digital nametag
047 ST506 Disk Seeking Demo Controller
048 Robot: Multi-Stamps Communicate via Shared Memory
049 NiMH Battery Charger/Conditioner
050 555 Timer as A/D Converter
051 Bits of Light
052 Process Control
053 Near Space Capsule
054 PIC Debugger
055 DS1820 Temp Sensor
056 Air muscle hexapod robot
057 Lights
058 Caller-ID Interface
059 Wind speed and wind direction measurement device
060 Calibrated Dust Feeder for Air Cleaner Tests
061 Use of a Serial EEPROM as a Lookup Table
062 Displaying Quantities on a 200 mV Panel Meter
063 Programmable Proportional Air Valve
064 Basic Stamp machine control application
065 Compass Interface for Navigation
066 Truck + ? identification
067 Meteoreological Station
068 Stamp Controls Electronic Tester for flex circuits
069 Game Timer
070 Photoghrapic light meter
071 Data System Remote Control on unmanned aircraft
072 Speaking Instructor
073 Small Mobile Robot
074 R/C helicopter altitude control unit
075 Automobile Rally Odometer Interface to Laptop
076 LCD drivers
077 Stamp I / PC Interface Demo
078 Stamp Photo Meter
079 Stiquito(TM) 97 HexaPod Robot
080 XRaCS DTMF Radio X10 Control with Voice Response
081 Interfacing the Basic Stamp 2 with I2C Devices
082 The WeatherStamp Meteorological Station
083 Maxxum 7000 Remote Release Widget
084 Xs And Os games for college project
085 Stamp II Mouse Emulator (Version 6)
086 Basic Alarm System
087 Interfacing with a Printer
088 Dinosaur Quiz Game
089 Chemical Injection System
090 RS-232 connections between Stamp and host
091 Video Character Overlay Generator Controller
092 Suction tube depth measurement display
093 Electronic Compass with Basic Stamp 2

094 Event Logger with 8K 24C65 I2C memory
095 Fixing the depth of a suction-pipe with the BS 2
096 Superchaser
097 Corky'z Robotz
098 Cloudrider: analog network with BS2 and BS1's
099 Yet Another Real Time Clock, Dallas DS1287
100 Amateur RadioSatellite Tracking (Az/El) Controller
101 DTMF Decoder
102 PC to STAMP via RS232 routines
103 PC Frequency Counter
104 Sub-Millisecond Reaction Timer
105 Computerized Dynamics Cart
106 Ham Radio Interface Using the Basic Stamp 2
107 Remote tempsensors communicates over the power lines
108 Interfacing a BASIC Stamp to SRAM
109 Stepper controller pulse generator
110 Automatic rang caller
111 Automatic emergency broadcast system
112 BASIC Stamp I as an welding machine
113 PLM-24 to X-10 Gateway
114 Semi-Automated Combusitible Gas Indicator Tester
115 Counter-rotating Servos
116 Joystick Controlled Robotic Arm
117 Anti Traction Control Device
118 Cat Chasing Lego Robot and Other Circuits
119 Camlift
120 Control 15 Servos in Parallel
121 8 Digit "Smart" Alphanumeric Display
122 Cycle Testing AC Motor Controller
123 Controlling an LCD by BS2 via I2C Bus
124 The Newcastle Robotic Bilby Project
125 The EM1 (Electric mule)
126 Distance Measurement with GP2D02 SHARP Sensor
127 TI82 Interface
128 Operator Interface for Multiple Stamps
129 Infrared Glucose (Blood Sugar) Monitor
130 Fox For ham radio or Automated Propogation Beacon
131 GPS Data Overlay on Video
132 10Base-T Cable Tester
133 Kodak DC40/50/120 camera control
134 Implement S.N.A.P network protocol in a BASIC Stamp
135 Stamp/PC RS-485 Network
136 Easy-to-build BS keyboard/display w/ 10 keys/LEDs
137 Joystick control: BS2, 2 motors & 2 HBridges
138 Basic Stamp 2 Mobile Robot
139 Home Automation and Security System
140 UM3750 Read Code
141 Magnetic Stripe Reader
142 Telephone Remote Control and Remote Alarm
143 Tube preamplifier control section

144 Interrupt for PBASIC
145 dLOG
146 Compass
147 BS-2 serial VISCA interface
148 Servo tester
149 Small-bot
150 Repeater Controller
151 ESD Tester for Foot and Wrist Straps
152 Beneficial Insect Dispenser
153 Bugsey
154 Vector2X Compass Module with the new BS2SX Stamp
155 Serial Mouse to BS2 Interface
156 Radio Repeater Controller
157 Keypad reader
158 Automatic Vehicle Location / Mobile Asset Tracking
159 Interfacing a 4X4 keypad to the stamp II
160 Interfacing a Max186 8 Channel ADC to a stamp II
161 Realistic Manual Shifter for PC Driving Games
162 Contact ID handshake board
163 Basic Stamp II I2C protocol for several ICs
164 Home Controller
165 Coinmachine
166 Navigation system for the blind
167 Robot Fighters
168 Octobot
169 SPI interface chip
>
170 Implementing TCP/IP functionallity
>
171 Home Security System
>
172 Garage Door Opener

Regards,

/Christer

[NOTE: Clear the "X" from my e-mail address if you want to e-mail me]

-=-
* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
-=-
Send and receive serial data over the power lines... For more info
about the PLM-24 Power Line Modem go to http://www.hth.com/plm-24/
-=-

3814. List of the rec.radio newsgroups

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-01 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <7vki4h$p29$1@news.hawaii.edu>
Source record: 65980
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

```
Archive-name: radio/personal-brief-introduction

In an effort help ensure a poster's article reaches the appropriate
audience, below is a list of the rec.radio newsgroups. In most cases,
a group's name will explain its purpose. Cross-posting should rarely
be necessary.

*rec.radio.broadcasting (devoted to the broadcast industry; moderated)*
rec.radio.cb
rec.radio.info (periodic informational bulletins; moderated)
rec.radio.scanner
rec.radio.shortwave
rec.radio.swap (for buying, selling, and trading; not a discussion group)

rec.radio.amateur.antenna
rec.radio.amateur.boatanchors (tube-type communications equipment)
rec.radio.amateur.digital.misc (packet, pactor and other digital modes)
rec.radio.amateur.dx (long-distance amateur communications)
rec.radio.amateur.equipment (questions, comments regarding commercially-
built amateur gear; not for buying/selling)
rec.radio.amateur.homebrew (devoted to home-building ham gear)
rec.radio.amateur.policy (issues include code, restructuring, local
restrictions in conflict with FCC R&R)
rec.radio.amateur.space (satellites, meteor scatter, EME)
rec.radio.amateur.misc (any topic not covered in the above groups)

(At least two other English language radio hierarchies exist, prefixed
with "uk" (United Kingdom), and "aus" (Australia), in place of "rec.")

Again, cross-posting should rarely be necessary. Many times, a long-
running thread results from a single cross-posted article, and its
content drifts further and further away from being "on-topic" in the
various NGs which receive each and every followup.

For more detailed information, see "Guide to the Rec.radio Newsgroups"
posted on the 15th of each month.

Jeffrey Herman, KH6O
(rec.radio.amateur working-group)

*It's been sadly reported that the moderator was lost to us in an
automobile accident; the future of this newsgroup is not known. 73 Bill...
```

3815. Re: Dial Drives

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-01 00:00:00 UTC
From: Nick Caruso <nick.caruso@software.com>
Message-ID: <381DD941.5DB536A3@software.com>
Source record: 65981

Corky wrote:

> Does anyone know of a source for dial drives that can be used with
> air variable tuning capacitors.

I *believe* Surplus Sales of Nebraska has some, but I could be wrong. Check their catalog at
http:/www.surplussales.com/
some stuff's not in the online catalog, so you might want to get the printed one. It's worth having.
(I have no connection to SSoN, other than having bought some RF connectors from them once.)

Dan's Small Parts, http://www.fix.net/dans.html, has reduction gear drives, and suchlike. Or at least he did when I last looked. Also no connection here, other than having been a satisfied customer.

Also, Small Parts Incorporated, http://www.small-parts.com, has an extensive catalog of mechanical items like gears and shaft couplings. You could possibly build the drive you want from stuff they've got. Their catalog is also a must have.

Finally, if you've got the space and the patience, you could make a reduction mechanism using some dial cord and old jar lids. There are some notes about this technique in the book "Build Your Own Intelligent Amateur Radio Transceiver" by Randy Henderson.

I'm sure there're lots of other sources out there. Places like Ocean State Electronics, and Antique Radio Supply (?) come to mind, but I don't have any experience with them. They both have web sites, I know.

good luck and best regards,
n. caruso kb1dej

3816. Re: Dial Drives

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-01 00:00:00 UTC
From: Bob Liesenfeld <wb0poq@visi.com>
Message-ID: <381DF185.62962596@visi.com>
Source record: 65982

Corky wrote:
>
> Does anyone know of a source for dial drives that can be used with
> air variable tuning capacitors.

I have engineered one by sliding a small rubber grommet over a large nail, and fabricating a couple of brackets with grommets as bearings to hold the nail. I mount everything so the grommet in the middle of the nail bears against the dial cord wheel found on many variable caps. This provides a *smooth* and >slow< drive for next to nothing.

72 Bob 'POQ
--
Genuine E-mail From the Land of the Everlasting Icicle...
Bob Liesenfeld
wb0poq@visi.com

3817. Contract Engineer Position in Denver Area

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-01 00:00:00 UTC
From: "Ronald F. Bauer" <rbauer3@mindspring.com>
Message-ID: <381DA7DE.3797C53F@mindspring.com>
Source record: 65983

Forgive me if this is not the proper forum for this but I am
actively seeking 3-4 skilled programmers who have strong
skills using C/C++ and Ada to perform hardware/software test
& integration. Experience using LabView, exposure to basic
RF Engineering and working with Satellite and/or
Communications systems a big plus. For further information,
please visit out web site at http://www.ess-us.com or
contact me directly at (480)348-3990

Thanks in advance,
Ron Bauer
Sr. Manager
ESS, Inc.

3818. Re: Radio Shack Frequency Counter ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-02 00:00:00 UTC
From: Raw Power Radio <rawpowerradioNOraSPAM@go.com.invalid>
Message-ID: <2750ac20.b931ab60@usw-ex0102-016.remarq.com>
Source record: 65893

I have that counter and I like it. It's a great little box for the price. But I should mention that it seems very sensitive to input signal amplitude; too much or too little will give you false readings. When using a 10:1 scope probe, I suggest adjusting the compensating capacitor in the probe until you get a correct reading. (Of course, you'll need to have an approximate idea of what your frequency is in the first place!). When you change frequency, you might very well have to readjust the probe.

* Sent from RemarQ http://www.remarq.com The Internet's Discussion Network *
The fastest and easiest way to search and participate in Usenet - Free!

3819. Schematic for 6146 RF amp: 300M, 160M, 3M or 2M

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-02 00:00:00 UTC
From: Raw Power Radio <rawpowerradioNOraSPAM@go.com.invalid>
Message-ID: <0221c012.bab47dfd@usw-ex0102-016.remarq.com>
Source record: 65894

I have a bunch of 6146Bs laying around, and I'd like to build an RF amp. If anyone has schematics for amps for the bands listed in the subject line, please let me know. Links to schematics online are especially appreciated. Thanks in advance.

PS: I didn't know the 6146 could be used at VHF, but my old Sylvania manual says it's good to 175MHz.

* Sent from RemarQ http://www.remarq.com The Internet's Discussion Network *
The fastest and easiest way to search and participate in Usenet - Free!

3820. HP8556A and HP852B

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-02 00:00:00 UTC
From: Ib Holst Jorgensen <oz9dr@post1.tele.dk>
Message-ID: <rO4eOGUjyn+XKpFda6fTSkRPHHXJ@4ax.com>
Source record: 65895
Cross-posted to:
misc.industry.electronics.marketplace,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.equipment

Hello
Does anyone know where to get the LOG REF LEVEL knob
for the HP8552B when used with the HP8556A unit?
One or two needed.
Please answer to:
oz9dr@post1.tele.dk

Greetings
Ib

3821. HP8556A and HP852B

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-02 00:00:00 UTC
From: Ib Holst Jorgensen <oz9dr@post1.tele.dk>
Message-ID: <RwUfOGePx9h5hvg4t1hOh0uAyEm+@4ax.com>
Source record: 65896
Cross-posted to: misc.industry.electronics.marketplace,rec.radio.amateur.homebrew,sci.electronics.components

Hello
Does anyone know where to get the LOG REF LEVEL knob
for the HP8552B when used with the HP8556A unit?
One or two needed.
Please answer to:
oz9dr@post1.tele.dk

Greetings
Ib

3822. Re: Need very low phase noise XO at 110 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-02 00:00:00 UTC
From: "Michael D. Pendley" <michael.pendley@sematech.org>
Message-ID: <381EE795.658267F3@sematech.org>
Source record: 65897

Tomas,
Try Wenzel. They make very good osciilators.
http://www.wenzel.com/catalog/4to24.html#ultralow
73
Michael
WA5VTV

Tomas Ahrne wrote:

> I am building a digital FM radio, and after some signal conditioning the
> signal goes to an AD converter clocked by a divided by 2 110 MHz XO (AD
> sampling frequency 55 MHz).
>
> The S/N you get from the AD converter is very much dependendent on the clock
> jitter, and jitter and phase noise are closely coupled. The AD is 14 bits,
> but has an S/N of about 75 dB.
>
> The formula for the resultant S/N when using a clock signal with a certain
> amount of jitter, t, and signal frequency, f, is:
>
> S/N=20*log[1/(2*pi*f*t)].
>
> A standard off-the-shelf XO might have a phase noise of -110 dBc at 1kHz
> away from the carrier. This gives a jitter of about 6.5 ps.
>
> For broadcast FM, f is max 108 MHz. This gives:
>
> S/N=47 dB.
>
> So you see, I am ruining the AD converter SN.
>
> S/N from jitter should be at around -80 dB so as not to degrade the S/N of
> the AD converter. For that I need jitter to be < 0.15 ps, a factor of
> 6.5/.15=43.3 better than what I have.
>
> This would mean that I need the phase noise to be 20*log(43.3)=32.7 dB
> better. I know that the calculation between jitter and phase noise is more
> complicated than this, but this is a rough estimate.
>
> Can anyone help me with a design or have pointers to web sites or know of a
> good book, etc.
>
> Best,
>
> Tomas Ahrne

3823. Re: Using WWV (HF) as freq ref?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-02 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7vn7ao$7kh$1@nnrp1.deja.com>
Source record: 65898

In article <19991101235953.04216.00001037@ng-ff1.aol.com>,
k7itm@aol.com.nospam (K7ITM) wrote:
> I know that people who want the ultimate in frequency standard
calibration via
> radio broadcast use WWVB at 60kHz because of the stable propagation
delay. But
> what sort of accuracy can be obtained by careful use of WWV on HF, at
~1000
> miles distance? Over a period of, say, an hour during mid-day, what
is the
> maximum frequency offset to be expected because of continuous path
length
> change during that time? What other errors should one look out for?

According to NIST Special Publication 432:

"...the received accuracy is far less due to various propagation
effects. The usable received accuracy is about 1 part in 10 million
for frequency (1 x 10^-7) and about 1 ms for timing..."

It's on the web at:

http://www.boulder.nist.gov/timefreq/pubs/sp432/sp432.htm

Am I showing my age when I mention that I actually own a paper copy
of SP432? :-)
--
Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte
Satellite: VA3SFL on UO-22, KO-25

Sent via Deja.com http://www.deja.com/
Before you buy.

3824. Re: Using WWV (HF) as freq ref?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-02 00:00:00 UTC
From: Dan Rae <rae4@ix.netcom.com>
Message-ID: <381F114D.A95CF4CC@ix.netcom.com>
Source record: 65899

Tom,

I did do some experiments using my Racal RA1772 which has all the Local Oscillators brought out to the rear panel and a second slave "receiver" of some considerable negative gain consisting only of two mixers and the appropriate IF filters. Feeding the slave with my local 5 MHz standard and using the main Rx tuned to WWV at 5 (or 10) Mhz, and comparing the 1.4 MHz If outputs of the two rx's on a double beam scope, I was able to get an instant picture of how the path was varying between southern California and Colorado.

The results were interesting, and fascinating to watch. Between about 1 PM and 4 PM local time, there were quite long periods when the path seemed to be amazingly stable, and it was relatively easy to get within 1 part in 10E 7. You could actually watch the phase variations as they were happening, the difference between early morning and mid afternoon, was like looking at an ocean water surface during a storm and then again on a calm day. The water analogy seems right when you look at the scope. I guess you are looking indirectly at the D layer surface. I could have hooked the IF outputs up to a Vector voltmeter and even plotted the phase, but it seemed that you could estimate the overall phase drift of the local standard much better by eye. With a lot of practice and some luck you might get down to 1 part in 10E8 that way.

For home lab use the best off-air standard is still (while it lasts) Loran-C, with accuracies down to 1 in 10E11. WWVB with a lot of time and the appropriate gear, can get you down to 1 in 10E9.

Then of course there is Brookes Shera's well known GPS unit, which will, when attached to an oven of reasonable quality will give you almost Cesium levels of accuracy. Details at http://www.rt66.com/~shera/

But all in all I still like my BC221,

73, Dan AC6AO G3NCR

3825. Specs for General Radio 874-LAL?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-02 00:00:00 UTC
From: pmarkham@newsguy.com
Message-ID: <8E726AD90pmarkhamnewsguycom@208.134.253.159>
Source record: 65900

I am looking for the technical/operating specifications for a General Radio 874-LAL adjustable line. Any URL pointers or phone numbers would be appreciated.

TIA, Pete/wa4hei

3826. Re: Dial Drives

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-02 00:00:00 UTC
From: Corky <corkyNOcoSPAM@myremarq.com.invalid>
Message-ID: <0a0133f8.84f313f0@usw-ex0102-010.remarq.com>
Source record: 65901

Thanks for all info recieved so far.

* Sent from RemarQ http://www.remarq.com The Internet's Discussion Network *
The fastest and easiest way to search and participate in Usenet - Free!

3827. Re: Need very low phase noise XO at 110 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-02 00:00:00 UTC
From: Tomas Ahrne <dirac@takethisoutalgonet.se>
Message-ID: <vdFT3.234$Vd1.2598@news1.online.no>
Source record: 65902

Michael D. Pendley <michael.pendley@sematech.org> wrote in message
news:381EE795.658267F3@sematech.org...
> Tomas,
> Try Wenzel. They make very good osciilators.
> http://www.wenzel.com/catalog/4to24.html#ultralow
> 73
> Michael
> WA5VTV

Thanks.

Yes these oscillators could easily do the job. They look expensive, though.

I'll check them out.

Any suggestions for something less expensive, or something I can build
myself?

Best,

Tomas

3828. INFO: Dentron DTR-1200L

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-02 00:00:00 UTC
From: "Clifford W. Owen, NRL" <n3yyp@arrl.net>
Message-ID: <7vn7pc$b2d$1@ra.nrl.navy.mil>
Source record: 65903
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Hello All:

I am looking for information on adding 10M (12M/18M) to my Dentron DTR-1200L. So far, information on this amplifier has been very scarce. If anyone can help, please e-mail me directly.

Thank you,

--
Clifford W. Owen
n3yyp@arrl.net

| ** "There is nothing better than FREE, but nothing more expensive than FREE!" Y K Owen ** |
| ** "I respect the President. I just don't respect that guy pretending to be President." |

Get your FREE "Hand Gun Control" Products here!
http://www.frii.com/~buchanan/hgc/

3829. Re: Schematic for 6146 RF amp: 300M, 160M, 3M or 2M

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-02 00:00:00 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <381F29BD.9013629F@dialpoint.net>
Source record: 65904

Some of the older ARRL handbooks have a 2 meter amp using 2 of the 6146b tubes. They were used in lots of older comercial 2 way FM rigs on the VHF band.

Raw Power Radio wrote:
>
> I have a bunch of 6146Bs laying around, and I'd like to build an RF
> amp. If anyone has schematics for amps for the bands listed in the
> subject line, please let me know. Links to schematics online are
> especially appreciated. Thanks in advance.
>
> PS: I didn't know the 6146 could be used at VHF, but my old Sylvania
> manual says it's good to 175MHz.
>
>

3830. Re: Using WWV (HF) as freq ref?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-02 00:00:00 UTC
From: William Janssen <billj@calweb.com>
Message-ID: <381F25F0.9D0BFD74@calweb.com>
Source record: 65905

That SP 443 is older than my SP 559 but it also says to expect
an accuracy of 1.00E-07

I am using LORAN and I think I can keep my local standard (Crystal)
at 1.00E-10. I can do better but my receiver has variable delay
so I don;t trust the additional accruracy.

Bill K7NOM

marsgal42@hotmail.com wrote:
>
> In article <19991101235953.04216.00001037@ng-ff1.aol.com>,
> k7itm@aol.com.nospam (K7ITM) wrote:
> > I know that people who want the ultimate in frequency standard
> calibration via
> > radio broadcast use WWVB at 60kHz because of the stable propagation
> delay. But
> > what sort of accuracy can be obtained by careful use of WWV on HF, at
> ~1000
> > miles distance? Over a period of, say, an hour during mid-day, what
> is the
> > maximum frequency offset to be expected because of continuous path
> length
> > change during that time? What other errors should one look out for?
>
> According to NIST Special Publication 432:
>
> "...the received accuracy is far less due to various propagation
> effects. The usable received accuracy is about 1 part in 10 million
> for frequency (1 x 10^-7) and about 1 ms for timing..."
>
> It's on the web at:
>
> http://www.boulder.nist.gov/timefreq/pubs/sp432/sp432.htm
>
> Am I showing my age when I mention that I actually own a paper copy
> of SP432? :-)
> --
> Laura Halliday VA3LDH "Que les nuages soient notre pied
> Grid: FN03gs a terre..." - Hospital/Shafte
> Satellite: VA3SFL on UO-22, KO-25
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

3831. Re: custom headset radio. Need advice- TIA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-02 00:00:00 UTC
From: Roland Burgan <rburgan@up.net>
Message-ID: <381F2B74.4C5DF6A5@up.net>
Source record: 65906

From a health standpoint, is it wise...

Pirahna wrote:

> I wish to create several small ear peices that fit on the ear and are
> tranceivers. I want the tranmissions to be full duplex with as little
> background noise as possible. Basically they should function just like
> as if using two cordless phone only without the phone line and should
> be extremely smaller.
>
> My question is if this is even possible without spending hundreds of
> dollars per unit. The size of the unit should not exceed 1sq inch.
>
> Sincerely,
> Pirahna

3832. Re: Tayloe mixer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-02 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <381F2CB1.1084873A@corecomm.net>
Source record: 65907

Michael Black wrote:
> I did search dejanews, how I hate the way it's rearranged itself,
> and I don't see any references to it other than those that took
> place here, none of which wsa really concrete information.

Ain't that the truth. The *concept* is described beautifully. But all we really know is that he's charging humongous (for the frequency) capacitors directly from the input, whatever amplitude (< 4V) that might be at. I can only picture doing this with a huge gain block between the antenna and the detector; however, if 4V is the max input to the detector and he claims 111 dB dynamic range, all I can make of it is to guess the MDS at the detector input is 11 uV. If I haven't messed up the calculations and -136 dBm is 0.16 uV, that's a gain of 70 (less than I would have thought necessary) in a damn nice preamp.

Why does he call it a "product detector" over and over when he explicitly says "it is not really a mixer, producing both sum and difference frequencies, but rather is a 'switching integrator'"? As I understand the term, a product detector is a multiplier and can't help but produce sum and difference frequencies.

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

3833. Re: Need very low phase noise XO at 110 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-02 00:00:00 UTC
From: Tom Bruhns <tomb@lsid.hp.com>
Message-ID: <381F3551.44DF107A@lsid.hp.com>
Source record: 65908

Hi Tomas,

I'll give a ref and circuit for an oscillator, but first, I want to observe that, if I read your posting right, just taking the numbers at face value without thinking about what they might actually mean, I wonder if you are asking more than you really need in the way of s/n. If you sample at 55MHz, you have a very over-sampled signal, and you should get a LOT of processing gain by the time you get to audio bandwidth. For example, delta-sigma ADCs turn a very over-sampled one-bit ADC at, perhaps, 5MHz, into 20 bits worth of audio bandwidth. Even without noise shaping, I would expect you would end up with a better audio snr in the receiver than you will be able to get over the air from any commercial stations. OK, that is NOT an excuse for not doing well with the oscillator, but just a comment that perhaps you don't need things to be quite as good as you might have thought.

As for crystal oscillators...I should test some of the little XO modules and see how well they really do. But in "Ham Radio" magazine, Nov. 1977, there was an article which covered some low-noise oscillator circuits. (Sorry: I have a copy only of the oscillator part, and not the first page(s) which covered other receiver design issues, and therefore I don't have the title or author...but it's around page 38-41.) They gave one for a 5MHz XO. I assume it will work at higher freqs, at least some of the ideas. From the article, "...As a general rule, when designing oscillators, use the following guidelines: (1.) Oscillators should always use two stages: one operating in class A, and the other operating as a limiter. The limiter is also used as the feedback part ... . (2.) Circuits which have agc applied to the oscillator transistor should be avoided because the agc will likely add noise. This is discussed in detail in reference 6. ... " Note: Ref 6 is also the ref for the following oscillator circuit. The ref is: M. M. Driscoll, "Two-stage Limiting Series-Mode Type Quartz CRystal Oscillator Exhibiting Improved Short-Term Frequency Stability," Proceedings of the 26th Annual Symposium on Frequency Control, Ft. Monmouth New Jersey, 1972, page 43.

Here's the oscillator, in Spice-ish netlist form. That is, numbers following reference designator are node numbers to which it is connected:
V1 1 0 18volts (Input DC power)
L1 1 2 390uH
C1 2 3 3.3uF
C2 3 0 3.3uF
R1 3 0 75kohms
R2 3 1 27kohms

R3 1 5 1kohms
Q1 5 3 6 2N2222 (collector, base, emitter)
X1 6 7 5MHz crystal
C3 7 0 ??30pF trimmer capacitor, to adjust osc freq
L2 6 8 330uH
R4 8 0 620ohms
C4 5 9 0.01uF
R5 9 0 20kohms
R6 10 0 75kohms
R7 1 10 62kohms
C5 10 0 3300pF
C6 1 0 33uF
Q2 11 10 9 2N2222 (collector, base, emitter)
R8 11 4 50ohms
L3 2 4 10uH
C7 4 0 15-60pF trimmer
C8 4 13 43pF (output coupling capacitor; output from node 13)

Claimed performance is about -118dBc at 1Hz from "carrier", with a floor below -160dBc reached at about 3kHz from carrier. The text says the circuit may be used with either fundamental or overtone crystals. The article also shows a narrow crystal filter/amplifier for "cleaning" the output of an oscillator which might, for example, be optimized for low drift rather than low noise.

Cheers,
Tom

Tomas Ahrne wrote:
>
> I am building a digital FM radio, and after some signal conditioning the
> signal goes to an AD converter clocked by a divided by 2 110 MHz XO (AD
> sampling frequency 55 MHz).
>
> The S/N you get from the AD converter is very much dependendent on the clock
> jitter, and jitter and phase noise are closely coupled. The AD is 14 bits,
> but has an S/N of about 75 dB.
>
> The formula for the resultant S/N when using a clock signal with a certain
> amount of jitter, t, and signal frequency, f, is:
>
> S/N=20*log[1/(2*pi*f*t)].
>
> A standard off-the-shelf XO might have a phase noise of -110 dBc at 1kHz
> away from the carrier. This gives a jitter of about 6.5 ps.
>
> For broadcast FM, f is max 108 MHz. This gives:
>
> S/N=47 dB.
>
> So you see, I am ruining the AD converter SN.

>
> S/N from jitter should be at around -80 dB so as not to degrade the S/N of
> the AD converter. For that I need jitter to be < 0.15 ps, a factor of
> 6.5/.15=43.3 better than what I have.
>
> This would mean that I need the phase noise to be 20*log(43.3)=32.7 dB
> better. I know that the calculation between jitter and phase noise is more
> complicated than this, but this is a rough estimate.
>
> Can anyone help me with a design or have pointers to web sites or know of a
> good book, etc.
>
> Best,
>
> Tomas Ahrne

3834. 850-900 MHz RF Transistors - Anyone used them at other frequencies?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-02 00:00:00 UTC
From: rjburden.spamtrap@bigpond.com
Message-ID: <381f4d00.85712@news.bigpond.com>
Source record: 65909

Hi all,

I have a number of rf power transistors from mobile phone base stations ie 850-900 Mhz, around 30W out. I suspect I can't use them at other frequencies due to internal matching networks, but can anyone confirm if they have used such transistors at 70cm or 23cm?

Typical type numbers are E626P, E625P, TP3024A.

Many thanks,
Richard VK5OO

3835. Re: Using WWV (HF) as freq ref?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-02 00:00:00 UTC
From: Tom Bruhns <tomb@lsid.hp.com>
Message-ID: <381F541C.E6CFA9E4@lsid.hp.com>
Source record: 65910

My thanks to Laura and Bill for their postings.

One of the things I'd like to try to understand better and put some bounds on is the propagation effects from WWV. In an initial experiment, I could easily see the peak of the carrier distribution within better than 0.1Hz at 15MHz, with sidebands which aren't necessarily symmetrical (due, undoubtedly, to propagation effects) within one or two Hertz of the carrier. Even with a really terribly antenna (signal not as far above noise floor as I'd like), the sidebands are down tens of dB at 1Hz offset. So it seems like with a decent signal, I can measure it quite a bit better than 1 part in 10^7; but over the course of an hour, say, at mid day, what maximum average frequency offset should I expect, due to (more-or-less continuous) path length change over that time?

What techniques do you use to monitor Loran? Is that the Loran on 100kHz? Isn't it pulsed? Why choose that over WWVB? Does anyone out there have experience using one of the stations like NLK (Jim Creek Naval Transmitting Station; a wavelength or so away from me) as a frequency reference (given that they do move their frequency around sometimes...)?

Pardon all the questions, but I'm curious about what I can do with some new "toys." The ability to quickly measure with 4mHz resolution or so at 10MHz (and above) is fascinating, though I'm sure I'll soon tire of the novelty.

Cheers,
Tom

William Janssen wrote:
>
> That SP 443 is older than my SP 559 but it also says to expect
> an accuracy of 1.00E-07
>
> I am using LORAN and I think I can keep my local standard (Crystal)
> at 1.00E-10. I can do better but my receiver has variable delay
> so I don;t trust the additional accruracy.
>
> Bill K7NOM
>
> marsgal42@hotmail.com wrote:
> >
> > In article <19991101235953.04216.00001037@ng-ff1.aol.com>,
> > k7itm@aol.com.nospam (K7ITM) wrote:
> > > I know that people who want the ultimate in frequency standard

> > calibration via
> > > radio broadcast use WWVB at 60kHz because of the stable propagation
> > delay. But
> > > what sort of accuracy can be obtained by careful use of WWV on HF, at
> > ~1000
> > > miles distance? Over a period of, say, an hour during mid-day, what
> > is the
> > > maximum frequency offset to be expected because of continuous path
> > length
> > > change during that time? What other errors should one look out for?
> >
> > According to NIST Special Publication 432:
> >
> > "...the received accuracy is far less due to various propagation
> > effects. The usable received accuracy is about 1 part in 10 million
> > for frequency (1 x 10^-7) and about 1 ms for timing..."
> >
> > It's on the web at:
> >
> > http://www.boulder.nist.gov/timefreq/pubs/sp432/sp432.htm
> >
> > Am I showing my age when I mention that I actually own a paper copy
> > of SP432? :-)
> > --
> > Laura Halliday VA3LDH "Que les nuages soient notre pied
> > Grid: FN03gs a terre..." - Hospital/Shafte
> > Satellite: VA3SFL on UO-22, KO-25
> >
> > Sent via Deja.com http://www.deja.com/
> > Before you buy.

3836. Re: High current JFETS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-02 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <381e1497.365403877@news.online.no>
Source record: 65911

On Mon, 01 Nov 1999 09:05:19 -0500, Paul <pmartin@bright.net> wrote:

>> for mixer termination J310 will work, provided you follow G4DGU's
>> advice (Mutek) to use only 18 ohm source resistor (for 20mmho)
>> I've used some BF246C; with -6V gate voltage the current drain is
>> 20mA, believe the forward conductance is then close to 20mmho
>>
>
>Keep in mind that the J310(plastic) has half the current rating of it's
>metal encased brother the U310.
>73. Paul
>
if it works satisfactorily for 20mA, and if you don't need more, why
worry?

3837. Re: Tayloe mixer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-02 00:00:00 UTC
From: Tom Bruhns <tomb@lsid.hp.com>
Message-ID: <381F588E.9783D8D0@lsid.hp.com>
Source record: 65912

I'll have to play with it a bit, but I think the sensitivity can be
somewhat better than 11uV. Maybe Harold Johnson will chime in with some
info...I think he's played with them a little.

You could say that it (the sampling) does produce sum and difference
frequencies, but an integral part of the design is a filter (the
capacitors) that really kills the sum frequencies. Imagine replacing
the capacitors with little bandpass filters, all the same, all tuned to
the sum frequency, +/- their bandwidth. Then you get out the sum, not
the difference.

I heard that there was some patent interest in it, and that may be why
it's a little hard to find very much solid detail. Switched capacitor
filters like this have been around so long, I'm surprised that/if nobody
has used them for the down-converter application before. I think you
can accurately view the filter (essentially the same as the
down-converter topology, 'cept the output is taken at the switch common)
as a down-converter, filter, and up-converter (back to the input freq).
I recall thinking of them that way when introduced to them in the early
'70's. In fact, there are some VERY similar circuits that have been
used for FM stereo demodulation (product-detection, really) for quite a
long time. But...it may indeed be that nobody else had actually used
the switched-cap filter topology [slightly modified] for just the
down-conversion before!

Cheers,
Tom

"Clifton T. Sharp Jr." wrote:

> Why does he call it a "product detector" over and over when he explicitly
> says "it is not really a mixer, producing both sum and difference frequencies,
> but rather is a 'switching integrator'"? As I understand the term, a
> product detector is a multiplier and can't help but produce sum and
> difference frequencies.
>
> --
> +-+
> | Cliff Sharp | "Speech isn't free when it comes postage-due." |
> | WA9PDM | -- Jim Nitchals, founder, FREE |
> +-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+

3838. HP8556A and HP8552B

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-02 00:00:00 UTC
From: Ib Holst Jorgensen <oz9dr@post1.tele.dk>
Message-ID: <8VIfOKKJU9O2BeCXZ601uATNVjWG@4ax.com>
Source record: 65913

Hello
Does anyone know where to get the LOG REF LEVEL knob
for the HP8552B when used with the HP8556A unit?
One or two needed.
Please answer to:
oz9dr@post1.tele.dk

Greetings
Ib

3839. ## Can anyone help me identify an RF synthesizer chip marked "M64086GP" (used in a Uniden BC-3000XLT scanner)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-02 00:00:00 UTC
From: tinkerman97@usa.net
Message-ID: <381f7355.265711890@ny.news.verio.net>
Source record: 65914

Hello Netfriends,

I need help identifying a 20pin SMT RF PLL synthesizer chip marked
"M64086GP". I don't even know the manufacturer. Maybe the prefix"M"
and postfix "GP" can hint something. I can't see the chip itself
because it's inclosed in shielding.
This sythesizer chip is used in various radio scanners, one of them
the Uniden BC-3000XLT.
Help, anyone?...
Thanks and best regards,
T-man

Note: when Replying, please email me directly in addition
to posting here, so I don't miss any responses. Don't forget to
remove the "97" from my email address inserted as an anti-spam
counter measure...:-)

3840. FS: CQ, Ham-Radio, QST 1960's-1990's

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-02 00:00:00 UTC
From: "Sandy B." <ebjr@i-55.com>
Message-ID: <NRKT3.34697$Ow5.38908@dfw-read.news.verio.net>
Source record: 65915
Cross-posted to: alt.ham-radio.boatanchors,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Various year and partial years of magazine above. Some in binders.
I am located north of New Orleans area. Will sell only whole years
or partial years, no single copies.
Will consider trades for older equipment (boatanchors) or ARRL/Jones
"Handbooks". What I have is excess to my needs.

73,
Sandy W5TVW

3841. Re: 100's of projects

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-02 00:00:00 UTC
From: Will White <will.white@mindspring.com>
Message-ID: <381F7F1C.2A2E76CE@mindspring.com>
Source record: 65916
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave,uk.radio.amateur,uk.rec.radio.cb

Hey Harry,

You ever hear anything more from that lunatic who was threatening to report you to the "internet authorities" {sic} for refusing to design and furnish him with a schematic and construction plans for the multi-KW RF generator for drying firewood? You sure attract some odd ones, he he. Keep up the good work, I love your site, and soon will build the complete Cigar Box RX/TX pair (have the RX done).

Will
KD7BFX

Harry SM0VPO wrote:

> 100's of winter projects at Harry's Homebrew Homepage http://sm0vpo.8m.com.
>
> I have done a lot of updating recently and included a 4-watt AF amplifier as
> well as coil-winding using PCBs so that anyone can wind the same coil! Not
> an easy task, remember Harry's laws?:
>
> 1 - No two people can wind the same inductor with the same instructions and
> materials.
> 2 - Coil winding data is a constant that varies from person to person.
>
> Of course, the article is illustrated with photographs of a 20uH inductor
> (+150pf = 4MHz).
>
> There are loads of antenna projects, transmitters, receivers and even a
> little booze, if you think "homebrew" has another meaning.
>
> I have my own message board which is in daily use by home constructors with
> problems or suggestions. If you could help to answer some of the questions
> there I would be eternally gratefull.
>
> best regards from Harry - SM0VPO

3842. Re: Radio Shack Frequency Counter ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-02 00:00:00 UTC
From: "William F. Hagen" <whagen@inreach.com>
Message-ID: <381FA1EC.9295BD4B@inreach.com>
Source record: 65917

as long as the voltage is below the rating of the counter, and in the
frequency range, and the correct impedance setting is chosen, go for it.

ALG460 wrote:
>
> Does anyone know if the $79 Radio Shack frequency counter can be used to
> measure in circuit frequencies with test leads attached to it or does it only
> work with the supplied antenna on radiated signals.
>
> Tony

--
Please remove the word 'NOREPLY' from the email address, sorry for the
inconvenience, but it helps keep down the spam.

3843. Re: HP8556A and HP8552B

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-02 00:00:00 UTC
From: Dan Rae <rae4@ix.netcom.com>
Message-ID: <381FA712.A398DF4A@ix.netcom.com>
Source record: 65918

Ib,

If hp cannot still sell you one, (Part Number 08556-00013), and in the US we are lucky enough to have a free number to call, then the easy solution might be to subtract 20 dB from the indicated levels on the standard knob, it's not that difficult :-)

I f you keep on posting at the current rate (5 today by my count) then maybe some kind soul will find a knob for you, you never know :-)

73, Dan AC6AO G3NCR

3844. Re: Using WWV (HF) as freq ref?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-02 00:00:00 UTC
From: William Janssen <billj@calweb.com>
Message-ID: <381F8DDF.FD2565A3@calweb.com>
Source record: 65919

My Loran receiver (home made) uses a voltage controlled oscillator
at 1.00 MHz. I use that osc.. to generate a pulse at the LORAN pulse
rate. I then use a sample and hold to sample the received signal.
After ,of course, amplification. If the zero crossing of the signal
is centered in the pulse the the out put of the sampler is zero.
Any deviation in the sample output is amplified and used to control
the oscillator. I use a scope to initially lock on to the signal.
The divider chain to generate my pulse is programmable so I can
change it to align the local pulse with the LORAN pulse.

I built this because at the time I had a very strong LORAN signal
and the WWVB signal was weak. I intend to build a WWVB receiver "soon".

Bill K7NOM
Tom Bruhns wrote:
>
> My thanks to Laura and Bill for their postings.
>
> One of the things I'd like to try to understand better and put some
> bounds on is the propagation effects from WWV. In an initial
> experiment, I could easily see the peak of the carrier distribution
> within better than 0.1Hz at 15MHz, with sidebands which aren't
> necessarily symmetrical (due, undoubtedly, to propagation effects)
> within one or two Hertz of the carrier. Even with a really terribly
> antenna (signal not as far above noise floor as I'd like), the sidebands
> are down tens of dB at 1Hz offset. So it seems like with a decent
> signal, I can measure it quite a bit better than 1 part in 10^7; but
> over the course of an hour, say, at mid day, what maximum average
> frequency offset should I expect, due to (more-or-less continuous) path
> length change over that time?
>
> What techniques do you use to monitor Loran? Is that the Loran on
> 100kHz? Isn't it pulsed? Why choose that over WWVB? Does anyone out
> there have experience using one of the stations like NLK (Jim Creek
> Naval Transmitting Station; a wavelength or so away from me) as a
> frequency reference (given that they do move their frequency around
> sometimes...)?
>
> Pardon all the questions, but I'm curious about what I can do with some
> new "toys." The ability to quickly measure with 4mHz resolution or so
> at 10MHz (and above) is fascinating, though I'm sure I'll soon tire of
> the novelty.
>
> Cheers,
> Tom

>
> William Janssen wrote:
> >
> > That SP 443 is older than my SP 559 but it also says to expect
> > an accuracy of 1.00E-07
> >
> > I am using LORAN and I think I can keep my local standard (Crystal)
> > at 1.00E-10. I can do better but my receiver has variable delay
> > so I don;t trust the additional accruracy.
> >
> > Bill K7NOM
> >
> > marsgal42@hotmail.com wrote:
> > >
> > > In article <19991101235953.04216.00001037@ng-ff1.aol.com>,
> > > k7itm@aol.com.nospam (K7ITM) wrote:
> > > > I know that people who want the ultimate in frequency standard
> > > calibration via
> > > > radio broadcast use WWVB at 60kHz because of the stable propagation
> > > delay. But
> > > > what sort of accuracy can be obtained by careful use of WWV on HF, at
> > > ~1000
> > > > miles distance? Over a period of, say, an hour during mid-day, what
> > > is the
> > > > maximum frequency offset to be expected because of continuous path
> > > length
> > > > change during that time? What other errors should one look out for?
> > >
> > > According to NIST Special Publication 432:
> > >
> > > "...the received accuracy is far less due to various propagation
> > > effects. The usable received accuracy is about 1 part in 10 million
> > > for frequency (1 x 10^-7) and about 1 ms for timing..."
> > >
> > > It's on the web at:
> > >
> > > http://www.boulder.nist.gov/timefreq/pubs/sp432/sp432.htm
> > >
> > > Am I showing my age when I mention that I actually own a paper copy
> > > of SP432? :-)
> > > --
> > > Laura Halliday VA3LDH "Que les nuages soient notre pied
> > > Grid: FN03gs a terre..." - Hospital/Shafte
> > > Satellite: VA3SFL on UO-22, KO-25
> > >
> > > Sent via Deja.com http://www.deja.com/
> > > Before you buy.

3845. Re: Using WWV (HF) as freq ref?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-02 00:00:00 UTC
From: William Janssen <billj@calweb.com>
Message-ID: <381F94F5.6F328ACC@calweb.com>
Source record: 65920

One thing you should look out for is accounting for the instability
of your receiver.

How do you know that the variations you see aren't generated by your
receiver.

Bill K7NOM
> Tom Bruhns wrote:
> >
> > My thanks to Laura and Bill for their postings.
> >
> > One of the things I'd like to try to understand better and put some
> > bounds on is the propagation effects from WWV. In an initial
> > experiment, I could easily see the peak of the carrier distribution
> > within better than 0.1Hz at 15MHz, with sidebands which aren't
> > necessarily symmetrical (due, undoubtedly, to propagation effects)
> > within one or two Hertz of the carrier. Even with a really terribly
> > antenna (signal not as far above noise floor as I'd like), the sidebands
> > are down tens of dB at 1Hz offset. So it seems like with a decent
> > signal, I can measure it quite a bit better than 1 part in 10^7; but
> > over the course of an hour, say, at mid day, what maximum average
> > frequency offset should I expect, due to (more-or-less continuous) path
> > length change over that time?
> >

3846. Re: IF filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-02 00:00:00 UTC
From: Fred Daniel <fdaniel@home.com>
Message-ID: <381E4AF9.BB116270@home.com>
Source record: 65984

For the very best, look at:
http://www.collins.rockwell.com/collins-filters/

Fred Daniel, W6FNO

3847. Using WWV (HF) as freq ref?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-02 00:00:00 UTC
From: k7itm@aol.com.nospam
Message-ID: <19991101235953.04216.00001037@ng-ff1.aol.com>
Source record: 65985

I know that people who want the ultimate in frequency standard calibration via radio broadcast use WWVB at 60kHz because of the stable propagation delay. But what sort of accuracy can be obtained by careful use of WWV on HF, at ~1000 miles distance? Over a period of, say, an hour during mid-day, what is the maximum frequency offset to be expected because of continuous path length change during that time? What other errors should one look out for?

Cheers,
Tom

3848. WTD tubes for Heathkit SB401

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-02 00:00:00 UTC
From: erpi@revelstoke.net
Message-ID: <7vlvsg$ke5$1@news.junction.net>
Source record: 65986

I am looking for some tubes for my HeathKit SB-401.
If you have some you can spare for a reasonable price, I would like to hear
from you.
You can phone me at:
250-837-2525 in the daytime or
250-837-7754 in the evening or you can email me at:
erpi@revelstoke.net
I live in revelstoke, BC, Canada
VE7BWP Eric Pirtyak

"Yield to temptation, it may not pass your way again." L. Long

3849. Re: Tayloe mixer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-02 00:00:00 UTC
From: blackm00@cam.org
Message-ID: <blackm00-0211990118590001@dialup-524.hip.cam.org>
Source record: 65987

In article <381d8e41@casper.southcom.com.au>, "Ken Johnson"
<vk7krj@southcom.com.au> wrote:

> Hi, Can someone point me to any detailed info. on the Tayloe mixer? I have
> searched for references to it but found only one document which
> unfortunately does not have any diagrams or circuit details. I though it
> appeared in QST but a search of their indexes turned up nothing. I even
> emailed Dan Tayloe but have had no response so far. I know it appeared in
> tech topics (Radcom) but once again there is no reference to it on the RSGB
> web page. I would be grateful if someone could give me the references so I
> can look up the relevant issue/s (or better, download it from the web).
>
> --
> Thanks, Ken,vk7krj
> vk7krj@southcom.com.au

It's come up here a number of times, but while people have asked
questions about it and made reference to it, there hasn't been a
lot of discussion about it.

Earlier this year, someone asked, and I did a websearch, and
found a number of references. I never got around to posting the
URL's or some comments that I had at the time. I even dug up
some related references in the ham magazines.

Anyway, I just did another websearch and nothing new has turned
up, at least not with my keywords and chosen search engine.

The first one below is from Tayloe himself, and is the most informative.
The rest overlap.

Linkname: Tayloe MIxer
URL: http://www.extremezone.com/~ki7mn/tayloe.htm

Linkname: [BPSK] New Mixer Design by Dan Tayloe
URL: http://www.qth.net/archive/bpsk/199810/19981022.html#0

Linkname: RE: [BPSK] New Mixer Design by Dan Tayloe
URL: http://www.qth.net/archive/bpsk/199810/19981031.html#0

http://www.qth.net/bpsk-digest.archive/v01.n060

I did search dejanews, how I hate the way it's rearranged itself,
and I don't see any references to it other than those that took
place here, none of which wsa really concrete information.

Michael VE2BVW

3850. wtd tubes for heath sb401

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-02 00:00:00 UTC
From: erpi@revelstoke.net
Message-ID: <7vm0f8$kl3$2@news.junction.net>
Source record: 65988

I am looking for some tubes for my HeathKit SB-401.
If you have some you can spare for a reasonable price, I would like to hear
from you.

I am sorry I forgot to mention which tubes.

The tubes I am looking for are:
6AV11, 6D10, and 6146B.

You can phone me at:
250-837-2525 in the daytime or
250-837-7754 in the evening or you can email me at:
erpi@revelstoke.net

I live in revelstoke, BC, Canada
VE7BWP Eric Pirtyak

"What's a headache?" Adam asked.

3851. Re: Need very low phase noise XO at 110 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-02 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <7vmo19rld1@nnrp1.deja.com>
Source record: 65989

In article <bhcT3.2178$0H3.15223@news1.online.no>,
"Tomas Ahrne" <dirac@takethisoutalgonet.se> wrote:
> I am building a digital FM radio, and after some signal conditioning
the
> signal goes to an AD converter clocked by a divided by 2 110 MHz XO
(AD
> sampling frequency 55 MHz).
>
> The S/N you get from the AD converter is very much dependendent on the
clock
> jitter, and jitter and phase noise are closely coupled. The AD is 14
bits,
> but has an S/N of about 75 dB.
>
> The formula for the resultant S/N when using a clock signal with a
certain
> amount of jitter, t, and signal frequency, f, is:
>
> S/N=20*log[1/(2*pi*f*t)].
>
> A standard off-the-shelf XO might have a phase noise of -110 dBc at
1kHz
> away from the carrier. This gives a jitter of about 6.5 ps.
>
> For broadcast FM, f is max 108 MHz. This gives:
>
> S/N=47 dB.
>
> So you see, I am ruining the AD converter SN.
>
> S/N from jitter should be at around -80 dB so as not to degrade the
S/N of
> the AD converter. For that I need jitter to be < 0.15 ps, a factor of
> 6.5/.15=43.3 better than what I have.
>
> This would mean that I need the phase noise to be 20*log(43.3)=32.7 dB
> better. I know that the calculation between jitter and phase noise is
more
> complicated than this, but this is a rough estimate.
>
> Can anyone help me with a design or have pointers to web sites or know
of a
> good book, etc.
>

> Best,
>
> Tomas Ahrne
>
>

There are some types of XO that force the output signal to pass by the crystal itself. The latter filters out the signal sidebands. So, the crystal must be of the best quality as possible, preferable inside a vacuum sealed case.
The book Digital PLL Frequency Synthesizers, Theory and Practice, by Ulrich L. Rhode, has much info on low noise XO, including references.
--
Greetings,

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Before you buy.

3852. custom headset radio. Need advice- TIA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-02 00:00:00 UTC
From: Pirahna@Fish.net
Message-ID: <381eda27.4921780@news.supernews.com>
Source record: 65990

I wish to create several small ear peices that fit on the ear and are tranceivers. I want the tranmissions to be full duplex with as little background noise as possible. Basically they should function just like as if using two cordless phone only without the phone line and should be extremely smaller.

My question is if this is even possible without spending hundreds of dollars per unit. The size of the unit should not exceed 1sq inch.

Sincerely,
Pirahna

3853. HP8556A and HP852B

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-02 00:00:00 UTC
From: Ib Holst Jorgensen <oz9dr@post1.tele.dk>
Message-ID: <0ekeOLoTcSjtAVtCl9ksfhITjFNp@4ax.com>
Source record: 65991
Cross-posted to: misc.industry.electronics.marketplace,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.equipment,sci.electronics.misc

Hello
Does anyone know where to get the LOG REF LEVEL knob
for the HP8552B when used with the HP8556A unit?
One or two needed.
Please answer to:
oz9dr@post1.tele.dk

Greetings
Ib

3854. HP8556A and HP852B

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-02 00:00:00 UTC
From: Ib Holst Jorgensen <oz9dr@post1.tele.dk>
Message-ID: <5OseOIaD0Huxub1GufasO7GdX2ym@4ax.com>
Source record: 65992
Cross-posted to: misc.industry.electronics.marketplace,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.equipment,sci.electronics.misc

Hello
Does anyone know where to get the LOG REF LEVEL knob
for the HP8552B when used with the HP8556A unit?
One or two needed.
Please answer to:
oz9dr@post1.tele.dk

Greetings
Ib

3855. Re: WTB Eimac 8873

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-03 00:00:00 UTC
From: "Thomas C. Sefranek" <tcs@cmcorp.com>
Message-ID: <3820D8F5.4F3DC0E8@cmcorp.com>
Source record: 65843

Jeremy Hopkins wrote:

> i was looking for one awhile ago
> i think richardson still has them $$$$$$$
>

Yes, they can be found, but when I was faced with $500 each,
I gave away the amp!

>
> Robert Friess wrote:
> >
> > Hi All,
> >
> > I need one or two new or known good 8873s for a SB230 that I am bringing
> > back to life. Anyone out there have one of these rare beasts that they are
> > willing to part with?
> >
> > 73,
> > Bob,
> > N6CM
>
> --
> Jeremy W. Hopkins
> KC8GWH
> Toledo Ohio USA
> http://www.toltbbs.com/~jhop

--
Thomas C. Sefranek WA1RHP
ARRL Instructor, Technical Specialist, VE Contact.
http://www.harvardrepeater.org
http://hamradio.cmcorp.com/inventory/Inventory.html

3856. Where Do You Buy Project Supplies?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-03 00:00:00 UTC
From: Billy Moore <billymoore@nospam.mindspring.com>
Message-ID: <7vqu2lvun1@nntp8.atl.mindspring.net>
Source record: 65844

I want to start building some projects and I need to find a good source for basic parts like resistors, caps, pots, connectors, etc. I've done some searching on the web and I've found Newark (expensive), Digi-Key, Jameco, and a few other smaller suppliers. Jameco seems to have the best price/selection of the biggies. There are some smaller ones I haven't heard of before. Can anyone give me some recommendations? Thanks.

Billy Moore
KF4ECB

3857. Re: Where Do You Buy Project Supplies?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-03 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <3820F8D0.7FEA@pop.removethistomailme.net>
Source record: 65845

Billy Moore wrote:
>
> I want to start building some projects and I need to find a good source for
> basic parts like resistors, caps, pots, connectors, etc. I've done some
> searching on the web and I've found Newark (expensive), Digi-Key, Jameco,
> and a few other smaller suppliers. Jameco seems to have the best
> price/selection of the biggies. There are some smaller ones I haven't heard
> of before. Can anyone give me some recommendations? Thanks.
>
> Billy Moore
> KF4ECB

Newark and Digi-Key are my favorites, along with Mini-Circuits
(http://www.minicircuits.com). Between them there's not much they don't
have. Some of the more exotic RF/microwave parts can be found at
http://www.downeastmicrowave.com and http://www.shfmicro.com.

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

3858. Re: 100's of projects

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-03 00:00:00 UTC
From: ke6bcw@shortwaveplanet.com
Message-ID: <3820bbc4.426943192@news.earthlink.net>
Source record: 65846
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave,uk.radio.amateur,uk.rec.radio.cb

On Mon, 1 Nov 1999 10:45:10 +0100, "Harry SM0VPO"
<harryvpo@hotmail.com> wrote:

>100's of winter projects at Harry's Homebrew Homepage http://sm0vpo.8m.com.

There's a goldmine here. Even homebrewing brews! :)
I never thought about it before, but I've done almost all
homebuilt projects during winter. Something about those
short days, and cold outside, that makes you want to cuddle
up nice and close to a hot soldering iron. :)

>
>I have done a lot of updating recently and included a 4-watt AF amplifier as
>well as coil-winding using PCBs so that anyone can wind the same coil! Not
>an easy task, remember Harry's laws?:
>
>1 - No two people can wind the same inductor with the same instructions and
>materials.
>2 - Coil winding data is a constant that varies from person to person.
>
>Of course, the article is illustrated with photographs of a 20uH inductor
>(+150pf = 4MHz).
>
>There are loads of antenna projects, transmitters, receivers and even a
>little booze, if you think "homebrew" has another meaning.
>
>I have my own message board which is in daily use by home constructors with
>problems or suggestions. If you could help to answer some of the questions
>there I would be eternally gratefull.
>
>best regards from Harry - SM0VPO
>
>

3859. Re: Need very low phase noise XO at 110 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-03 00:00:00 UTC
From: Jim Pennell <spam@nospam.com>
Message-ID: <7vrb9accf1@nntp8.atl.mindspring.net>
Source record: 65847

Looking in the recent ARRL handbook, I found a low noise 5 MHz oscillator design that appears to use, and improve on, the ideas Ulrich Rohde mentioned in the Nov 1977 article.

This same technique which uses the crystal as both the frequency determining element and a filter for the output signal was used in a recent article in QEX regarding phase noise measurement methods. This design was for a 50 MHz crystal, although the same method may be applied at 110 MHz just as easily.

The QEX was this year, but I do not have the issue here in front of me.

There was also a design for low phase noise 125 MHz oscillator as an APPNOTE to go along with the AD9850 DDS chip. It can be found on the Analog Devices website:

http://www.analog.com/techsupt/application_notes/an419.pdf

Jim

Anti-spam email address.....

jpennell
---
at ix.netcom.com

3860. WTB: Westinghouse RX-33 meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-03 00:00:00 UTC
From: Marv_E_Ads@Juno.com
Message-ID: <7vnvj5qgb1@nnrp1.deja.com>
Source record: 65921

Hi,
I am looking for a couple of Westinghouse RX-33 series 2" square
meters.

500 Volt and 200 Volt scales would be perfect either with internal
scaling R's or just "standard" 1 mA movements.

Will also consider any other units in this series.

More hen's teeth: I'm also looking for a pair of Jennings Y-1 fixed
vacuum capacitors and for 3 or 4 Jennings JSLF-500 fixed vacuum caps.

Thanx,
Marv WC6W 310 649 3111 or via: Marv_e_ads@juno.com

Sent via Deja.com http://www.deja.com/
Before you buy.

3861. Re: ATV Balloon question?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-03 00:00:00 UTC
From: pmunsel@aol.com
Message-ID: <19991102214533.04173.00001251@ng-ff1.aol.com>
Source record: 65922

Do a search for HAT or HATS. That is the sight of the Houston ATV group, and they do the baloon launches. There is also a North Texas Baloon Project, and a sight for it. I just don't remember the information at this time.
73,
Paul Munsel N5XMV
Hearne, Tx.

3862. ## I found it !!! (it's a Mitsubishi...) (was: can anyone help me identify an RF synthesizer chip marked "M64086GP")

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-03 00:00:00 UTC
From: tinkerman97@usa.net
Message-ID: <381fa4e2.278398700@ny.news.verio.net>
Source record: 65923
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.components,alt.radio.scanner,alt.radio.scanner.uk,rec.radio.scanner,rec.radio.amateur.equipment

Hello again,

Well, after hard work (and the help of Chip directory,
http://www.hitex.com/chipdir/chipdir.html) I managed to idetify this
chip as a Mitsubishi part. I've even found similar parts with almost
identical partnames (+/- one digit...) even with several identical pin
names, which means I'm on the right track...
Reminder: this is a 20pin SSOP chip, RF synthesizer with serial input.
I need the full data sheet to program it.
So, is there anyone on this newsgroup with access to a Mitsubishi RF
catalog or other info source, to help me get the full data sheet
(better yet, to give me a pointer to a web site with proper PDF file)?

Thanks and best regards,
T-man

Note: when posting a Reply, please send me a copy
via email too so I don't miss any responses. Don't
forget to remove the "97" from my email address
inserted as an anti-spam counter measure...:-)

3863. Online Virtual Hamfest - FREE!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-03 00:00:00 UTC
From: compcnsult@aol.com
Message-ID: <19991102232553.02627.00000602@ng-ck1.aol.com>
Source record: 65924

New Amateur Radio Website!

Visit the new online Hamfest:

http://www.ehamfest.com

All ads placed free!

See the FAQ page for details!

3864. Re: HP8556A and HP852B

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-03 00:00:00 UTC
From: russell shaw <russell@webaxs.net>
Message-ID: <381FCD27.5BF6C9E5@webaxs.net>
Source record: 65925
Cross-posted to: misc.industry.electronics.marketplace,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.equipment,sci.electronics.misc

Try putting hp8556a into alta-vista. This will return
many second-hand dealers. One may have the knob.
If you can remember the 20dB factor, the knob isn't
really needed.

Ib Holst Jorgensen wrote:
>
> Hello
> Does anyone know where to get the LOG REF LEVEL knob
> for the HP8552B when used with the HP8556A unit?
> One or two needed.
> Please answer to:
> oz9dr@post1.tele.dk
>
> Greetings
> Ib

--
****

Russell Shaw, B.Eng, M.Eng(Research)
email: russell@webaxs.net

3865. Re: 100's of projects

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-03 00:00:00 UTC
From: Harry SM0VPO <harryvpo@hotmail.com>
Message-ID: <7voks6$r5t@newstoo.ericsson.se>
Source record: 65926
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave,uk.radio.amateur,uk.rec.radio.cb

Hi Will,

No, he has been remarkably quite. No doubt he tried to use his "wasta" to do something but failled. I should have copied him the Heathkit linear and HF TX and charged him for it!

Interesting that I have had yet another request from a different source, the guy wanted electronic info to build an induction fornace. He said it would be of benefit to us "hams" since we could then make custom aloys. In all my years in hamradio I have always tried to avoid melting metals in my shack - success rate approaching 99%! You can read this yourself if you look at the message board.

Bestr egards from Harry - SM0VPO
http://sm0vpo.8m.com

Will White wrote in message <381F7F1C.2A2E76CE@mindspring.com>...
>Hey Harry,
>
>You ever hear anything more from that lunatic who was threatening to report
you
>to the "internet authorities" {sic} for refusing to design and furnish him
with
>a schematic and construction plans for the multi-KW RF generator for drying
>firewood? You sure attract some odd ones, he he. Keep up the good work, I
love
>your site, and soon will build the complete Cigar Box RX/TX pair (have the
RX
>done).
>
>Will

3866. Re: Need very low phase noise XO at 110 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-03 00:00:00 UTC
From: Tomas Ahrne <dirac@takethisoutalgonet.se>
Message-ID: <pzST3.74$1C4.300@news1.online.no>
Source record: 65927

Tom Bruhns <tomb@lsid.hp.com> wrote in message
news:381F3551.44DF107A@lsid.hp.com...
> Hi Tomas,
>
> As for crystal oscillators...I should test some of the little XO modules
> and see how well they really do. But in "Ham Radio" magazine, Nov.
> 1977, there was an article which covered some low-noise oscillator
> circuits. (Sorry: I have a copy only of the oscillator part, and not
> the first page(s) which covered other receiver design issues, and
> therefore I don't have the title or author...but it's around page
> 38-41.) They gave one for a 5MHz XO. I assume it will work at higher
> freqs, at least some of the ideas. From the article, "...As a general
> rule, when designing oscillators, use the following guidelines: (1.)
> Oscillators should always use two stages: one operating in class A, and
> the other operating as a limiter. The limiter is also used as the
> feedback part ... . (2.) Circuits which have agc applied to the
> oscillator transistor should be avoided because the agc will likely add
> noise. This is discussed in detail in reference 6. ... " Note: Ref 6
> is also the ref for the following oscillator circuit. The ref is: M.
> M. Driscoll, "Two-stage Limiting Series-Mode Type Quartz CRystal
> Oscillator Exhibiting Improved Short-Term Frequency Stability,"
> Proceedings of the 26th Annual Symposium on Frequency Control, Ft.
> Monmouth New Jersey, 1972, page 43.
>
> Here's the oscillator, in Spice-ish netlist form. That is, numbers
> following reference designator are node numbers to which it is
> connected:
> V1 1 0 18volts (Input DC power)
> L1 1 2 390uH
> C1 2 3 3.3uF
> C2 3 0 3.3uF
> R1 3 0 75kohms
> R2 3 1 27kohms
> R3 1 5 1kohms
> Q1 5 3 6 2N2222 (collector, base, emitter)
> X1 6 7 5MHz crystal
> C3 7 0 ??30pF trimmer capacitor, to adjust osc freq
> L2 6 8 330uH
> R4 8 0 620ohms
> C4 5 9 0.01uF
> R5 9 0 20kohms
> R6 10 0 75kohms
> R7 1 10 62kohms
> C5 10 0 3300pF

> C6 1 0 33uF
> Q2 11 10 9 2N2222 (collector, base, emitter)
> R8 11 4 50ohms
> L3 2 4 10uH
> C7 4 0 15-60pF trimmer
> C8 4 13 43pF (output coupling capacitor; output from node 13)
>
> Claimed performance is about -118dBc at 1Hz from "carrier", with a floor
> below -160dBc reached at about 3kHz from carrier. The text says the
> circuit may be used with either fundamental or overtone crystals. The
> article also shows a narrow crystal filter/amplifier for "cleaning" the
> output of an oscillator which might, for example, be optimized for low
> drift rather than low noise.
>
> Cheers,
> Tom

Tom,

Thank you for your suggestions. I'll certainly try to look them up.

> I'll give a ref and circuit for an oscillator, but first, I want to
> observe that, if I read your posting right, just taking the numbers at
> face value without thinking about what they might actually mean, I
> wonder if you are asking more than you really need in the way of s/n.
> If you sample at 55MHz, you have a very over-sampled signal, and you
> should get a LOT of processing gain by the time you get to audio
> bandwidth. For example, delta-sigma ADCs turn a very over-sampled
> one-bit ADC at, perhaps, 5MHz, into 20 bits worth of audio bandwidth.
> Even without noise shaping, I would expect you would end up with a
> better audio snr in the receiver than you will be able to get over the
> air from any commercial stations. OK, that is NOT an excuse for not
> doing well with the oscillator, but just a comment that perhaps you
> don't need things to be quite as good as you might have thought.

I intend to sample the whole 87.5-108 MHz spectrum in one go, not at the IF stage. That's when you need all the S/N and SFDR (Spurious Free Dynamic Range) that you can get.

Suppose you can get an S/N of 75 dB at the AD converter. By down conversion you get processing gain, and the formula for calculating it is PG=10*log(fS/fB), where fS is the sampling frequency and fB the resultant baseband frequency after down conversion. You might get another 30 dB, which gives you a total of 105 dB. Then, FM demodulation might give you another 10-15 dB, maybe more. A total of 115-120 dB, so what's the problem?

Well, you will lose a lot of it.

1. The above figures are theoretical and will probably not be that good.
2. I haven't taken the analog frontend into account.
3. The above calculation assumes only one radio station in the whole FM band. Maybe in Lower Slobovia, but certainly not in Stockholm. I see that I

didn't mention the fact that I am designing a wide band receiver and not a narrow band one in my original post.

Let us suppose that there are 10 stations of about the same signal strength and that I am interested in the 11th one, which is 40 dB down relative to the other ones.

In order not to overdrive the AD I need to have headroom to allow for all radio signals to superimpose. Sine we are not talking about noise, but very deterministic signals, they will add up as 20*log(N) (at least if Murphy has his say), where N is the number of equal strength radio stations. With N=10, as above, the headroom needs to be 20 dB. Then, if the station of interest is 40 dB down again, its peak amplitude will be 60 dB down at the input of the AD converter.

Now I only have 115 to 120 db-60 dB=70-75 db left. Not good, not bad, but certainly not excellent.

Best,

Tomas

3867. Re: 850-900 MHz RF Transistors - Anyone used them at other frequencies?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-03 00:00:00 UTC
From: Harry SM0VPO <harryvpo@hotmail.com>
Message-ID: <7vp0sp$lns@newstoo.ericsson.se>
Source record: 65928

Hmmmmmn, I have a load of these devices and yes they do work well at other frequencies. I have used them in a 2-stage linear for 144MHz and even experimented with them in the HF PA covering 1.8 - 32MHz. With those devices you can simply regard them as a do-it-all power transistor. The only downfall is that any design you come up with will be of no use to others due to the cost of these devices.

best regards from Harry - SM0VPO
http://sm0vpo.8m.com

Hmmmmmn wrote in message <381f4d00.85712@news.bigpond.com>...
>Hi all,
>
>I have a number of rf power transistors from mobile phone base
>stations ie 850-900 Mhz, around 30W out. I suspect I can't use them at
>other frequencies due to internal matching networks, but can anyone
>confirm if they have used such transistors at 70cm or 23cm?
>
>Typical type numbers are E626P, E625P, TP3024A.
>
>Many thanks,
>Richard VK5OO

3868. Re: Schematic for 6146 RF amp: 300M, 160M, 3M or 2M

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-03 00:00:00 UTC
From: Harry SM0VPO <harryvpo@hotmail.com>
Message-ID: <7vp10e$moi@newstoo.ericsson.se>
Source record: 65929

I seem to remember seeing an article in this month's RadCom (RSGB) using two 6146 bottles.

Regards Harry - SM0VPO
http://sm0vpo.8m.com

Raw Power Radio wrote in message
<0221c012.bab47dfd@usw-ex0102-016.remarq.com>...
>I have a bunch of 6146Bs laying around, and I'd like to build an RF
>amp. If anyone has schematics for amps for the bands listed in the
>subject line, please let me know. Links to schematics online are
>especially appreciated. Thanks in advance.
>
>PS: I didn't know the 6146 could be used at VHF, but my old Sylvania
>manual says it's good to 175MHz.
>
>
>* Sent from RemarQ http://www.remarq.com The Internet's Discussion Network
*
>The fastest and easiest way to search and participate in Usenet - Free!
>

3869. Re: custom headset radio. Need advice- TIA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-03 00:00:00 UTC
From: Harry SM0VPO <harryvpo@hotmail.com>
Message-ID: <7vp166$ocv@newstoo.ericsson.se>
Source record: 65930

I do not know about that which you seek, but I have seen "in-the-ear"
receivers which receive a transmission from a magnetic induction loop
mounted in the shoulder of a coat or jacket. Would this suit your needs?

Harry - SM0VPO
http://sm0vpo.8m.com

Pirahna wrote in message <381eda27.4921780@news.supernews.com>...
>I wish to create several small ear peices that fit on the ear and are
>tranceivers. I want the tranmissions to be full duplex with as little
>background noise as possible. Basically they should function just like
>as if using two cordless phone only without the phone line and should
>be extremely smaller.
>
>My question is if this is even possible without spending hundreds of
>dollars per unit. The size of the unit should not exceed 1sq inch.
>
>Sincerely,
> Pirahna

3870. Need battery Charger Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-03 00:00:00 UTC
From: oldgear@aol.com
Message-ID: <19991103053940.02753.00000605@ng-cc1.aol.com>
Source record: 65931

Hi
I need a schematic of an industrial Battery Charger like the sears 50/2/amp with the 200 amp engine starter. The model # is 934.71832. It was Manf by Century. Any similar model would be OK. A scanned Copy would be fine.
Thanks

3871. Re: custom headset radio. Need advice- TIA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-03 00:00:00 UTC
From: Pirahna@Fish.net
Message-ID: <39f61852.86385026@news.supernews.com>
Source record: 65932

They will be used for special purpose gaming. Worn maybe 2hours at a time max. I wouldn't think it would be any different then being on the cordless phone for that long.

-Pirahna

On Tue, 02 Nov 1999 13:20:36 -0500, Roland Burgan <rburgan@up.net> wrote:

>From a health standpoint, is it wise...
>
>Pirahna wrote:
>
>> I wish to create several small ear peices that fit on the ear and are
>> tranceivers. I want the tranmissions to be full duplex with as little
>> background noise as possible. Basically they should function just like
>> as if using two cordless phone only without the phone line and should
>> be extremely smaller.
>>
>> My question is if this is even possible without spending hundreds of
>> dollars per unit. The size of the unit should not exceed 1sq inch.
>>
>> Sincerely,
>> Pirahna

3872. Re: Re: Âest wire for making RF coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-03 00:00:00 UTC
From: Keith Rainbow <rrainbow@cc.curtin.edu.au>
Message-ID: <7vp5ha$e3r$1@ftp.curtin.edu.au>
Source record: 65933
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.misc

Tom Bruhns <tomb@lsid.hp.com> wrote in message
news:38173D73.F77D25AD@lsid.hp.com...
: De Guerin wrote:
: >
: > Litz wire is best ..
:
: AFAIK, only over a limited range of frequencies, typically mid-kHz to
: very low MHz. See http://www.neewcweb.com/litz/litz.htm for more info.

Agreed about Litz wire. According to Terman, not much real advantage above
1 MHz due to stranding irregularities and inter-strand capacitance. BTW
have you ever tried BUYING the stuff?

Taking up a previous thread, the interesting thing to me about silver, is
that most "real" RF engineers claim that it's a waste of time polishing
silver plating to remove the tarnish. The argument seems to be that
although silver oxide /silver nitride are both insulators , the layer is
only a few molecules thick and so contributes very little to the total
skin-effect resistance, despite being located in the very worst position.
Anyone got any comments?

Personally, I still like to see those cavities shine!

Keith

3873. Re: ?est wire for making RF coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-03 00:00:00 UTC
From: Rich Grise <offduty@entheosengineering.com>
Message-ID: <38206324.69BE@entheosengineering.com>
Source record: 65934
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.misc

Keith Rainbow wrote:
...
> Taking up a previous thread, the interesting thing to me about silver, is
> that most "real" RF engineers claim that it's a waste of time polishing
> silver plating to remove the tarnish. The argument seems to be that
> although silver oxide /silver nitride are both insulators , the layer is
> only a few molecules thick and so contributes very little to the total
> skin-effect resistance, despite being located in the very worst position.
> Anyone got any comments?
>
Yeah - that makes perfect sense, now that you mention it. The oxide
is an insulator, so would probably have a negligible effect, even if
it's really thick - think of a silver-plated wire with a pvc jacket-
the jacket isn't going to affect the conductivity at all!

> Personally, I still like to see those cavities shine!
>
> Keith

Cheers!
Rich

3874. FS: Books, Tubes & misc. stuff

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-03 00:00:00 UTC
From: MURRAY PASTERNACK <M.PASTERNACK@prodigy.net>
Message-ID: <7vpr7e$1v64$1@newssvr03-int.news.prodigy.com>
Source record: 65935
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

e-mail to mailto:w6krc@arrl.net for list. Murray

3875. info Texscan attenuator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-03 00:00:00 UTC
From: Eric Post <post@iaehv.nl>
Message-ID: <3820FE69.3976@iaehv.nl>
Source record: 65936

Hello,

recently I bought a step attenuator from Texscan and now I'm looking for
some information about it. Can someone help me ?

It's a model LA 54 attenuator from Texscan corp. 0-60 dB 1 dB steps.

I would like to know the following :

max. frequency
VSWR
maximum power

Plaese reactions by email, thanks a lot.

Eric Post PE1MIX

3876. Re: Need very low phase noise XO at 110 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-03 00:00:00 UTC
From: blackm00@cam.org
Message-ID: <blackm00-0311991249570001@dialup-596.hip.cam.org>
Source record: 65937

In article <381F3551.44DF107A@lsid.hp.com>, Tom Bruhns <tomb@lsid.hp.com> wrote:

>[stuff deleted]
>
> As for crystal oscillators...I should test some of the little XO modules
> and see how well they really do. But in "Ham Radio" magazine, Nov.
> 1977, there was an article which covered some low-noise oscillator
> circuits. (Sorry: I have a copy only of the oscillator part, and not
> the first page(s) which covered other receiver design issues, and
> therefore I don't have the title or author...but it's around page
> 38-41.)

Just for completeness, the article is "Effects of Noise in Receiving Systems" with a blurb: "A discussion of the many types of noise which affect communications receivers, including external noise, noisy local oscillators, and noise IMD" It's by Ulrich L. Rohde himself.

I'm sure I first saw the other trick suggested, taking the signal off one side of the crystal so it acts as a filter, in another of Rohde's articles. I think it might be the June 1975 issue of Ham Radio, in an article entitled "Stable Crystal Oscillators", but I don't have the article handy and the specific article is a guess based on a vague memory and an accumulative index.

Michael

3877. 9k2 Mod for Standard C500?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-03 00:00:00 UTC
From: nh7t@qsl.net
Message-ID: <38209504.912B941C@qsl.net>
Source record: 65938

Hi folks,
used abt all search engines.. with no success so far..
does someone have the mods handy to make the old Standard C500 fit for
9k2 packet?
thanks for any hint!
73, Rico

3878. Re: 9k2 Mod for Standard C500?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-03 00:00:00 UTC
From: "nh7t@qsl.net" <nh7t@qsl.net>
Message-ID: <38209661.A7457B32@qsl.net>
Source record: 65939

sry, of course 9k6..

3879. Re: Schematic for 6146 RF amp: 300M, 160M, 3M or 2M

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-03 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <3820b9d2.538800965@news.online.no>
Source record: 65940

On Wed, 3 Nov 1999 11:20:01 +0100, "Harry SM0VPO"
<harryvpo@hotmail.com> wrote:

>I seem to remember seeing an article in this month's RadCom (RSGB) using two
>6146 bottles.
>
it was replacement for 6JS6 in FT-200/FT-250 and some advices about
the modification, somebody has the problem that the PA-valves have
short life, I thought that SWEEP valves lasted at least 20 years,
while 6146 seems to die because of cathode poissening within not so
distant future.

One advice if you use 6146 type, install a heater switch

73 Jan-Martin LA8AK

>Regards Harry - SM0VPO
>http://sm0vpo.8m.com
>
>Raw Power Radio wrote in message
><0221c012.bab47dfd@usw-ex0102-016.remarq.com>...
>>I have a bunch of 6146Bs laying around, and I'd like to build an RF
>>amp. If anyone has schematics for amps for the bands listed in the
>>subject line, please let me know. Links to schematics online are
>>especially appreciated. Thanks in advance.
>>
>>PS: I didn't know the 6146 could be used at VHF, but my old Sylvania
>>manual says it's good to 175MHz.
>>
>>
>>* Sent from RemarQ http://www.remarq.com The Internet's Discussion Network
>*
>>The fastest and easiest way to search and participate in Usenet - Free!
>>
>
>

3880. WTB Eimac 8873

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-03 00:00:00 UTC
From: Robert Friess <rfriess@attglobal.net>
Message-ID: <3820c9f0_1@news1.prserv.net>
Source record: 65941

Hi All,

I need one or two new or known good 8873s for a SB230 that I am bringing back to life. Anyone out there have one of these rare beasts that they are willing to part with?

73,
Bob,
N6CM

3881. Re: WTB Eimac 8873

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-03 00:00:00 UTC
From: Jeremy Hopkins <jhopkins@toltbbs.com>
Message-ID: <3820CCA5.FB64E0DF@toltbbs.com>
Source record: 65942

i was looking for one awhile ago
i think richardson still has them $$$$$$$

Robert Friess wrote:
>
> Hi All,
>
> I need one or two new or known good 8873s for a SB230 that I am bringing
> back to life. Anyone out there have one of these rare beasts that they are
> willing to part with?
>
> 73,
> Bob,
> N6CM

--
Jeremy W. Hopkins
KC8GWH
Toledo Ohio USA
http://www.toltbbs.com/~jhop

3882. Please explain 3rd order intercept point.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-04 00:00:00 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <01bf2658$883addc0$cc874d0c@default>
Source record: 65848

Questions referenced to HF receiving systems.

Please explain 3rd order intercept point.

What is a decent 3rd order intercept point for an amp?
How about a "great" 3rd order intercept point for an amp?

Same for a mixer--decent 3rd order?
great 3rd order?

How about 3rd order intercept of a receiver?

Thanks
Mike

3883. Re: Using WWV (HF) as freq ref?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-04 00:00:00 UTC
From: k7itm@aol.com.nospam
Message-ID: <19991103192335.06564.00000539@ng-fy1.aol.com>
Source record: 65849

Bill K7NOM wrote:

>One thing you should look out for is accounting for the instability
>of your receiver.
>
>How do you know that the variations you see aren't generated by your
>receiver.

Well, the "receiver" runs from a pretty good reference oscillator. In fact, it's that reference that I want to calibrate. The phase noise of the receiver is also pretty good: I can look at another reference oscillator, and things are -100dBc at 1Hz offset, and the freq is stable for hour sorts of periods to probably one part in 10^9, maybe better.

I let it "watch" WWV on 15MHz this afternoon for a while. With one hour averaging, the sidebands were nicely symmetrical at -40dBc at 1Hz offset, and the center was pretty stable, better than 0.1Hz. Next time I have a chance, I'll do a peak-hold, and watch for drift. But in any event, either the received WWV signal drifted the same direction as the receiver, or the received signal this afternoon for a couple hours was stable to well within one part in 10^8. If I could get a clean enough signal and KNOW that the propagation was stable, I could resolve better than 4 millihertz in about six minutes. I'll see how that works against my good reference osc.

I'm curious about WWVB...at 60kHz the equipment I design at work can resolve phase differences around 1 millidegree in just a few seconds, so _IF_ I can get a good enough signal, I should be able to rather quickly calibrate to near the broadcast accuracy. Have to try it first on the Jim Creek signal, which should be quite a bit stronger than WWVB here. :-)

Cheers,
Tom

3884. WTB coil only for Jennings RJ1A relay

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-04 00:00:00 UTC
From: ny1e@server.nlbbs.com
Message-ID: <FKnDK4.oq3@server.nlbbs.com>
Source record: 65850

I Broke a lead off my relay...anyone have a bad relay with a good coil?
de Dick NY1E

3885. Re: Dial Drives

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-04 00:00:00 UTC
From: Corky <corkyNOcoSPAM@myremarq.com.invalid>
Message-ID: <0a0133f8.c4326bea@usw-ex0106-042.remarq.com>
Source record: 65851

Had no luck with Antique Electronic Supply,they sell dial pulleys and cords, I did some digging around the house and am having some good luck using some old large press fit knobs that I have glued rubber too. I then took a wood pencil and glued rubber to it, mounted all the above in a sheetmetal channel,and bam! it works good. I now just have to find some properly sized materials of good quality to make everything look as work as good as possible.
Thanks all for the replies and thanks Bob for getting for getting me to use my own noggin and hands.

* Sent from RemarQ http://www.remarq.com The Internet's Discussion Network *
The fastest and easiest way to search and participate in Usenet - Free!

3886. Re: Where Do You Buy Project Supplies?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-04 00:00:00 UTC
From: JW <jdwalton@home.com>
Message-ID: <38219A51.C35B1E40@home.com>
Source record: 65852

Add Allied-Avnet, Pioneer Standard, Mouser, and JDR Microdevices to the list.

The pots from Jameco are pretty tinny. I would avoid these. The IC's are very competitively priced at Jameco, but Digikey has a better selection.

Be advised that some of the big guys have minimum orders.

Billy Moore wrote:

> I want to start building some projects and I need to find a good source for
> basic parts like resistors, caps, pots, connectors, etc. I've done some
> searching on the web and I've found Newark (expensive), Digi-Key, Jameco,
> and a few other smaller suppliers. Jameco seems to have the best
> price/selection of the biggies. There are some smaller ones I haven't heard
> of before. Can anyone give me some recommendations? Thanks.
>
> Billy Moore
> KF4ECB

3887. Re: Where Do You Buy Project Supplies?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-04 00:00:00 UTC
From: Michael Neverdosky <mneverdosky@earthlink.net>
Message-ID: <38215996.A1498964@earthlink.net>
Source record: 65853

Try Dan's Small Parts.
He has lots of stuff and great prices.
http://www.fix.net/~jparker/dans.html

He is a small operation so doesn't have the hassles of the big guys, the
draw back is that sometimes he is a little slow when he is very busy.

michael

Billy Moore wrote:
>
> I want to start building some projects and I need to find a good source for
> basic parts like resistors, caps, pots, connectors, etc.

3888. Re: Where Do You Buy Project Supplies?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-04 00:00:00 UTC
From: kizerian@ced.utah.edu
Message-ID: <7vsff7$1rq$1@nnrp1.deja.com>
Source record: 65854

Try Mouser. Great prices. Excellent service. No minimum order. Good catalog and website at www.mouser.com.

I design radio kits for beginners and need a reliable source for inexpensive readily available parts. I usually end up ordering from Mouser for the above reasons. Highly recommended!

Bruce Kizerian kk7zz

Sent via Deja.com http://www.deja.com/
Before you buy.

3889. homebrew bfo's

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-04 00:00:00 UTC
From: weathrship@aol.com
Message-ID: <19991104103600.11361.00001016@ng-fr1.aol.com>
Source record: 65855

Hello you-all

I am now trying different types of bfo's at 455 kc IF.
I found one that is used in the 'autodyne' mode but
it is not one I am familiar with. The Hallicrafter's S120
uses it too. I would appear that the S120 uses the
same lineup as an AA5 style broadcast radio and to
get a cheap bfo, they simply switch in 470 ohms to
ground and remove the connection from the suppressor
grid of IF amp 12BA6 which normally sits at ground and
ties this to ground now thru about 2.5 K pot. It appears
that as this pot's resistance is increased, the gain goes
up for AM stations until it starts oscillating and then
adjusted for best SSB reception as it is now injecting
a carrier to beat with the sideband signal. It works, but
I cant figure out how the heck this introduces gain or
feedback into the 12BA6 thru a suppressor grid. I can
remove the ground connection to a suppressor grid without
any mods and of course the electron cloud the starts building
up around the plate/suppressor reduces the gain considerably,
the rig motorboats etc... I suspect as in references I have read
that I am probably no doubt having reverse current from the
electrons being knocked off the plate from the original high
velocity electron stream to the screen grid etc..

Can some radioman out there shed some light on this bfo
scheme for the rest of us? I cant find any reference to it in
about 8 books I managed to scrounge up, and suspect that
the scheme is cheap but doesnt perform like a real bfo.

Thanks

3890. Re: Using WWV (HF) as freq ref?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-04 00:00:00 UTC
From: Mike Lucas W5CHR <lucascom@email.msn.com>
Message-ID: <uDpMrAuJ$GA.222@cpmsnbbsa03>
Source record: 65856

K7ITM wrote
> In fact,it's that reference that I want to calibrate. The phase noise of
the receiver
>is also pretty good: I can look at another reference oscillator, and
things
>are -100dBc at 1Hz offset, and the freq is stable for hour sorts of periods
to
>probably one part in 10^9, maybe better.
>
Tom: With equipment like that, I'll bet you show up for a schedule both on
time AND on frequency! :~)

Mike Lucas W5CHR
Memphis, Tenn.

3891. Re: Specs for General Radio 874-LAL?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-04 00:00:00 UTC
From: dunnt@cco.caltech.edu
Message-ID: <dunnt-0411990834370001@dhcp-40-180.caltech.edu>
Source record: 65857

In article <8E726AD90pmarkhamnewsguycom@208.134.253.159>,
pmarkham@newsguy.com (pmarkham) wrote:

> I am looking for the technical/operating specifications for a General Radio
> 874-LAL adjustable line. Any URL pointers or phone numbers would be
> appreciated.
>
> TIA, Pete/wa4hei

Pete: I don't have a lot of info, only whats given in General Radio Catalog R.

"874-LAL Adjustable Line An air-dielectric coaxial line that can be
telescoped to change it's length. Used in matching networks, as phase
shifter, and as a variabletime-delay element. Contacts are made by
multiple-spring fingers.

Connectors are locking Type 874.

Characteristic Impedance: Not constant --approximately 50 ohms when fully
collapsed, approximately 57 ohms when fully extended.

Adjustment Range: 25 cm

Physical Length: 33 cm (minimum) to 58 cm (maximum)."

Nice to see GR was using metric in a 1963 catalog. 73 Tom WB6IQD

3892. Re: Please explain 3rd order intercept point.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-04 00:00:00 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <941739642.1612071018@news.indigo.ie>
Source record: 65858

On Thu, 04 Nov 1999, AMDX wrote:

>
>Please explain 3rd order intercept point.
> <snip>

Unfortunately, in the real world, there is no such thing
as a perfect linear amplifier. There is always some distortion
of the signal at the amplifier output. This distortion tends to increase
at the cube of the wanted signal. i.e. a 10dB (10 x power)
increase in wanted signal is likely to lead to a 30dB (1000 x power)
of the unwanted distortion products. The third order intercept is a
theoretical point, where the third order intermodulation products
(i.e. 2*F1- F2 or 2*F2 - F1) are at the same level as the
wanted signal.

>How about 3rd order intercept of a receiver?

A good receiver will have a third order intercept
of more than +30dBm (measured at the receiver input.)

A very very good receiver, such as the N6NWP front
end (QST Feb. 93,) will have a third order intercept of
more than +40dBm (10W!!!)

See the "Advanced Receiver Concepts" chapter of:
Solid State Design for the Radio Amateur by
W7ZOI and W1FB.

73, Ed. EI9GQ.

--

EI9GQ Home brew radio page:
http://www.qsl.net/ei9gq

Remove 'X' to reply

nospam AT oceanfree DOT net.

3893. Re: Where Do You Buy Project Supplies?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-04 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7vsugqdsa1@nnrp1.deja.com>
Source record: 65859

By all means: Digi-Key, Newark, Mouser, etc. Another fave of mine is Mainline in England.

You get exotica wherever you can get it. Like the fun I had tracking down some TriQuint parts in less-than-a-full-reel quantities last year.

Don't be afraid of minimum orders - use it as an excuse to arrange a group buy, or use it to stock your junkbox. Everybody needs things like .1 uF capacitors (I buy them by the hundred), and letting it be known that you have some spare MAR-6s or SBL-1s or whatever can be your ticket to instant popularity. :-)

Do you have any local possibilities? Here in Toronto I frequent outfits like Sayal and Active Surplus...erratic (sometimes chaotic) selection and availability, but decent prices.
--
Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte
Satellite: VA3SFL on AO-16, UO-22, KO-23, KO-25

Sent via Deja.com http://www.deja.com/
Before you buy.

3894. Re: Where Do You Buy Project Supplies?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-04 00:00:00 UTC
From: Mike Silva <mjsilva@jps.net>
Message-ID: <KelU3.1500$G51.382054@news.wenet.net>
Source record: 65860

Mouser's also my primary choice.

73,
Mike, KK6GM

kizerian@ced.utah.edu wrote in message <7vsff7$1rq$1@nnrp1.deja.com>...
>Try Mouser. Great prices. Excellent service. No minimum order. Good
>catalog and website at www.mouser.com.
>
>I design radio kits for beginners and need a reliable source for
>inexpensive readily available parts. I usually end up ordering from
>Mouser for the above reasons. Highly recommended!
>
>Bruce Kizerian kk7zz
>
>
>Sent via Deja.com http://www.deja.com/
>Before you buy.

3895. WTB: HEATHKIT DX100 TRANSMITTER

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-04 00:00:00 UTC
From: Greg Heath <gheath1@nycap.rr.com>
Message-ID: <akmU3.4081$JD1.266471@typhoon.nyroc.rr.com>
Source record: 65861

I am looking for a DX100 or DX100B in Good Working order in the NY or NJ area..and a reasonable price. you can reach me at 518-383-8655 in Albany, NY or by email at gheath1@nycap.rr.com Thanks Greg.

3896. Re: Please explain 3rd order intercept point.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-04 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <3821F3F7.E3892CBC@teleport.com>
Source record: 65862

Actually, second-order distortion increases as the square of the signal amplitude, third-order as the cube, fourth-order as the fourth power, and so forth. The reason that third-order distortion gets so much attention isn't that it's the only distortion product, or even the largest. The problem with third-order products is that some of the third-order mixing products (the ones Ed mentioned) of two nearby signals ends up at a frequency close to the two signals, so they can get through ordinary filters.

For example, if two signals are at 14.0 and 14.1 MHz, the second order products are 28.1 and 0.1 MHz, both easily filtered out in the early stages of a 20 meter receiver. But two of the third-order products are 13.9 and 14.2 MHz. So strong 20 meter signals can get through front-end filters and mix, producing spurious signals in or near the 20 meter band.

In a direct conversion receiver, second-order distortion is more of a problem. It can cause demodulation of nearby AM or SSB signals, or produce an audio signal which gets amplified. For example, two signals at 14.0 and 14.001 produce 0.001 MHz, which is 1 kHz -- audio. In a superhet, where the IF is at a radio frequency, this is filtered out. In a direct conversion receiver, all possible audio frequencies can't be filtered, and the problem of AM demodulation still remains.

I'm not an expert at this, so would appreciate corrections if what I said isn't accurate. I second Ed's recommendation of _Solid State Design for the Radio Amateur_ as a good source of information on this topic. Another source is Chapter 17 of the _ARRL Handbook_. You'll find both these books to be well worth their modest cost if you're interested in topics like these.

Roy Lewallen, W7EL

Eamon Skelton wrote:
>
> On Thu, 04 Nov 1999, AMDX wrote:
>
> >
> >Please explain 3rd order intercept point.
> > <snip>
>
> Unfortunately, in the real world, there is no such thing
> as a perfect linear amplifier. There is always some distortion
> of the signal at the amplifier output. This distortion tends to increase
> at the cube of the wanted signal. i.e. a 10dB (10 x power)
> increase in wanted signal is likely to lead to a 30dB (1000 x power)

> of the unwanted distortion products. The third order intercept is a
> theoretical point, where the third order intermodulation products
> (i.e. 2*F1- F2 or 2*F2 - F1) are at the same level as the
> wanted signal.
>
> >How about 3rd order intercept of a receiver?
>
> A good receiver will have a third order intercept
> of more than +30dBm (measured at the receiver input.)
>
> A very very good receiver, such as the N6NWP front
> end (QST Feb. 93,) will have a third order intercept of
> more than +40dBm (10W!!!)
>
> See the "Advanced Receiver Concepts" chapter of:
> Solid State Design for the Radio Amateur by
> W7ZOI and W1FB.
>
> 73, Ed. EI9GQ.
>
> --
>
> EI9GQ Home brew radio page:
> http://www.qsl.net/ei9gq
>
> Remove 'X' to reply
>
> nospam AT oceanfree DOT net.

3897. shipmates-beware rogradco

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-04 00:00:00 UTC
From: weathrship@aol.com
Message-ID: <19991104161746.01653.00001021@ng-bh1.aol.com>
Source record: 65863

Hello,
This is just my experience. Others of you may have had better
dealings with RogRadCo.

I got billed on Sept 23 against my credit card for a Crystal Radio Kit.

This is the 4th of November. No radio. I got excuses about 'gee, it
got sent back with "no such address", I call the guy...seems nice, but
I get the feeling he is pulling my leg. He probably meant to send it
to me, but never got around to it. I wait. I wait a week. No radio.

So I call again. Before I can get two words out, it's "hold on..." I get
put on hold. Then the line hangs up. I call back, busy...busy again,
busy again... Finally two more calls result in his answering machine.

I can tell he's real concerned about my problem.

Just thought you guys would like to know who might encounter his
website and think you might get something for your $50.00.

Sheeeesh. I'm sorry if this is whining to some of you, but if we
let people do this, what's the point in having this homebrew newgroup?

We have to get our parts and kits and info on this stuff from somewhere.
I found his website from a homebrew/kit site. In 10 years of dealing
here and meeting a bunch of cool people and not having any problems
buying and selling and exchanging stories and helping others, I finally
got stiffed. I guess I'm lucky. But I had more faith in people. I'll
have to be gnarly and suspicious now. I hate that.

Some people's kids, huh?

Your radio pal, Tony

3898. O/SCOPE FOR SALE

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-04 00:00:00 UTC
From: tekdiver@aol.com
Message-ID: <19991104181649.08243.00000787@ng-fc1.aol.com>
Source record: 65864

I ahve a NEW tenma 20mghz DUAL TRACE with 10x probes.
Used 5 times to calibrate a sonar unit. have manual and probes.
$300 takes it. PERFECT CONDITION.
can ping cover of man. or spec sheet.

tekdiver@aol.com

3899. Re: Using WWV (HF) as freq ref?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-04 00:00:00 UTC
From: William Janssen <billj@calweb.com>
Message-ID: <38223C56.5D3FBD59@calweb.com>
Source record: 65865

Tom
I didn't save your address. Send me email so we can discuss
a paper that you might be interested in.

It Is;
Propagation Effects On Radio Transmissions
by
James L. Jespersen NIST, Boulder

Bill K7NOM billj@calweb.com

3900. Sources for tube set components?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-04 00:00:00 UTC
From: "Randall D. DuCharme" <randyd@tcainternet.com>
Message-ID: <38226BB9.7DAE5857@tcainternet.com>
Source record: 65866

Greetings,

I'm looking for sources for old tube set components. I realize they're getting hard to come by but know that there are places that still carry some items. Can anyone assist me in finding these companies?

Many thanks

Randy

3901. Sensitive power detectors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-04 00:00:00 UTC
From: Peter Bolch <nc-bolchpe@netcologne.de>
Message-ID: <7vtr1u$9th$1@news.netcologne.de>
Source record: 65867

Hi,

how do the sensitive (power level down to - 50 dBm) power sensor heads work in principle? Just one diode? If so, how is the temperature compensation done? Or a balancing technique?

Peter

3902. Re: Sources for tube set components?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-04 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <1VuU3.45350$5W2.1026647@news6.giganews.com>
Source record: 65868

What are you seeking? I have lots of parts that might be useful, including tubes.

73, Bob K6DDX

3903. Re: Tube Amp help sought - I smell a project coming on

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-04 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <2VuU3.45351$5W2.1026647@news6.giganews.com>
Source record: 65869

Those tubes were never intended for RF amplifier service but they would probably work okay as long as you don't try too high a frequency.

Use any circuit designed for 6146 tubes and you will be pretty close. See older ARRL handbooks. (Connect the suppressor grid to the cathode.)

73, Bob K6DDX

3904. Re: Where Do You Buy Project Supplies?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-05 00:00:00 UTC
From: weathrship@aol.com
Message-ID: <19991105173406.11862.00001569@ng-fe1.aol.com>
Source record: 65743

Dan's small parts and kits is one of my favourites when I'm not messing with valves and condensers and aerials.

For modern projects, he has all the BJT's, IC's, discrete and active mixers, kits, meters...sheesh you name it, and he is a real asset to us homebrewers...a good businessman with some super deals.

Your pal, Tony

3905. Re: Where Do You Buy Project Supplies?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-05 00:00:00 UTC
From: Billy Moore <billymoore@nospam.mindspring.com>
Message-ID: <7vvrr2$fe3$1@nntp8.atl.mindspring.net>
Source record: 65744

marsgal42@hotmail.com wrote in message <7vsugqdsa1@nnrp1.deja.com>...
>Do you have any local possibilities? Here in Toronto I frequent
>outfits like Sayal and Active Surplus...erratic (sometimes
>chaotic) selection and availability, but decent prices.

We have Radio Shhhh... Radio Shhhh.... Radio Shhhh.... I can't say it.
You know, that Tandy company. We also have a couple of small shops like
Radio Electronics that caters to local businesses, but they are expensive.
I haven't been able to find any surplus shops around here. Does anyone know
of a surplus shop in the Northeast Atlanta area?

Billy Moore

3906. Re: High current JFETS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-05 00:00:00 UTC
From: Michael Masterson <mmastersonkdi@worldnet.att.net>
Message-ID: <800095$c50$1@bgtnsc02.worldnet.att.net>
Source record: 65745

Mike:
I ran into that problem in a Big way- back in around 1989 I was using
CP640's
in a production high-dynamic range IF subsystems and Crystalonics went
bust.
But try a set of four U310's in parallel (grounded-gate operation) and the
results were very good.
Mike, WN2A wn2a@qsl.net

Mike Newman wrote in message <3817caa3.4523143@news.clear.net.nz>...
>Whatever happened to those high current JFETS that were around in the
>early 80's and used in high dynamic range rf applications?
>
> ie CP640, CP650 etc by Teledyne Crystalonics.
> P 8001, P 8002 by TI (in Germany I think)
>
>They were used in common gate mode, specified as low-noise (approx 2
>dB @ 50 Mhz), usable to 300 Mhz, matched to 50 ohm with VSWR < 1.5:1,
>with Idss up to 1 amp or so, and a high dynamic range.
>
>What are the best alternative devices marketed today?
>Are there any similar devices produced today?
>
>MikeN zl1bnb
>
>

3907. Re: Battery Backup for Astron Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-05 00:00:00 UTC
From: "George T. Baker" <w5yr@swbell.net>
Message-ID: <3823B53E.822DC0B1@swbell.net>
Source record: 65746

I am using that exact arrangement. I connect the battery to the power supply through a fuse. The fuse serves to prevent discharging the battery - probably catastrophically! - should the power supply crowbar for any reason. The power supply output is a constant 13 volts which only trickle charges the battery. Turning the power supply off does not discharge the battery. This arrangement has been in use for a couple of years now. I have not found it necessary to switch the battery out of the circuit for any reason.

72/73, George
Fairview, TX 30 mi NE Dallas in Collin county
Amateur Radio W5YR, in the 54th year and it just keeps getting better!
R/C since 1964 - AMA 98452 RVing since 1972

"Robert J. Dellicker" wrote:
>
> I'd like to use a battery that I have for backup of a system which is
> powered by an Astron RS-20M power supply. The battery is a sealed lead acid
> 24Ah type NP24-12FR from Yuasa-Exide.
>
> The supply is overkill for the equipment running. (500mA avg, 4A peak)
>
> My question is can I hook the battery straight to the power supply or should
> I have a disconnect circuit that switches in when I loose power or the
> battery needs to be topped off and switches out when power is on and the
> battery is fully charged?
>
> If I need such a circuit where would I find schematics?
>
> Please reply directly by email since I usually only browse the group when
> I'm trying not to burn down my house ;-)
>
> --
> Bob Dellicker KB3CRH
> kb3crh@arrl.net
> http://home.ptd.net/~rjd/

3908. Re: GPS modules???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-05 00:00:00 UTC
From: Mark Fraser <mfraser@helix.net>
Message-ID: <3823B7AC.C4F336B0@helix.net>
Source record: 65747

http://maven.com
Unfortunately, they are all sold out! On the very day I was gonna
buy a couple! The early bird and all that.... / mark

Matt Krick wrote:
>
> I rember reading about GPS receiver modules that were on sale on the
> internet for about $20, there only out put was serial data to be
> interfaced to a computer, does anyone know a address to the page that
> was selling these? I seem to have misplaced it.
>
> Thanx for any help.
> --Matt

3909. ### SINAD Meter Homebrew???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-05 00:00:00 UTC
From: wb4lnm@aol.com
Message-ID: <19991104194851.19609.00001143@ng-fn1.aol.com>
Source record: 65870

I don't think I've ever seen an article to build a homebrew SINAD meter for FM receiver tune up. Seems like it would be an easy thing to do - it apparently just needs a detector (AC to DC at audio ranges) to drive an analog meter, plus a notch filter at 1000 Hz. Seems like an idea project for a couple of op-amps. The least expensive commercial units I have seen run $300 bucks or so, which make it a bit ridiculous when you only need to use on occasionally. Anyone see any designs for a simple unit?

73

John...
WB4LNM

John H. Klingelhoeffer
WB4LNMxx@aol.com (remove xx for real address)

3910. Tube Amp help sought - I smell a project coming on

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-05 00:00:00 UTC
From: VE3YES <enzo@ibm.net>
Message-ID: <3822310B.863FA74D@ibm.net>
Source record: 65871

Does anyone have any experience building a linear amplifier with EL34 tubes? They have the control, screen and suppressor grid all broken out individually. In an audio circuit a pair of them are often good for 45-55Watts. I have a box of them, several 450V power transformers, 450V electrolytics and several high-voltage ceramic adjustable capacitors. I think there is a project here!

I have much experience in designing and building audio tube amplifiers but weak in the RF end.

Any advice appreciated!
Andy

3911. Battery Backup for Astron Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-05 00:00:00 UTC
From: "Robert J. Dellicker" <rjd@ptd.net>
Message-ID: <0jsU3.565$9L.27024@nnrp1.ptd.net>
Source record: 65872

I'd like to use a battery that I have for backup of a system which is powered by an Astron RS-20M power supply. The battery is a sealed lead acid 24Ah type NP24-12FR from Yuasa-Exide.

The supply is overkill for the equipment running. (500mA avg, 4A peak)

My question is can I hook the battery straight to the power supply or should I have a disconnect circuit that switches in when I loose power or the battery needs to be topped off and switches out when power is on and the battery is fully charged?

If I need such a circuit where would I find schematics?

Please reply directly by email since I usually only browse the group when I'm trying not to burn down my house ;-)

--
Bob Dellicker KB3CRH
kb3crh@arrl.net
http://home.ptd.net/~rjd/

3912. GPS modules???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-05 00:00:00 UTC
From: Matt Krick <dcflux@yahoo.com>
Message-ID: <38226848.F68C50B@yahoo.com>
Source record: 65873

I rember reading about GPS receiver modules that were on sale on the internet for about $20, there only out put was serial data to be interfaced to a computer, does anyone know a address to the page that was selling these? I seem to have misplaced it.

Thanx for any help.
--Matt

3913. Re: Using WWV (HF) as freq ref?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-05 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <38227544.6F63EBD4@corecomm.net>
Source record: 65874

William Janssen wrote:
> Tom
> I didn't save your address. Send me email so we can discuss
> a paper that you might be interested in.
>
> It Is;
> Propagation Effects On Radio Transmissions

<aol> me too! </aol>

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+

3914. Re: GPS modules???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-05 00:00:00 UTC
From: Roland Cordesses <cordesse@opgc.univ-bpclermont.fr>
Message-ID: <382281FC.5F7FA99C@opgc.univ-bpclermont.fr>
Source record: 65875

Here is the site where these modules were advertised :

http://mavin.com/slickitems.html

73's

Roland Cordesses / F2DC

==========
Matt Krick a ï¿½crit :
>
> I rember reading about GPS receiver modules that were on sale on the
> internet for about $20, there only out put was serial data to be
> interfaced to a computer, does anyone know a address to the page that
> was selling these? I seem to have misplaced it.
>
> Thanx for any help.
> --Matt

3915. Re: Battery Backup for Astron Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-05 00:00:00 UTC
From: hrbcrb@aol.comSTAYAWAY
Message-ID: <19991105021803.01871.00000964@ng-cp1.aol.com>
Source record: 65876

Hello Bob

The answer is yes, you can use your battery and power supply together. There are however a few precautions - you want to put a series diode between the PS and Battery. Since you state your load does not exceed 4 amps I would suggest a diode with a current rating of aproximately 10 amps (bigger/larger is okay too).

The diode will protect the PS from discharging the battery when it is turned off, or in the event of a 115Vac power failure. By the way, it has been my experience that Yuasa makes one of the best sealed lead acid batteries on the market today. Egle Picher is also an excellent brand, but hard to find.

One other caution on sealed lead acid batteries, as the name implies they are sealed, however if the internal pressure builds up they will vent - from memory Yuasa batteries vent when the pressure differential reaches 5-7PSI. The way to avoid any internal pressure build up in the battery is too limit the charge current to less than 25% of rated capacity. In the case of your 24AH unit, that would be 6 amps. I'm conservative and use 10 to 15% (in your case that would be 2.4 to 3.6 amps). You can control the current by adjusting the voltage on your PS and watching the current meter. If your power supply has a fixed output voltage a one ohm (5 to 10 watt) resistor in series with the diode would limit the current, a toggle switch could be wired across the switch and when the current drops to an acceptable level the switch would short out the resistor. 13.6Vdc is a good float voltage for lead acid batteries. You may find a resistor helpful even if your supply voltage is adjustable as it will be easier to set and limit the charging current. There will be a voltage drop across the diode you are going to install between the PS and Batt, typical voltage for a silicone diode is 0.7 volts. You will have to adjust the PS voltage to aproximately 14.3Vdc for the battery to see 13.6.

I'm not sure about the diode, but the power resistor, switch, small project box, wire and lugs for the battery and PS should be available at Radio Shack.

Hope this helps, regards, Hugh KF6HHS
Retired, now life moves at my pace.
please note spam filter

3916. Re: Using WWV (HF) as freq ref?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-05 00:00:00 UTC
From: k7itm@aol.com.nospam
Message-ID: <19991105032949.02514.00001115@ng-cr1.aol.com>
Source record: 65877

Mike Lucas W5CHR wrote:

>Tom: With equipment like that, I'll bet you show up for
>a schedule both on time AND on frequency! :~)
>

Hahaha! Well, actually my equipment shows up just fine, but I'm such a terrible slob about remembering skeds that you shouldn't plan on ME running on as tight a schedule as the equipment! ;-)

Cheers,
Tom

3917. Re: GPS modules???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-05 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <38229B3E.2573F850@corecomm.net>
Source record: 65878

Roland Cordesses wrote:
> http://mavin.com/slickitems.html

Damn! Sold out. I knew I shoulda got that check in the mail sooner.

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+

3918. CB Web Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-05 00:00:00 UTC
From: jknope@aol.com
Message-ID: <19991105043050.02718.00001010@ng-ce1.aol.com>
Source record: 65879
Body handling: HTML body converted to readable text

Check out Big Mac's CB
Web Page
http://www.angelfire.com/fl/knope/cb.html

3919. Re: Where Do You Buy Project Supplies?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-05 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <Gh6+NLA1tol4Ew7P@ifwtech.demon.co.uk>
Source record: 65880

Laura Halliday wrote:
>
>Don't be afraid of minimum orders - use it as an excuse to
>arrange a group buy, or use it to stock your junkbox. Everybody
>needs things like .1 uF capacitors (I buy them by the hundred),
>and letting it be known that you have some spare MAR-6s or
>SBL-1s or whatever can be your ticket to instant popularity. :-)
>
>Do you have any local possibilities? Here in Toronto I frequent
>outfits like Sayal and Active Surplus...erratic (sometimes
>chaotic) selection and availability, but decent prices.

Two very good points!

You can't really get going as an experimenter until you have a stock of basic components, such as small resistors in all common values, small ceramic capacitors in 1nF, 10nF and 100nF, and common semiconductors such as 1N4148, 1N4007 and your favorite transistors and FETs. If you're always having to stop to order common parts such as those, your project will never take off. So, as Laura says, don't be afraid to buy more than you need and take the rest into stock.

Don't call it junk: think of it as stocks of good parts for future projects!

Also, you don't have to buy everything at new catalog prices. You pay the catalog distributors extra so that they can continue to keep every component you might ever need (and that's a fair deal). Surplus companies don't do that, so you pay less for whatever they happen to have. If you're always on the lookout for useful parts to take into stock, you can often find bargains at ridiculous prices.

For example, I'll never need to buy another 1N4003 again (or 1N4002 or 1N4001)... if only I could remember where I stored the reel...

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

3920. HBR-8-11 circuit Wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-05 00:00:00 UTC
From: "aaa@bbb.com" <aaa@bbb.com>
Message-ID: <3822B3E3.127DBEF2@bbb.com>
Source record: 65881

hi,

I am interested in building an home brew receiver HBR8/11 presented
on the web page http://www.inetport.com/~talen/

Does anyone have the circuit and coil winding details for these
or has the OLD QST articles mentioned there ?

These seem like interesting receivers to build, and am currently
thinking of building something similar using 4 * 6u8 tubes

tube 1 = 6u8 = Mixer and oscillator , converts to ist IF 1700 KHz,
with 2 tuned circuit filter for front end
may use the triode as a mixer and the pentode as the HFO to increase
dynamic range.
AGC may be implemented with In4007 diode attenuator

tube 2 = 6u8 = mixer oscillator converts from 1700 Khz to 100 Khz,
uses 3-4 tuned circuit filter built using T50-2 toroids at 1700 Khz.
AGC may be implemented with In4007 diode attenuator

tube3: = 6u8 = IF amplifier + audio amplifier, uses 4 toroids (1/2 88
mH telephone loading coils= 22mH each) for selectivity at 100 Khz, the
triode is a simple audio amp which can drive Hi-Z headphones
AGC may be implemented with In4007 diode attenuator

tube 4: 6u8 : grid (or Plate) detector and BFO for SSB

This should have about 40 db image rejection @ 10 -15 Mhz, and pretty
good selectivity
and sensitivity.

If one could get those 6az8 tubes for a resonable price, they would be
ideal to have as they are remote cutoff and can have AGC applied to
them. Also the 6u9 is an excellent tube with the pentode having gm =
12mMho and being Remote cutoff, but they need impossible to find 10 pin
decal sockets.

The audio statges may also have the selectojet audio filter to provide
some audio filtering
using 2 12ax7 tubes.

The speaker amp can be anything using a 6aq5 etc and so can the be PSU.

any ideas would be very helpful.

73s and thanks

singhpk99@yahoo.com

3921. Re: Need very low phase noise XO at 110 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-05 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <382218c4.628657056@news.online.no>
Source record: 65882

Believe it was shown in Ham-Radio - 1977(?). I scaled it up to 12MHz
xtals for use with VHF/UHF beacons since 1978 (1000pF and 33 ohm to
ground), 0.2V RMS O/P, and still listening on 144/432/1296MHz the
output sounds extremely clean, much better than any other oscillators
I've listened to. Used with 2N2222, BC547 and BF199 transistors.

73
Jan-Martin LA8AK

On Wed, 3 Nov 1999 23:09:33 -0800, "Jim Pennell" <spam@nospam.com>
wrote:

> Looking in the recent ARRL handbook, I found a low noise 5 MHz oscillator
>design that appears to use, and improve on, the ideas Ulrich Rohde mentioned
>in the Nov 1977 article.
>
> This same technique which uses the crystal as both the frequency
>determining element and a filter for the output signal was used in a recent
>article in QEX regarding phase noise measurement methods. This design was
>for a 50 MHz crystal, although the same method may be applied at 110 MHz
>just as easily.
>
> The QEX was this year, but I do not have the issue here in front of me.
>
> There was also a design for low phase noise 125 MHz oscillator as an
>APPNOTE to go along with the AD9850 DDS chip. It can be found on the
>Analog Devices website:
>
>
> http://www.analog.com/techsupt/application_notes/an419.pdf
>
>
> Jim
>
>
>
>
>--
>-----
>
>Anti-spam email address.....
>
>
>jpennell
>------------

> at ix.netcom.com
>
>
>
>
>

3922. Re: Connect to the Internet at no cost !!!! 383

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-05 00:00:00 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3822F12B.BADC528B@IEEE.org>
Source record: 65883
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.packet,rec.radio.amateur.policy

jqsirc@isyours.com wrote:
> For every hour I am surfing the web, they will pay me 60 cents.

What cheapskates. Intel paid me $40 an hour to surf the web.
--
73, Cecil, W6RCA http://www.bigfoot.com/~w6rca

3923. Re: Sensitive power detectors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-05 00:00:00 UTC
From: n7ws@arrl.net
Message-ID: <3822f607.153484985@news.azstarnet.com>
Source record: 65884

On Thu, 4 Nov 1999 20:14:14 +0100, "Peter Bolch" <nc-bolchpe@netcologne.de>
wrote:

>Hi,
>
>how do the sensitive (power level down to - 50 dBm) power sensor heads work
>in principle? Just one diode? If so, how is the temperature compensation
>done? Or a balancing technique?
>
>
>Peter
>
>

Go to: http://www.tm.agilent.com/tmo/Notes/English/5965-6630E.html

Download this document and you have all you need to know about power meters and
power measurements.

Wes N7WS

3924. Re: Battery Backup for Astron Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-05 00:00:00 UTC
From: mcalhoun@ksu.edu
Message-ID: <7vv0k2$t4l@unix1.cc.ksu.edu>
Source record: 65885

hrbcrb@aol.comSTAYAWAY (KF6HHS) writes:
>The answer is yes, you can use your battery and power supply together. There
>are however a few precautions - you want to put a series diode between the PS
>....[snip]....

>One other caution on sealed lead acid batteries, as the name implies they are
>....[snip]....

Don't forget one effect of a looooonnnnng AC-power outage:
How's the Astron going to behave when the AC comes back on
and "sees" a really-badly-discharged battery as a load?

--Myron.
--
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (Professor Emeritus) "Barbershop" tenor. CDL(PTX) W0PBV (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

3925. HELP! Tube Guru's Advice Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-05 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <382312CB.116D34B0@midwestmicro-tek.com>
Source record: 65886

About 4 months ago or so I posted a letter to solicit help on a 12BY7/1625 75 watt transmitter that I was building. I was anticipating passing my Novice exam and was building my first transmitter and reciever. I got a lot of good advice from a lot of good people. I'd like to thank Mike Silva, Doug Smith, Blake, Michael Tracy at ARRL and especially Jim N2EY for all of thier help and also the rest of you guys who contributed as well. And Bill N2CQR for all the help getting my MMX reciever on line.

It took a while and in the mean time I got caught up with other things but I finaly sat down with all of the posted advice and e-mails and GOT THE DARN THING WORKING! Not quite as well as I'd like but I used all the advice I got and I finally got the transmitter working fairly well. I'm getting about 30 watts output on 80m and about 35 watts output on 40m. It's a good, clear signal with very little (thanks to the transmatch) harmonics. My SWR shows a maximum of about 1.2 on the extream edges of my tuneing range. It's not the 50 watts that I was expecting but I can get on the air with it. Turns out that my final coils in the pi network where a bit off and needed better shielding. I shielded everything and now I'm getting a much stronger and clearer signal.

I got my ticket 2 months ago but I want to practice my code a bit more before I go on the air. I'm in an aluminum sided apartment house and because of how my antenna is situated most of my signal will be going North and West so if any one is interested I'll be at operating somewhere at 3.71MHz and 7.11MHz in a couple of weeks.

TNX!

Rick, KC0GIX

3926. Re: GPS Receiver Kit - Ham-Homebrew Digest V99 #287

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-05 00:00:00 UTC
From: hbrown@voicenet.COM
Message-ID: <3.0.32.19991105134951.006edb5c@popmail.voicenet.com>
Source record: 65887
Body handling: HTML body converted to readable text

The GPS receiver boards are gone. They are sold out. I checked with them Tuesday.

The company selling them was Electro Mavin located in Compton CA. Their web page is at: http://mavin.com/

You can find out what you and I missed on the page. There was mod information available on referenced sites for reading data via a serial port. The antenna was included too.

If anyone has a spare, please contact me.

73, Harry, W3IIT

hbrown@voicenet.com

Visit the Mt. Airy VHF Radio Club at:

0000,0000,fefehttp://www.ij.net/packrats/

Check the June 1999 VHF Contest Photos at the Web
site

Info on VHF/Microwave Nets, Beacons & Subscription to Cheesebits

Beacons at 50.080, 144.284, 222.065, 432.295, 903.071,
1,296.251, 2,304.037, 3456.220, 5,760.200 and 10,368.200 MHz from FM29JW

3927. Re: Battery Backup for Astron Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-05 00:00:00 UTC
From: denton sprague <denton@oregontrail.net>
Message-ID: <38233F4E.21D9B3DA@oregontrail.net>
Source record: 65888

Install a blocking diode mounted on a heatsink between the b+ lead of the power supply and the battery. Hook your rig directly across the battery outputs. The blocking diode should be good for about 50 amps continous. The reason for the diode is to keep the battery b+ feeding current back into the power supply when the power goes out.
Keep an eye out on the battery's electrolyte level, if the water keeps evaporating, lower the power supply voltage to about 13.3 vdc output or so. We use this scheme on our local repeater and have good luck with it.

"Robert J. Dellicker" wrote:

> I'd like to use a battery that I have for backup of a system which is
> powered by an Astron RS-20M power supply. The battery is a sealed lead acid
> 24Ah type NP24-12FR from Yuasa-Exide.
>
> The supply is overkill for the equipment running. (500mA avg, 4A peak)
>
> My question is can I hook the battery straight to the power supply or should
> I have a disconnect circuit that switches in when I loose power or the
> battery needs to be topped off and switches out when power is on and the
> battery is fully charged?
>
> If I need such a circuit where would I find schematics?
>
> Please reply directly by email since I usually only browse the group when
> I'm trying not to burn down my house ;-)
>
> --
> Bob Dellicker KB3CRH
> kb3crh@arrl.net
> http://home.ptd.net/~rjd/

3928. Re: Tayloe mixer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-05 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <382344C9.6065BDF9@corecomm.net>
Source record: 65889

Tom Bruhns wrote:
> I'll have to play with it a bit, but I think the sensitivity can be
> somewhat better than 11uV. Maybe Harold Johnson will chime in with some
> info...I think he's played with them a little.

Some random thoughts: I would think the output noise from the detector would be a problem when dealing at microvolt input levels. Tayloe appears to be hanging a couple of op amps off the "outputs"; I wonder how not only noise performance, but nonlinearities in those op amps will impact performance. Also, there's got to be some sort of AGC in there; if he just took the output from the 11 uV signal and amplified hell out of it, the audio would be pretty distorted for a 1 mV signal and beyond all recognition for that 4V signal. The AGC itself has to introduce some noise and distortion.

I'm thinking teflon caps here, maybe polypropylene. I think leakage and soak

It goes without saying that it'll be better in all respects if those op amps he's using are CLC425 instead of 741. :-) Undoubtedly, considering the nifty new analog mux he's using, he found some modern amps.

Any good on-line references to the theory behind switched-capacitor filters? Everything I can find, including the material in AoE[1], grabs a chip and says, "look, nifty! magic!"

[1] Not on-line, but someone's gonna point me there anyway. I went. Besides, AoE isn't fundamentally a theory book, nor meant to be.
--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

3929. Re: Battery Backup for Astron Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-05 00:00:00 UTC
From: noone@nowhere.com
Message-ID: <38223db2.321126152@news.squonk.net>
Source record: 65890

On 5 Nov 1999 10:28:50 -0600, mcalhoun@ksu.edu (Myron A Calhoun)
wrote:

>hrbcrb@aol.comSTAYAWAY (KF6HHS) writes:
>>The answer is yes, you can use your battery and power supply together. There
>>are however a few precautions - you want to put a series diode between the PS
>>....[snip]....
>
>>One other caution on sealed lead acid batteries, as the name implies they are
>>....[snip]....
>
>Don't forget one effect of a looooonnnnng AC-power outage:
>How's the Astron going to behave when the AC comes back on
>and "sees" a really-badly-discharged battery as a load?
>
>--Myron.

Good point. I use a large 12v bulb, the resistance goes down as the
current goes down, so it charges faster than a linear resistor would,
yet still serves to limit the maximum current from the supply.

Another concern is to not run the battery much below 12v or you'll
harm it. Small relay triggered by a zener/NPN combination would do
the trick, and only use a few milliamps when activated.

3930. Re: HELP! Tube Guru's Advice Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-05 00:00:00 UTC
From: weathrship@aol.com
Message-ID: <19991105170625.11862.00001554@ng-fe1.aol.com>
Source record: 65891

Yes!

See you guys? It can be done.
And I'll bet Rick had a blast!!!

Thanks for posting your story here,
and I thank those other guys too for
adding and assisting. We all learned
something. I'm working with some
TRF and Superhet sets using valves
right now. I've got a 1625 or two in one
of my junk drawers and now, I'm excited
about the prospect of starting on that!!

Your radio pal, Tony

3931. Tube radios- AM, Shortwave for you beginners here

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-05 00:00:00 UTC
From: weathrship@aol.com
Message-ID: <19991105172958.11862.00001568@ng-fe1.aol.com>
Source record: 65892

Hey you guys... I finally got my act together. I had so much fun
scratch building AM and Shortwave tube radios that I am about to
be able to sell them for those of you interested and dont want to
hassle finding the right parts. I found a way to handcraft the IF,
RF and Osc coils so you dont have to figure out how to nibble
away at aluminum, or put your chassis thru a milling machine to
mount the commercial cans. The IF coils are pre-tuned and adjusted
to give as much selectivity and fidelity as I can get from hand-crafting
them. They aren't as selective as commercial cans, I figure 20kc
bandwidth for AM is good, I am getting more than that, but these
radios do a pretty good job especially as a starting platform for teaching
radio basics without confusing people about depletions regions and stuff
right from the git-go and scaring them off. The only alignment is to the
local oscillator for setting the dial. I am offering experimenters the
handcrafted bobbins too so they can wind their own if they want.
I put these things in clear, clear blue and clear red acrylic and safe
enclosed cases. With instructions like heathkit, and how to build a
cheap isolation xformer, winding info, etc. If you are tired of just taking
parts like BJT's, inductors, resistors and stuffing IC's onto pc boards
without any idea why you are doing it, or how the circuit works, see
my website and have some real radio fun!

See: http://hometown.aol.com/weathrship/myhomepage/business.html

I thought about doing this just for the homebrew guys here at cost...but
it's a real pain stooping over and winding 412 turns of #30 magnet wire
4 times in a row and only make my money back, ha ha. If I can do this
on the side and pay taxes and come up with a few bucks to buy more
radios without my wife yelling at me (she's pretty loud) for spending money
on my goofy geeky hobby, then so much the better.

See ya,
Your radio pal, Tony

3932. WTD Hallicrafter SX100 Mk1A manual

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-06 00:00:00 UTC
From: vank66@aol.com
Message-ID: <19991105214227.00964.00001786@ng-fu1.aol.com>
Source record: 65748

I need a manual and\or alignment instructions for a hallicrafter SX-100 receiver. Any leads greatly appreciated .Thanks in advance Van K6QGH

3933. Re: Tayloe mixer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-06 00:00:00 UTC
From: k7itm@aol.com.nospam
Message-ID: <19991105232358.04216.00002106@ng-ff1.aol.com>
Source record: 65749

Cliff Sharp wrote, re the Tayloe mixer:

>Some random thoughts: I would think the output noise from the detector
>would be a problem when dealing at microvolt input levels. Tayloe appears
>to be hanging a couple of op amps off the "outputs"; I wonder how not
>only noise performance, but nonlinearities in those op amps will impact
>performance. Also, there's got to be some sort of AGC in there; if he
>just took the output from the 11 uV signal and amplified hell out of it,
>the audio would be pretty distorted for a 1 mV signal and beyond all
>recognition for that 4V signal. The AGC itself has to introduce some
>noise and distortion.

Well...I think the op amps should be low distortion, but they don't need to be particularly fast. The signals on the capacitors should not be changing very quickly: the capacitors are supposed to act as a very serious lowpass filter, and indeed must be chosen to set a corner frequency around 3kHz, if that's the bandwidth you want. Seems like there's no reason to not put in additional rolloff going into the op amps, if the low 6dB/octave rolloff of the single lowpass is a problem.

You don't HAVE to have AGC, though it might be a nice convenience, just as on other receivers. (Actually, to keep the I and Q channels balanced, I'd prefer to NOT use AGC and just have wide dynamic range in the amps.) Good audio op amps are capable of pretty wide dynamic range: run on +/-15V supplies, they can output over 5 volts RMS. If the gain is *10 (20dB), and the input-referred noise is 5 nanovolts/rtHz, then the output noise from the amplifier is roughly 300 nanovolts in the 3kHz bandwidth, or more than 140dB below full output. With an amp like the AD797, or the Burr-Brown OPA627, the distortion products can also be on the order of 140dB below a 5-volt output, if you're careful with the design. (Real fun to try to measure that at home.) Even "garden-variety" audio amps like the NE5532 should be pretty decent. Of course, if you have interferring signals within the audio passband, your ears may have some difficulty separating a weak desired signal from the strong interferring signal.
>
>I'm thinking teflon caps here, maybe polypropylene. I think leakage and
>soak

Seems like no reason to not use polyprops...select a low-inductance design. I've never found a reasonable source for Teflon caps but would like to know of any. Certainly nonlinearities in the switches themselves would be worse than most of the capacitor effects...but I would be really careful to avoid HF resonances in the caps. I'd try surface mount NPO ceramics if the capacitance needed wasn't so large.

>
>It goes without saying that it'll be better in all respects if those op
>amps he's using are CLC425 instead of 741. :-) Undoubtedly, considering
>the nifty new analog mux he's using, he found some modern amps.
>
>Any good on-line references to the theory behind switched-capacitor
>filters? Everything I can find, including the material in AoE[1], grabs a
>chip and says, "look, nifty! magic!"

Dunno about online refs. If you assume perfect switches, I don't think it's too hard to see what's going on: act like a lowpass filter for 1/4 cycle, then "hold" since the input is disconnected. If the switching is 'zactly synchronous with an input sinusoid, the value on the cap will be the average of the voltage during that time, eventually, plus a little ripple at the input freq. One could write the equations and solve them, or let Spice do it. -- One problem looking for refs is that there are several very distinct things that folk call "switched capacitor filters." Be careful to not get the wrong topology.

Cheers,
Tom

3934. Re: GPS Receiver Kit - Ham-Homebrew Digest V99 #287

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-06 00:00:00 UTC
From: Matt Krick <dcflux@yahoo.com>
Message-ID: <3823BF5A.EABFEEC3@yahoo.com>
Source record: 65750

> The GPS receiver boards are gone. They are sold out. I checked with them Tuesday.
> If anyone has a spare, please contact me.
>

Please Contact me if anyone comes across more. willing to pay 40 bux or a little bit more if you don't want to pay shipping, Want to use the unit to set the time on my repeater automatic

--Matt, KC7GSA
DCFluX@yahoo.com

3935. Re: homebrew bfo's

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-06 00:00:00 UTC
From: blackm00@cam.org
Message-ID: <blackm00-0611990033020001@dialup-633.hip.cam.org>
Source record: 65751

In article <19991104103600.11361.00001016@ng-fr1.aol.com>,
weathrship@aol.com (Weathrship) wrote:

> Hello you-all
>
> I am now trying different types of bfo's at 455 kc IF.
> I found one that is used in the 'autodyne' mode but
> it is not one I am familiar with. The Hallicrafter's S120
> uses it too. I would appear that the S120 uses the
> same lineup as an AA5 style broadcast radio and to
> get a cheap bfo, they simply switch in 470 ohms to
> ground and remove the connection from the suppressor
> grid of IF amp 12BA6 which normally sits at ground and
> ties this to ground now thru about 2.5 K pot. It appears
> that as this pot's resistance is increased, the gain goes
> up for AM stations until it starts oscillating and then
> adjusted for best SSB reception as it is now injecting
> a carrier to beat with the sideband signal. It works, but
> I cant figure out how the heck this introduces gain or
> feedback into the 12BA6 thru a suppressor grid. I can
> remove the ground connection to a suppressor grid without
> any mods and of course the electron cloud the starts building
> up around the plate/suppressor reduces the gain considerably,
> the rig motorboats etc... I suspect as in references I have read
> that I am probably no doubt having reverse current from the
> electrons being knocked off the plate from the original high
> velocity electron stream to the screen grid etc..
>
> Can some radioman out there shed some light on this bfo
> scheme for the rest of us? I cant find any reference to it in
> about 8 books I managed to scrounge up, and suspect that
> the scheme is cheap but doesnt perform like a real bfo.
>
> Thanks

It's regeneration, just like in a regenerative receiver/detector.

Feed some of the signal back into the input. The IF stage is then
on the verge of oscillation. Selectivity increases, just as with
a regen receiver or a Q-Multiplier. Increase things enough, and
the stage goes into oscillation, providing a beat signal at the IF.

The advantage of this is that it doubles or triples the use of the IF
amplifier, and requires no extra tubes. A significant something in
a cheap receiver.

The disadvantage is that it doesn't give good skirt selectivity, and once the tube is in oscillation, selectivity suffers. Also, because the tube is both amplifying and oscillating, it must affect strong signal handling of that IF stage. And of course, since you aren't using a product detector, the receiver suffers as much as any receiver used for CW and SSB that lacks one.

I don't kow enough about tube operation to properly explain the circuit. But I'm wondering if the schematic doesn't show something? Old ARRL Handbooks had a bit about putting IF amplifiers into regeneration for selectivity, and they mention a small capacitance from plate to grid, usually in the form of a "gimmick" capacitor, just two pieces of insulated wire twisted together, or even just by bringing a piece of wire connected to the plate near the grid. That perhaps isn't shown on the schematic, but exists in the receiver.

You don't need MORE gain to put a stage into oscillation. You need enough feedback, and then controlling the gain determines whether the stage is on the verge of oscillation, ie selective, or actually oscillating.

The June 1971 issue of QST has an article about tunring an All American Five into a shortwave receiver. After adding an isolation transformer, it puts a transistor converter ahead of it, puts the IF into regeneration (with a piece of wire providing feedback, and a pot in the cathode to control regeneration), but it uses a separate transistor BFO.

Somewhere I thought I had the circuit used in some other cheap Hallicrafters receiver, but it's not where I thought it would be.

Pat Hawker shows the circuit from the SX140 in an older edition of his Amateur Radio Techniques. It's about the same as you describe, though it has a silicon diode going from the suppressor grid to ground (it's cathode at ground). However, the brief blurb says nothing about how it operates, and the schematic does not show any feedback from plate to grid.

I can't find the issue of Communications Quarterly with the article about renerative receivers. Since it's a good overview of the field, it might show such a circuit. Anything I can put my hands on without digging has very traditional regen circuits.

Obviously, the suppresor grid is being used to smoothly control regeneration, and without having to tamper with the circuit beyond taking that grid off ground.

Michael

3936. Re: Tayloe mixer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-06 00:00:00 UTC
From: blackm00@cam.org
Message-ID: <blackm00-0611990150130001@dialup-633.hip.cam.org>
Source record: 65752

In article <381F2CB1.1084873A@corecomm.net>, "Clifton T. Sharp Jr."
<clifto@corecomm.net> wrote:

> Michael Black wrote:
> > I did search dejanews, how I hate the way it's rearranged itself,
> > and I don't see any references to it other than those that took
> > place here, none of which wsa really concrete information.
>
> Ain't that the truth. The *concept* is described beautifully. But all we
> really know is that he's charging humongous (for the frequency) capacitors
> directly from the input, whatever amplitude (< 4V) that might be at. I
> can only picture doing this with a huge gain block between the antenna
> and the detector; however, if 4V is the max input to the detector and he
> claims 111 dB dynamic range, all I can make of it is to guess the MDS at
> the detector input is 11 uV. If I haven't messed up the calculations and
> -136 dBm is 0.16 uV, that's a gain of 70 (less than I would have thought
> necessary) in a damn nice preamp.
>
> Why does he call it a "product detector" over and over when he explicitly
> says "it is not really a mixer, producing both sum and difference frequencies,
> but rather is a 'switching integrator'"? As I understand the term, a
> product detector is a multiplier and can't help but produce sum and
> difference frequencies.
>
My comment wasn't so much that information is limited, but how are
people finding out about it? Twice this year, people have asked about
it, and I've wondered why they'd know about it, but not have seen
details? A few other times, it's come up in passing in some other thread,
like the
name is common knowledge, yet nobody before this thread has actually said
anything in this newsgroup about it's operation or potential limitations.

On some level, attaching your name to a circuit gives it higher
recognizability, yet we are used to names attached to circuits which
have been around for decades. It doesn't do anything to describe
the operation, as all those oscillators named after people can attest.
When someone first asked about the Tayloe mixer here at the beginning
of the year, I sure hadn't heard of it, and assumed it must be something
I was familiar with, but under a different name. When I found a
reference, it turns out to be a circuit from a normal guy who appears
to have tripped over it by fooling around. Or at least, that's
the impression I got from the piece by the actual creator.

On some level, I can see some other things that might have been
teh basis of the idea, because I've certainly looked at certain

things and wondered about them in this area.

The obvious thing is using CMOS switches as mixers. I think I thought of it myself (no, I didn't invent it, only saw a possibility before I saw it described elsewhere), reading something about the MC1496 double balanced mixer, which uses the circuit now known as a Gilbert Mixer. I could see using CMOS switches as to do the function of the upper four transistors.

I might not have seen that myself, I can't remember, but I did at one point see a "robot voice" in an electronic magazine from England which used CMOS switches in a balanced modulator of some sort to create the same effect as a "ring modulator" used in music synthesizers.

And the April 1982 issue of Popular Electronics had a synchronous detector (complete with selectable sideband) which used CMOS switches as the product detectors. Each channel used a 2-input muliplexer, part of a CD4053.

A much more recent reference was in Communications Quarterly for Fall 1998, where a 74HC4066 was used as a ring modulator type product detector.

There must be other references, I"m sure I've seen some, but we haven't seen a lot of use of CMOS switches as mixers, which is surprising since they are cheap, though that says nothing about how well they operate.

Another thing that I had in the back of my mind was the circuitry used in coherent CW. I'm not sure I've ever seen a complete circuit. The portion I did see, and my memory is incomplete, had the incoming signal split into two sets of CMOS switches which were switched at the IF (or is it RF?) frequency, with the channels fed 90 out of phase. There are capacitors on the output; I can't remember whether I pictured
it as a sample and hold or a filter. You have a DC signal coming out of both channels which follows the incoming CW signal. It's not useable because it's DC, so it's fed into another set of CMOS switches/mixers, which are switched at an audio rate, again with both sides 90 apart. The output of those is an audio signal.

I remember looking at that and seeing a resemblance to the Third Method (or Weaver method) of generating SSB. When you've moved down to DC after the first set of switches, you've got two channels that are 90 degrees apart, and then when you remodulate it at audio frequency (the second set of switches) you get the second set of 90 shift.

But the Tayloe mixer is really has as it's basis the "commutating filter". I don't see that mentioned in the text in the references I gave. It was really clear the first time I saw that text.

The first time I saw a commutating filter was in the very first issue of QST I ever received, the April 1971 issue. "Digital Filters" by L.V. Gibbs. He only calls it a digital filter, but years later I learned it's true name. It's that whole thing of 4 switches, 4 capacitors, and a resistor in series at the input. It is one of the fuller articles I've seen in the hobby magazines about this type of filter. Of course, it was a long time ago, and the circuit he shows actually uses transistors to do the switching of the capacitors, and dividers made of discrete transistors (and on the final page, as filler, there's a bit from the ARRL museum showing a "triple spark gap" which somehow seemed so mystical to me at 11).

The filter is based on the operation of an RC low pass filter. But it's a bandpass filter. It's center frequency is determined by the clocking frequency (which ends up being a multiple of the center frequency because of the dividers needed to clock the switches in the proper sequence). I'm too tired at the moment to extract the place of the input resistor and the capacitors. Maybe I will later. The more capacitors 9and hence switches) the cleaner the output, to really simplify.

To get better skirt, you need to cascade more filters of this type.

One important thing is that it works like comb filter, in that it will also peak signals on all harmonics of the center frequency, except N (where N is the number of capacitors/switches) and multiples of N.

Don Lancaster briefly mentions the filter in his CMOS Cookbook.

73 for August 1974 has a "Super Selective CW Tracking Filter" using this type of filter, along with a PLL to so it tracks the incoming signal. It's less informative.

I don't have the date, but there was also a good article in Ham Radio around 1978 or so. I know the issue had Wes Stewarts split-band audio limiter on the cover, and I think Hank Olson wrote the article. His was more on practical designs, far more modern than the QST article, including using a crystal and a CMOS divider to provide the clock, and at least one example of cascading the filters. I don't remember how informative the text was, but it ranks up there with the QST article.

There wasn't much more beyond this. It seemed like such a nifty idea, yet nobody semed to do much with it. To this day, I wonder about putting it in the IF of a receiver, provided the IF is low enough.

But something about the clocking always made me wonder about it's application in phasing SSB. I don't think I ever had any concrete ideas, only thoughts that there must be some application.

I'm still thinking about how it's supposed to translate into the Tayloe Mixer, but it would seem that Dan Tayloe looked at the filter like

I did, thought about using it in other ways, and figured something out.

I hope this helps set the background, or maybe will give somebody an idea to try along different lines.

Michael

3937. Re: HBR-8-11 circuit Wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-06 00:00:00 UTC
From: blackm00@cam.org
Message-ID: <blackm00-0611990236330001@dialup-633.hip.cam.org>
Source record: 65753

It's not clear whether you want to build the receiver, or just use
parts of it. One thing that made the HBR receivers standout was that
they were intended to be duplicated. Ted Crosby designed them to
be copied, and put plenty of effort into the articles (and supplemental
material) so people could copy them exactly. In fact, if you read
some of the articles, you'll see him making comments about duplication.
He had set out to create receivers that others could build, and he
was afraid of people making incautious substitutions.

I'm not completely sure that's the way to go, especially since you
are then doomed to track down the original parts, but that is the
philosophy behind the series.

They were popular precisely for that reason, almost like an
intermediate step between building your own and a Heathkit.

But it sounds like you haven't seen the article, and you already
are making substitutions. That's fine, but if you're going that way
then the original article may not be all that important. Tube
receivers were fairly common back then (though a lot of them had
nothing distinctive about them) and looking through old QSTs or old
books should turn up something.

If you want to use other components (and the original designs were
meant to use specific cariable capacitors and IF transformers) and tubes,
then all you are copying is the conversion scheme. You'd then do
better to get a tube-era ARRL Handbook, find suitable circuits for
the tubes you want to use, and start building. For coil winding,
the same Handbook will provide equations for winding appropriate
coils, based on your variable capacitors and coil forms.

If you're already changing so much, why stay with even that conversion
scheme? You'll have more gain before the real selectivity with that
scheme than if there's a narrow filter after the first mixer, and
certainly the original does not have much selectivity at 1700 KHz.
The reason for the choices were undoubtedly 100KHz to get good
selectivity, without going to a mechanical or crystal filter, and then the
1700 KHz IF selected as being low enough to be out of the HF spectrum, but
high enough so there'd be no problem with the 100KHz image. The 1700KHz
IF is there only as
a stepping stone, and the selectivity only has to kill eht 100KHZ image.

You can probably scrounge up a crystal filter in the HF range for
relatively little at this point, and then make the receiver single
conversion. Or find something somewhat wider, and convert down
to an IF where you can get selectivity with LC circuits, which allows

for multiple bandwidths.

What I'm saying is that the IF frequencies were a reflection of what
was available at the time. There is nothing special about them,
and as long as you are not reproducing an original HBR receiver,
a "classic" tube receiver does not have to have "classic" IF frequencies.

A lot can be said about building an HBR receiver, but if you aren't
actually building it, then there are plenty of other sources to follow.

Michael VE2BVW

In article <3822B3E3.127DBEF2@bbb.com>, "aaa@bbb.com" <aaa@bbb.com> wrote:

> hi,
>
> I am interested in building an home brew receiver HBR8/11 presented
> on the web page http://www.inetport.com/~talen/
>
> Does anyone have the circuit and coil winding details for these
> or has the OLD QST articles mentioned there ?
>
> These seem like interesting receivers to build, and am currently
> thinking of building something similar using 4 * 6u8 tubes
>
> tube 1 = 6u8 = Mixer and oscillator , converts to ist IF 1700 KHz,
> with 2 tuned circuit filter for front end
> may use the triode as a mixer and the pentode as the HFO to increase
> dynamic range.
> AGC may be implemented with In4007 diode attenuator
>
> tube 2 = 6u8 = mixer oscillator converts from 1700 Khz to 100 Khz,
> uses 3-4 tuned circuit filter built using T50-2 toroids at 1700 Khz.
> AGC may be implemented with In4007 diode attenuator
>
>
> tube3: = 6u8 = IF amplifier + audio amplifier, uses 4 toroids (1/2 88
> mH telephone loading coils= 22mH each) for selectivity at 100 Khz, the
> triode is a simple audio amp which can drive Hi-Z headphones
> AGC may be implemented with In4007 diode attenuator
>
> tube 4: 6u8 : grid (or Plate) detector and BFO for SSB
>
>
> This should have about 40 db image rejection @ 10 -15 Mhz, and pretty
> good selectivity
> and sensitivity.
>
>
> If one could get those 6az8 tubes for a resonable price, they would be
> ideal to have as they are remote cutoff and can have AGC applied to
> them. Also the 6u9 is an excellent tube with the pentode having gm =

> 12mMho and being Remote cutoff, but they need impossible to find 10 pin
> decal sockets.
>
>
>
> The audio statges may also have the selectojet audio filter to provide
> some audio filtering
> using 2 12ax7 tubes.
>
>
> The speaker amp can be anything using a 6aq5 etc and so can the be PSU.
>
>
> any ideas would be very helpful.
>
> 73s and thanks
>
> singhpk99@yahoo.com

3938. Can a transformer have too much inductance?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-06 00:00:00 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <01bf285f$7a8c9160$08874d0c@default>
Source record: 65754

I have a transformer, 950 ohm to 50 ohm
It has a 13 turn pri and a 3 turn sec.
At the lowest freq of use (540khz) the pri reactance is
8,500 ohms. This is much higher than I need but this
is the core I have.
Does extra pri inductance cause any problems?

Thanks
Mike

3939. **** WANTED: Tannoy & Jensen speakers circa 1940's to 1960's ****

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-06 00:00:00 UTC
From: lzayas@xsite.net
Message-ID: <382434d8.2678578@nntp.xsite.net>
Source record: 65755
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

WANTED: old Jenzen corner speakers ,TRI-axials, drivers,tweeters from
the 40's,50's,60's
Dual concentric TANNOYS.

e-mail or call <LZAYAS@XSITE.NET>

(773-594-1041) Chgo.

Thank You Louis

Louis Zayas
lzayas@xsite.net
773.594.1041
Chicago Illinois

3940. Re: HBR-8-11 circuit Wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-06 00:00:00 UTC
From: abcd1234 <abcd1234@ix.netcom.com>
Message-ID: <801fkpeat1@news1.exit109.com>
Source record: 65756

Hello ,

Thanks for your detailed reply.

I can copy the detailed HBR-8 or 11 as it is
but where is the circuit of this Rx ?
Where can I find it?
Can it be posted on the web somewhere ?
The site in question has everthing "EXCEPT"
the circuit diagram !

Also, substition is a necessity because of impossible to find parts
like the 100Khz Miller Ifts and 1700 Khz IFTs. Both of these will have to
home-made using toroids and trimmer caps.

1/2 of 88mH toroids = 22mH will resonate @ 100 Khz with 100pf
and about 50Khz with 400 pf. They seem like the ideal substitue
for 100 Khz coils.

Also, I dont want use any type of Xtal filter in this receiver, and do it
using IFTS and coils only.

I have looked at several ARRL books, 1957 and 1951 etc
and do see various convertors etc and a dual conversion regen
also with no IF amp in the '57 book. They helped me a lot.
The question of IF coil design still remains , as they still use impossible
to find parts.

The HBR receiver circuit would certaily help me at this point,
as it was close to what Ihave wanted to make myself,
even if I dont clone/copy it , as it is another reference design.

Again, please someone poset a copy of that HBR8/11 circuit.

73's
singhpk99@yahoo.com

Michael Black wrote in message ...
>
>It's not clear whether you want to build the receiver, or just use
>parts of it. One thing that made the HBR receivers standout was that
>they were intended to be duplicated. Ted Crosby designed them to
>be copied, and put plenty of effort into the articles (and supplemental
>material) so people could copy them exactly. In fact, if you read
>some of the articles, you'll see him making comments about duplication.
>He had set out to create receivers that others could build, and he
>was afraid of people making incautious substitutions.

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>I'm not completely sure that's the way to go, especially since you
>are then doomed to track down the original parts, but that is the
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>They were popular precisely for that reason, almost like an
>intermediate step between building your own and a Heathkit.
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>But it sounds like you haven't seen the article, and you already
>are making substitutions. That's fine, but if you're going that way
>then the original article may not be all that important. Tube
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>If you want to use other components (and the original designs were
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>The reason for the choices were undoubtedly 100KHz to get good
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>1700 KHz IF selected as being low enough to be out of the HF spectrum, but
>high enough so there'd be no problem with the 100KHz image. The 1700KHz
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>a stepping stone, and the selectivity only has to kill eht 100KHZ image.
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>You can probably scrounge up a crystal filter in the HF range for
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>to an IF where you can get selectivity with LC circuits, which allows
>for multiple bandwidths.
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>What I'm saying is that the IF frequencies were a reflection of what
>was available at the time. There is nothing special about them,
>and as long as you are not reproducing an original HBR receiver,
>a "classic" tube receiver does not have to have "classic" IF frequencies.
>
>A lot can be said about building an HBR receiver, but if you aren't
>actually building it, then there are plenty of other sources to follow.
>
> Michael VE2BVW
>

>In article <3822B3E3.127DBEF2@bbb.com>, "aaa@bbb.com" <aaa@bbb.com> wrote:
>
>> hi,
>>
>> I am interested in building an home brew receiver HBR8/11 presented
>> on the web page http://www.inetport.com/~talen/
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>> Does anyone have the circuit and coil winding details for these
>> or has the OLD QST articles mentioned there ?
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>> tube 2 = 6u8 = mixer oscillator converts from 1700 Khz to 100 Khz,
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>> mH telephone loading coils= 22mH each) for selectivity at 100 Khz, the
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>>
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>> This should have about 40 db image rejection @ 10 -15 Mhz, and pretty
>> good selectivity
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>> them. Also the 6u9 is an excellent tube with the pentode having gm =
>> 12mMho and being Remote cutoff, but they need impossible to find 10 pin
>> decal sockets.
>>
>>
>>
>> The audio statges may also have the selectojet audio filter to provide
>> some audio filtering
>> using 2 12ax7 tubes.
>>
>>

>> The speaker amp can be anything using a 6aq5 etc and so can the be PSU.
>>
>>
>> any ideas would be very helpful.
>>
>> 73s and thanks
>>
>> singhpk99@yahoo.com

3941. Re: Need very low phase noise XO at 110 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-06 00:00:00 UTC
From: Tomas Ahrne <dirac@takethisoutalgonet.se>
Message-ID: <9VYU3.2772$1C4.28341@news1.online.no>
Source record: 65757

Hi all,

I just want to thank you all who answered my plea.

Ir seems that I will be able to get something that will work. I haven't decide on the final solution yet, but now I have enough to work from.

Best,

Tomas Ahrne

3942. Need 87.5-108 MHz band pass filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-06 00:00:00 UTC
From: Tomas Ahrne <dirac@takethisoutalgonet.se>
Message-ID: <Mb_U3.2847$1C4.28904@news1.online.no>
Source record: 65758

Hi,

Maybe you saw a recent post of mine: "Need very low phase noise XO at 110 MHz". I got so many good answers that I think that that part of my design will work out.

I am designing a digital FM receiver for 87.5-108 MHz. I intend to sample the RF signal directly and do all down conversion and demodulation in a DSP (Digital Signal Processor).

There is also another critical part, the band pass filter.

I was hoping to buy the filter ready made from some manufacturer, but this is not a standard item. I checked how much it would cost to have it custom made and it is quite a bit more than I anticipated. 1-10 would cost $300 a piece from Lorch Microwave. I am checking another supplier as well, but I don't imagine that the price will be that different.

So, does anyone know of a manufacturer who has this filter as a standard item for a reasonable price, < $100, or thereabouts?

The other option I have is to make it myself. Does anyone have any good pointers or references?

The pass band is 87.5-108 MHz, stop bands 78.9 and 113.2 MHz. Ripple in pass band could be 1-2dB, and stop band attebuation preferably 80 dB, or more.

Best,

Tomas

3943. Re: Q: Airport Security and homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-06 00:00:00 UTC
From: PAUL HINMAN <paulhinman@home.com>
Message-ID: <38248950.1C959B0F@home.com>
Source record: 65759

My biggest adventure with airport security occurred when I took a
suitcase of items that somebody in the US missed after leaving Canada
because the specific brands weren't available in the US.

I indicated to the first customs guy that I had some stuff that would
not be coming back to Canada, this made me a candidate for a full
baggage inspection. They shut down all but one of the inspection queues
and all of the customs guys came over to inspect my suit case of
breakfast cereal and peanut butter. They were all splitting a gut
laughing as I headed to my plane.

"Robert M. Ganter" wrote:
>
> On Tue, 12 Oct 1999 10:09:37 GMT, spam@nospam.com (Spammer) wrote:
>
> << lots of FUN (?!?) stuff deleted >>
>
> Two years ago I took my Kenwood TS711 (2m allmode station) with me to
> work /MM on a sailing trip.
> In Zurich they simply used a GC to search for nitrogene, a painless
> two minute procedure.
> On the way back we checked in in Athens, Greece. The whole thing was
> just a big joke. I put my rig on the X-ray machine and observed the
> security guard who dozed behind his screen. When the rig came across
> he suddenly woke up, turned the machine to maximum to get through all
> the metal (there's quite a lot in the TS711...) and -- continued
> dozing. I did not have to prove it worked, nothing.
> Right after that I could get a look at the screenshot he took from the
> rig: the mains transformer was just a black donut, all the rest was
> more or less transparent.
> I am shure, that it would be an easy job to replace the iron core with
> an iron ring filled with explosives, some work, ok, but nobody would
> notice later on the airport, except they search for nitorgene, as in
> Zurich. The guy in Athens simply did not care and *this* is IMO the
> main problem. If security is not taken serious (and this also means
> well trained and well paid staff), all that security stuff is
> worthless.
> IMHO the only secure way is to use the (still rather expensive) GCs I
> have seen in Zurich (and Frankfurt, LAX). This would also make it an
> easy job to carry homebrew equipment with You. If they don't find
> nitrogene, there is no explosive in it and they should be happy.
>
> 73
>
> Robert

>
> --
>
> Robert M. Ganter HB9DNN

3944. Re: Can a transformer have too much inductance?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-06 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <8023oh$8s1$1@neptunium.btinternet.com>
Source record: 65760

You can't have TOO much inductance on a wideband transformer winding insofar as the low frequency end of the band is concerned. For radio work an inductive reactance of 5 times the resistance the transformer works into is usually adequate..

Low frequency problems arise only when there is not enough inductance. The generator then has to provide not only the load current but also a heavy core magnetising current. There may not be much power wasted in the transformer itself but the generator may be very unhappy.

But you can have too much winding resistance. If there's not enough winding area to allow thicker wire then it will be necessary to reduce the number of turns which will also reduce the inductance.

But the principal effect of too much inductance is to limit a transformer's high frequency response. This occurs for two reasons - the leakage inductance is higher and so also is the self-capacitance of the windings.

Stick to the rule of thumb of reactance being 4 or 5 times the terminating resistance and you won't go far wrong. If the high frequency response is then not good enough then there's no alternative with a given core but to compromise.

Or consider using a core material with a higher permeability. This allows greater inductance with fewer turns, lower winding resistance, less leakage inductance and less stray capacitance.

In your present case, Mike, if the high frequency response is OK, leave things as they are.
--
==========
Cheers, Reg, G4FGQ
For free technical radio software go to:-
http://www.btinternet.com/~g4fgq.regp
==========
AMDX wrote .
> I have a transformer, 950 ohm to 50 ohm
> It has a 13 turn pri and a 3 turn sec.
> At the lowest freq of use (540khz) the pri reactance is
> 8,500 ohms. This is much higher than I need but this
> is the core I have.
> Does extra pri inductance cause any problems?
>
> Thanks
> Mike

3945. a radio manual question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-06 00:00:00 UTC
From: don medon <skater@military-media.com>
Message-ID: <38249A77.1E8C@military-media.com>
Source record: 65761

Military Media is putting together a CD-ROM containing
Radio Manuals. So far we have the following
AN/PRC-70 AN/PRC-25
AN/PRC-90/2 AN/PRC-119
AN/PRC-47 AN/PRC-126
AN/GRC-213 RT 66,67,68
AN/PRC-104 AN/PRC-71
AN/PRC-68 AN/VRC-53
AN/PRC-41A AN/VRC-12,43,44,46,47
AN/PRC-77 AN/GRA-71

If anyone has ideas about what other manuals to add to the CD,
please email me Thanks

3946. No code ham info wanted.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-06 00:00:00 UTC
From: blueglow <blueglow@mindspring.com>
Message-ID: <802qhe$k8m$1@nntp5.atl.mindspring.net>
Source record: 65762
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

Does anyone have any new or recent information about any changes to the code requirements for licenses? If so please email the info or links to blueglow@mindspring.com.

I am wanting this to put up on my new ham website I am building and also for my curiosity.
Thanks,
Mark
KG4FDR

3947. Re: No code ham info wanted.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-06 00:00:00 UTC
From: "William F. Hagen" <whagen@inreach.com>
Message-ID: <3824F231.158AFC24@inreach.com>
Source record: 65763
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

http://www.fcc.gov/wtb/amateur/

blueglow wrote:
>
> Does anyone have any new or recent information about any changes to the code
> requirements for licenses? If so please email the info or links to
> blueglow@mindspring.com.
>
> I am wanting this to put up on my new ham website I am building and also for
> my curiosity.
> Thanks,
> Mark
> KG4FDR

--
Please remove the word 'NOREPLY' from the email address, sorry for the
inconvenience, but it helps keep down the spam.

3948. Website for HF/Amateur Radio and SWLing

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-07 00:00:00 UTC
From: nw7us@hfradio.removethispart.org
Message-ID: <1P4V3.1121$RI1.14879@sea-read.news.verio.net>
Source record: 65764
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hey!

While mobiling around, and working those rare DX stations, I have found it rather frustrating to scramble for paper and pen. I don't have an easy way to install a laptop in the car, either.

So, I thought, "I can use my Palm Pilot" and create a memo. But that was a bit of a pain. What to do?

Create a log program! That's what I did. It is now version 0.1 -- and works ok.

You have a Palm Pilot? Wanna use this logger? Come download the free Application at:

http://hfradio.org/softdown.html#hflog

I have been using it during my jaunts. Helps. It is very simple, and very basic.

Send comments to: hflog AT hfradio DOT org (you can figure out the address)

In other news: The NW ARRL (Northwest Section of the ARRL) website is now hosted at http://hfradio.org/nwarrl/ - and I have been appointed as new Webmaster. If you are in the NW, and have updates, etc., please let me know. If you are interested in the NW Activity, etc., come check it out.

Also, I am still offering free websites for HAM and SWL sites. Want to make your own page? Come and fill out the form.

Don't forget: http://hfradio.org, a non-commercial site offering:

+ Azimuth Map / Equidistant Map Creation (choose any QTH as center, many options

+ Propagational Resources (live, real-time reports, eAlert service (sign up for automatic email solar/geo reports, complete with Aurora index))

+ News, and DX information and reports

+ QSL Manager and Callsign Lookup center

+ Swap and Shop

+ FREE HOME PAGES THAT YOU CAN USE TO POST YOUR OWN HAM OR SWL SITE

+ Bookstore - SWL and Ham related books. Over a 1000 titles so far.

+ Plus more (Directories, etc.)

This is my offering to the community, all funded by me. I am working hard to bring excellent content to the site. I have need for others who might wish to assist. I need a

Software editor -- someone who can review and post software links, etc. Let me know if you are interested. (See the site on how to email me).

If you feel up to it, after looking around the site, drop me a note (you'll find my address on the site) and share your thoughts.

73!

--

: World-Wide Communications via Amateur Radio : 122.93W : 47.67N :
: 10x56526 : CW/SSB - DX hunter : Brinnon, WA : Code Warrior #60 :
: visit http://hfradio.org/ :

3949. Re: What is the current state of the art in HF fron end design?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-07 00:00:00 UTC
From: b_runner@hotmail.com
Message-ID: <381e6e37.21327532@news.eisa.net.au>
Source record: 65765

Hi,

Thanks a lot for the schematics. Just a few comments. As it turned
out, I have already tested both circuits before.

The first one is fairly known and it's a good work horse, especially
if one uses a good RF device and pushes a lot of current through. With
small (tiny!) xformers, I was able to get flat response up to 500MHz.

The second one I have never actually built, but I have played with it
with the ARRL Radio Designer. The circuit never seemed to function in
accordance with the original article. In the end, I used blind
optimization to get the transformer ratios. I was able to get
reasonable gain, but the frequency response was never as flat as the
previous circuit. The OIP3 remains to be verified in practice. Anyone?
BTW, thanks Chuck for pointing out the incorrect formula in the
original article. One wonders, if he got such a fundamental thing
wrong... :-) Well it *is* an amazing circuit anyway.

Runner

On Fri, 29 Oct 1999 09:29:43 -0500, "Charles H. Reichert"
<reichert@cig.mot.com> wrote:

>As promised I placed the two High OIP Amplifier
>circuits & info on my Web Page at;
>
>http://www.imaxx.net/~kd9jq
>
> 73 Chuck KD9JQ
>
>Charles Reichert wrote:
>>
>> I found the one article by Ulrich L. Rohde DJ2LR
>> from the November 1979 issue of HR page 34
>> and a sheet I made up with a working schematic/equations
>> using the 2N5109.
>>
>> The other is a schematic of the design based on U.S. Patent
>> 3,891,834; 1975. I'm assuming that this is printable for
>> general consumption since 17 years has passed.
>>
>> I'll clean them up this week and put them on my web page.
>>
>> 73 Chuck KD9JQ
>>

>>
>> Charles Reichert wrote:
>> >
>> > I have buried in my files a coupls of articles on high intercept
>> > RF Amp stages using a bipolar. I found a flaw in the circuits
>> > and re-drew themn. I've never actually built these but can fax
>> > you the article/corrected sheets.
>> >
>> > Chuck KD9JQ
>> > http://www.imaxx.net/~kd9jq
>> >
>> > runner wrote:
>> > >
>> > > Hi,
>> > >
>> > > I am thinking about building an HF rig, so before I really start
>> > > warming up the ARRL Radio designer[:-)], I would like to find out
>> > > more about what can be done. Any hints, ideas, links, books etc, about
>> > > this subject would be greatly appreciated.
>> > >
>> > > I am very curious about the best currently achieved results in HF
>> > > receiver front end design. For now,I would put aside the rest of the
>> > > RX chain (I followed a lot of discussion about DSP/phase techniques
>> > > here lately).
>> > >
>> > > So for now I am looking at the best linear RF amps and mixers. For the
>> > > amps, the best figures I have yet seen are for some push-pull amps :
>> > > about 40-45dBm IP3. Have any of you gurus seen better figures+designs?
>> > > I would imagine that it could be possible to get a pair of V-MOS FETs,
>> > > run them in A-class (with large heat sinks), put a xformer feedback
>> > > around and use two of those in push-pull mode... similar to
>> > > transmitter amps, but for receive... Am I off track here? If this
>> > > works, I would guess we could get over 50dBm IP3?
>> > >
>> > > Now, with mixers, I am a bit on the fuzzy side here. I have seen the
>> > > "Tayloe" mixer some time ago and it looks pretty impresive. Have any
>> > > of you tried to replicate the results? I like diode ring mixers, or
>> > > their variations, using other kinds of switching elements, eg. D-MOS
>> > > FETs. These are linear, but have a fundamental disadvantage, the 5-7dB
>> > > loss. So, when using them, if one wants to get sensitivity, a preamp
>> > > is needed, and that reduces the linearity, which is counterproductive.
>> > > Are there any active high performance mixers? With what I know now,
>> > > if I was about to build a mixer, I woul do something similar as the
>> > > amp suggested above: a couple of essentially super linear amps, but
>> > > instead of DC supply, I would switch them on/off really hard. Perhaps
>> > > a square wave between slightly negative bias (to switch the devices
>> > > off quickly) and full A-class current?
>> > >
>> > > Sorry for the long posting here... I seem to need feedback for my
>> > > back-of the envelope thinking.

>> > >
>> > > runner
>
>--
> Regards,
>
> Charles Reichert
>____
>Motorola NSS ACE phone: 847-632-6669 Work
>IL-82 3436S fax: 847-632-7428 Work
>1501 W. Shure Drive email: qa2696@email.mot.com
>Arlington Hgts, IL. 60004
>____

3950. Re: Can a transformer have too much inductance?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-07 00:00:00 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <01bf28ca$857c8ba0$86b14d0c@default>
Source record: 65766

Well, I don't know if the high frequency response is limited by the
high inductance or the core material. The core is a 4229-3F3
ungapped pot core, the A sub L is about 15,000 (the book says
7,800 + or - 25% but, measuring the impedance of either the pri
or sec gives me 15,033 or 14,675 for A sub L)
I do have high freq losses,
1Mhz----------92.5% of input power delivered to output
2Mhz----------63.5% of input power delivered to output
3Mhz----------45.5% of input power delivered to output
4Mhz----------33.7% of input power delivered to output
5Mhz----------23.7% of input power delivered to output
6Mhz----------17.0% of input power delivered to output
7Mhz----------10.5% of input power delivered to output
This was measured driving the 50 ohm side with .02vpp,
the losses may be less with a smaller signal.
The A sub L of this material drops off about 3Mhz and
the loss curve doesn't show anything above ! Mhz.
The self resonant freq of the 13 turn secondary is above 10Mhz, (to go
above 10Mhz I have to change to a very low power signal generator) it may
be 14Mhz but showed very weak and this is with an additional 15pf of
scope probe capacitance.
Hey Reg, let me give some details :-)
I built this for a Flag antenna,
>http://www.angelfire.com/md/k3ky/page37.html<
the transformer has a shield between the primary and secondary.
I wound 13 turns of #30 wire spaced apart on the
bobbin then put on a thin layer of tape, over this I wound a layer of
brass, being
careful to not let the ends short together. I filled the space with
Styrofoam and
wound the 3 turn primary on the outside of the Styrofoam.
I built a box out of PCB material, by earth grounding the ferrite core
and the
brass shield, I measure 1/10 of 1 pf of capacitance between the primary and

the secondary. This is important to minimize according to the info on the
webpage.
I don't know how accurate this is, I'm using a voltage divider circuit
and when I
substitute a 1pf cap for the transformer the voltage across my resistor
goes up
by a factor of 10----so it seems my transformer has to be much less then
1pf.
I got the antenna working tonight!!! It is supposed to have a cardiod

pattern,
I can confirm this, I live in Florida I aimed the antenna N.E. I am not
hearing
Spanish language stations form the south on this antenna but if I switch to

another antenna they are there.
That's enough for now, I'm going to play with my radio.

Thanks
Mike

3951. Trouble with downconverter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-07 00:00:00 UTC
From: clifford kelley <cwkelley@inreach.com>
Message-ID: <01bf28d7$5c965920$c543d1d1@bigbear>
Source record: 65767

Hi,

I'm hoping someone familiar with downconverters can answer a question.

I have an L band down converter that seems to have developed a problem. When
I put in a cw test signal instead of a single cw output an additional signal offset by a few hundred kHz also shows up. The desired signal is at 4.3 MHz. Is this indicative of damage to the converter or a loose connection?

Thanks,

Cliff

3952. icom ic800m

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-07 00:00:00 UTC
From: terence damon <telboy270@freeuk.com>
Message-ID: <0raV3.2239$An.38055@nnrp4.clara.net>
Source record: 65768

any info please on this model please

3953. UPS Schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-07 00:00:00 UTC
From: gutsyme <tayger1@netscape.net>
Message-ID: <38253FD7.EE0380B6@netscape.net>
Source record: 65769
Body handling: Binary attachment payload not displayed: tayger1.vcf

Need to find a schematic for a Topaz (Square D Co.) uninteruptable power supply PN 84126-01 Ass'y No. 932-00016-01. I have a non working one from garage sale and wish to use it as an inverter to run ham gear. Will pay reasonable cost.

[One or more binary attachments are retained only in the source text.]

3954. Re: Need 87.5-108 MHz band pass filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-07 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <3824d174.807036123@news.online.no>
Source record: 65770

My suggestion is that you use a simpler approach first, and if you
succeed with the project, then start thinking about improvements.
I have seen just too many newcomers who specify units which may not be
neccessary or are just too expensive, and often they never complete
most parts of the project

On Sat, 6 Nov 1999 19:11:57 +0100, "Tomas Ahrne"
<dirac@takethisoutalgonet.se> wrote:

>Hi,
>
>Maybe you saw a recent post of mine: "Need very low phase noise XO at 110
>MHz". I got so many good answers that I think that that part of my design
>will work out.
>
>I am designing a digital FM receiver for 87.5-108 MHz. I intend to sample
>the RF signal directly and do all down conversion and demodulation in a DSP
>(Digital Signal Processor).
>
>There is also another critical part, the band pass filter.
>
>I was hoping to buy the filter ready made from some manufacturer, but this
>is not a standard item. I checked how much it would cost to have it custom
>made and it is quite a bit more than I anticipated. 1-10 would cost $300 a
>piece from Lorch Microwave. I am checking another supplier as well, but I
>don't imagine that the price will be that different.
>
>So, does anyone know of a manufacturer who has this filter as a standard
>item for a reasonable price, < $100, or thereabouts?
>
>The other option I have is to make it myself. Does anyone have any good
>pointers or references?
>
>The pass band is 87.5-108 MHz, stop bands 78.9 and 113.2 MHz. Ripple in pass
>band could be 1-2dB, and stop band attebuation preferably 80 dB, or more.
>
>Best,
>
>Tomas
>
>

3955. Re: Trouble with downconverter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-07 00:00:00 UTC
From: Harke Smits <harke.smits@net.hcc.nl>
Message-ID: <38258D88.286038CE@net.hcc.nl>
Source record: 65771

Hi Cliff,

Given the info provided I would suggest to check the local oscillator of the down converter. Some oscillators may show spurious and you get two or more output signals for only one in.

Good luck,

Harke

clifford kelley wrote:

> Hi,
>
> I'm hoping someone familiar with downconverters can answer a question.
>
> I have an L band down converter that seems to have developed a problem.
> When
> I put in a cw test signal instead of a single cw output an additional
> signal offset by a few hundred kHz also shows up. The desired signal is at
> 4.3 MHz. Is this indicative of damage to the converter or a loose
> connection?
>
> Thanks,
>
> Cliff

3956. TS-870 Mods?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-07 00:00:00 UTC
From: n7ws@arrl.net
Message-ID: <3825927c.324635435@news.azstarnet.com>
Source record: 65772
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Anybody made any improvements to the TS-870? Installing an i-f filter for instance?

73,

Wes N7WS

3957. heelp FM925 and FM1100

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-07 00:00:00 UTC
From: "Patrick.DeMarchi" <Patrick.DeMarchi@wanadoo.fr>
Message-ID: <804939$n31$1@wanadoo.fr>
Source record: 65773

Hello
I am looking for information about the transceivers PHILIPS FM925 and FM1100
for using on the amateurs bands.
I am very interested by plans, connectics and modifications.
My english is poor so, scuse me ffor any mistakes!
Thank you very much for your help.
Patrick.............. F6HSM..............

3958. Re: Need 87.5-108 MHz band pass filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-07 00:00:00 UTC
From: NANCY GIANAKOPOULOS <n.gianakopoulos@worldnet.att.net>
Message-ID: <804efs$sp2$1@bgtnsc03.worldnet.att.net>
Source record: 65774

Go to aade.com (Almost all Digital Electronics). He has a very good filter design program for around $30; this program will synthesize almost any kind of filter you might want to use.

Pete Gianakopoulos

Tomas Ahrne <dirac@takethisoutalgonet.se> wrote in message news:Mb_U3.2847$1C4.28904@news1.online.no...
> Hi,
>
> Maybe you saw a recent post of mine: "Need very low phase noise XO at 110
> MHz". I got so many good answers that I think that that part of my design
> will work out.
>
> I am designing a digital FM receiver for 87.5-108 MHz. I intend to sample
> the RF signal directly and do all down conversion and demodulation in a DSP
> (Digital Signal Processor).
>
> There is also another critical part, the band pass filter.
>
> I was hoping to buy the filter ready made from some manufacturer, but this
> is not a standard item. I checked how much it would cost to have it custom
> made and it is quite a bit more than I anticipated. 1-10 would cost $300 a
> piece from Lorch Microwave. I am checking another supplier as well, but I
> don't imagine that the price will be that different.
>
> So, does anyone know of a manufacturer who has this filter as a standard
> item for a reasonable price, < $100, or thereabouts?
>
> The other option I have is to make it myself. Does anyone have any good
> pointers or references?
>
> The pass band is 87.5-108 MHz, stop bands 78.9 and 113.2 MHz. Ripple in pass
> band could be 1-2dB, and stop band attebuation preferably 80 dB, or more.
>
> Best,
>
> Tomas
>
>

3959. 11 TO 10 METER CONVERSION

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-07 00:00:00 UTC
From: bujiaj8@aol.com
Message-ID: <19991107131726.16565.00002722@ng-fn1.aol.com>
Source record: 65775

I AM A NEW HAM OPERATOR.... NEVER DID THIS BEFORE BUT SOUNDS LIKE AN INTERESTING PROJECT. I WOULD APPRECIATE ANY INFORMATION I CAN GET ON CONVERSION OF CB TO 10 METER RADIO. I HAVE IN MIND CONVERSION OF A TRC 47 TO 10 METER FOR USE IN THAT BAND. IF YOU CAN HELP ME OUT, I WOULD REALLY APPRECIATE IT!! THANKS IN ADVANCE.

BILL
KD5FXT

3960. Re: TS-870 Mods?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-07 00:00:00 UTC
From: Bubba Joe <bubbajoe@mail.usa.net>
Message-ID: <LkjV3.1451$S%5.9792@typhoon3.tampabay.rr.com>
Source record: 65776
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Install an IF Filter? the 870 was the first HF rig to have DSP at the IF.
(translated: it has the finest IF filters available already)

Wes Stewart <n7ws@arrl.net> wrote in message
news:3825927c.324635435@news.azstarnet.com...
> Anybody made any improvements to the TS-870? Installing an i-f filter for
> instance?
>
> 73,
>
> Wes N7WS

3961. Re: TS-870 Mods?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-07 00:00:00 UTC
From: JerryL <jlockett@lightspeed.net>
Message-ID: <IGjV3.47655$5W2.1131486@news6.giganews.com>
Source record: 65777
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Dear Bubbajoe, you better recheck your facts about the 'only filters' in a TS-870. There are two (2) filters ahead of the DSP filter section that are centered on 8830khz and 455khz. Both are not so good ceramic types, and there is a mod out to replace them with a decent xtal lattice type, which greatly improves things, and then the DSP section works quite a bit nicer.....

There aren't any amateur radio type DSP filters that can work at those freqs (i.e., 8830, 455) at this time...At least not in a cost effective solution that you would be willing to pay. The current DSP in the Kenwood 870 works only at a very low (audio?) level, 'after' all the other filtering. Its like shutting the barn door, after the horse has escaped. Better filters would aid the low level DSP section to better deal with the remaining signals instead of having to deal with all the extra crud..

de Jerry

--
jlockett@lightspeed.net

Bubba Joe <bubbajoe@mail.usa.net> wrote in message
news:LkjV3.1451$S%5.9792@typhoon3.tampabay.rr.com...
> Install an IF Filter? the 870 was the first HF rig to have DSP at the IF.
> (translated: it has the finest IF filters available already)
>
>
> Wes Stewart <n7ws@arrl.net> wrote in message
> news:3825927c.324635435@news.azstarnet.com...
> > Anybody made any improvements to the TS-870? Installing an i-f filter for
> > instance?
> >
> > 73,
> >
> > Wes N7WS
>
>

3962. Re: TS-870 Mods?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-07 00:00:00 UTC
From: n7ws@arrl.net
Message-ID: <3825d65b.342013140@news.azstarnet.com>
Source record: 65778
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

On Sun, 7 Nov 1999 10:39:09 -0800, "JerryL" <jlockett@lightspeed.net> wrote:

>Dear Bubbajoe, you better recheck your facts about the 'only filters' in a
>TS-870. There are two (2) filters ahead of the DSP filter section that are
>centered on 8830khz and 455khz. Both are not so good ceramic types, and there
>is a mod out to replace them with a decent xtal lattice type, which greatly
>improves things, and then the DSP section works quite a bit nicer.....
>
>There aren't any amateur radio type DSP filters that can work at those freqs
>(i.e., 8830, 455) at this time...At least not in a cost effective solution that
>you would be willing to pay. The current DSP in the Kenwood 870 works only at a
>very low (audio?) level, 'after' all the other filtering. Its like shutting the
>barn door, after the horse has escaped. Better filters would aid the low level
>DSP section to better deal with the remaining signals instead of having to deal
>with all the extra crud..
>
>de Jerry

Thanks, Jerry for your response. You beat me to the punch, so to speak.

Can you point me to the info on the filter replacement.

Thanks,

Wes
>
>--
>jlockett@lightspeed.net
>
>
>Bubba Joe <bubbajoe@mail.usa.net> wrote in message
>news:LkjV3.1451$S%5.9792@typhoon3.tampabay.rr.com...
>> Install an IF Filter? the 870 was the first HF rig to have DSP at the IF.
>> (translated: it has the finest IF filters available already)
>>
>>

3963. WTB: Used 8877

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-07 00:00:00 UTC
From: ny1e@server.nlbbs.com
Message-ID: <FKuE7z.M9v@server.nlbbs.com>
Source record: 65779

My amp is done, now I need the tube! anyone have 8877 pulls? Please reply with condx and price shipped to Maine. Thanks, Dick NY1E

3964. Re: TS-870 Mods?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-07 00:00:00 UTC
From: Bubba Joe <bubbajoe@mail.usa.net>
Message-ID: <FFkV3.1453$S%5.10247@typhoon3.tampabay.rr.com>
Source record: 65780
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Dear Jerry,
Yes, you are correct about the filters. I stand corrected. I bought an 870 when they first came out because all previous 'dsp' rigs were at the audio freqs -- and yes, dynamic range impacts from adjacent signals still screw up the rx - or as you say close the barn door a little too late.

the two IF stages are filters -- and obviously had no idea there was a move afoot to improve them -- would be glad to follow up on that.

The thing that brought the 870 out a head of the pack - is that they do the DSP at 40MHz which is still a stage above audio. So you can define your transfer function with digital controls and do not have the 'classic' IF filter controls for SSB, CW ,etc.

It is a very nice radio -- I am sure that as DSP chip processing speeds increase (and get cheaper) the digital will move closer to the RF stage.

OK, Wes, I take it back.

cheers

bubba

JerryL <jlockett@lightspeed.net> wrote in message news:lGjV3.47655$5W2.1131486@news6.giganews.com...
> Dear Bubbajoe, you better recheck your facts about the 'only filters' in a
> TS-870. There are two (2) filters ahead of the DSP filter section that are
> centered on 8830khz and 455khz. Both are not so good ceramic types, and there
> is a mod out to replace them with a decent xtal lattice type, which greatly
> improves things, and then the DSP section works quite a bit nicer.....
>
> There aren't any amateur radio type DSP filters that can work at those freqs
> (i.e., 8830, 455) at this time...At least not in a cost effective solution that
> you would be willing to pay. The current DSP in the Kenwood 870 works only at a
> very low (audio?) level, 'after' all the other filtering. Its like shutting the
> barn door, after the horse has escaped. Better filters would aid the low level
> DSP section to better deal with the remaining signals instead of having to

deal
> with all the extra crud..
>
> de Jerry
>
> --
> jlockett@lightspeed.net
>
>
> Bubba Joe <bubbajoe@mail.usa.net> wrote in message
> news:LkjV3.1451$S%5.9792@typhoon3.tampabay.rr.com...
> > Install an IF Filter? the 870 was the first HF rig to have DSP at the
IF.
> > (translated: it has the finest IF filters available already)
> >
> >
> > Wes Stewart <n7ws@arrl.net> wrote in message
> > news:3825927c.324635435@news.azstarnet.com...
> > > Anybody made any improvements to the TS-870? Installing an i-f filter
for
> > > instance?
> > >
> > > 73,
> > >
> > > Wes N7WS
> >
> >
>
>

3965. Signal amplification

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-07 00:00:00 UTC
From: "Alan E." <iamthecaptain@hotmail.com>
Message-ID: <3D184A54FF567FFD.FECD882AA1293F57.6806274F90C406D3@lp.airnews.net>
Source record: 65781

I know nothing about radios, but I need to amplify the signal coming in to my radio. I know products are sold to amplify TV signal, but I haven't found a similar product for radios. Can I make such a thing myself?

Thank you
Alan E.

3966. Re: TS-870 Mods?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-07 00:00:00 UTC
From: JerryL <jlockett@lightspeed.net>
Message-ID: <XQmV3.85747$y45.1148165@news4.giganews.com>
Source record: 65782
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Well, I am reading this out of the Kenwood TS-870 service manual. It has four IF's. The first one is at 73.05Mhz, the second is 8.830Khz, the third is 455Khz, while the fourth and last is 11.30Khz. The DSP operates 'only' from the last IF. So as you can see, all those great DSP filters don't do much at all the other IF's that are higher. That 40Mhz clock feeds various things, but that is not in any way the frequency of the DSP unit.

There are some notes on improving the TS-870, which I have not tried (yet), and you may find them of interest at:

http://members.aol.com/ve3bmv/TS870mods.htm

regards Jerry...

--
jlockett@lightspeed.net

Bubba Joe <bubbajoe@mail.usa.net> wrote in message
news:FFkV3.1453$S%5.10247@typhoon3.tampabay.rr.com...
> Dear Jerry,
> Yes, you are correct about the filters. I stand corrected. I bought an
> 870 when they first came out because all previous 'dsp' rigs were at the
> audio freqs -- and yes, dynamic range impacts from adjacent signals still
> screw up the rx - or as you say close the barn door a little too late.
>
> the two IF stages are filters -- and obviously had no idea there was a move
> afoot to improve them -- would be glad to follow up on that.
>
> The thing that brought the 870 out a head of the pack - is that they do the
> DSP at 40MHz which is still a stage above audio. So you can define your
> transfer function with digital controls and do not have the 'classic' IF
> filter controls for SSB, CW ,etc.
>
> It is a very nice radio -- I am sure that as DSP chip processing speeds
> increase (and get cheaper) the digital will move closer to the RF stage.
>
> OK, Wes, I take it back.
>
> cheers
>
> bubba
>

3967. Re: TS-870 Mods?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-07 00:00:00 UTC
From: Bubba Joe <bubbajoe@mail.usa.net>
Message-ID: <g1nV3.1492$S%5.10756@typhoon3.tampabay.rr.com>
Source record: 65783
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Thanks for the link -- might be good to submit this good stuff to qrz.com
radio mods.

cheers

JerryL <jlockett@lightspeed.net> wrote in message
news:XQmV3.85747$y45.1148165@news4.giganews.com...
> Well, I am reading this out of the Kenwood TS-870 service manual. It has
four
> IF's. The first one is at 73.05Mhz, the second is 8.830Khz, the third is
> 455Khz, while the fourth and last is 11.30Khz. The DSP operates 'only'
from the
> last IF. So as you can see, all those great DSP filters don't do much at
all
> the other IF's that are higher. That 40Mhz clock feeds various things,
but that
> is not in any way the frequency of the DSP unit.
>
> There are some notes on improving the TS-870, which I have not tried
(yet), and
> you may find them of interest at:
>
> http://members.aol.com/ve3bmv/TS870mods.htm
>
> regards Jerry...
>
> --
> jlockett@lightspeed.net
>
>
> Bubba Joe <bubbajoe@mail.usa.net> wrote in message
> news:FFkV3.1453$S%5.10247@typhoon3.tampabay.rr.com...
> > Dear Jerry,
> > Yes, you are correct about the filters. I stand corrected. I bought
an
> > 870 when they first came out because all previous 'dsp' rigs were at the
> > audio freqs -- and yes, dynamic range impacts from adjacent signals
still
> > screw up the rx - or as you say close the barn door a little too late.
> >
> > the two IF stages are filters -- and obviously had no idea there was a
move
> > afoot to improve them -- would be glad to follow up on that.
> >

> > The thing that brought the 870 out a head of the pack - is that they do
the
> > DSP at 40MHz which is still a stage above audio. So you can define your
> > transfer function with digital controls and do not have the 'classic' IF
> > filter controls for SSB, CW ,etc.
> >
> > It is a very nice radio -- I am sure that as DSP chip processing speeds
> > increase (and get cheaper) the digital will move closer to the RF stage.
> >
> > OK, Wes, I take it back.
> >
> > cheers
> >
> > bubba
> >
>
>
>

3968. Re: Signal amplification

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-07 00:00:00 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3826037E.21B6E4F0@dialpoint.net>
Source record: 65784

What frequency ranges and do you need to transmitt also ?
There are preamps made for some frequencies but may not be much help
below 30 mhz with a good receiver. What radio are you goung to use ?

"Alan E." wrote:
>
> I know nothing about radios, but I need to amplify the signal coming in to
> my radio. I know products are sold to amplify TV signal, but I haven't
> found a similar product for radios. Can I make such a thing myself?
>
> Thank you
> Alan E.

3969. Re: Battery Backup for Astron Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-07 00:00:00 UTC
From: davem@groucho.cs.ubc.ca
Message-ID: <80508g$2dt@groucho.cs.ubc.ca>
Source record: 65785

w5yr@swbell.net writes:
>I am using that exact arrangement. I connect the battery to the power
>supply through a fuse. The fuse serves to prevent discharging the
>battery - probably catastrophically! - should the power supply crowbar
>for any reason. The power supply output is a constant 13 volts which only
>trickle charges the battery. Turning the power supply off does not
>discharge the battery. This arrangement has been in use for a couple of
>years now. I have not found it necessary to switch the battery out of the
>circuit for any reason.

This may work with some power supplies but will destroy the pass (output) transistor in others. Usually, the output (+) jack is connected to the emitter of the pass transistor. The voltage regulator circuitry applies a slightly higher voltage (forward biasing the base) to deliver current to the output. When the AC supply voltage goes away, the base voltage can fall to zero because there is no power to the regulator circuitry - but the emitter is still at 13 V due to the battery.

If the pass transistor's base-emitter breakdown voltage rating is higher than 13 V, that's OK. But for some transistors it's only 6 V, and turning off the AC supply with a battery connected to the output can destroy the transistor.

Dave

3970. Re: Battery Backup for Astron Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-07 00:00:00 UTC
From: William Janssen <billj@calweb.com>
Message-ID: <38264226.87754C1F@calweb.com>
Source record: 65786

Dave Martindale wrote:
>
> w5yr@swbell.net writes:
> >I am using that exact arrangement. I connect the battery to the power
> >supply through a fuse. The fuse serves to prevent discharging the
> >battery - probably catastrophically! - should the power supply crowbar
> >for any reason. The power supply output is a constant 13 volts which only
> >trickle charges the battery. Turning the power supply off does not
> >discharge the battery. This arrangement has been in use for a couple of
> >years now. I have not found it necessary to switch the battery out of the
> >circuit for any reason.
>
> This may work with some power supplies but will destroy the pass
> (output) transistor in others. Usually, the output (+) jack is
> connected to the emitter of the pass transistor. The voltage regulator
> circuitry applies a slightly higher voltage (forward biasing the base)
> to deliver current to the output. When the AC supply voltage goes
> away, the base voltage can fall to zero because there is no power
> to the regulator circuitry - but the emitter is still at 13 V due
> to the battery.
>
> If the pass transistor's base-emitter breakdown voltage rating is
> higher than 13 V, that's OK. But for some transistors it's only 6 V,
> and turning off the AC supply with a battery connected to the output
> can destroy the transistor.
>
> Dave
I burned up two power supplies this way before I finally
got smart. Now I always put a diode in series to prevent
reverse current.

Bill (slow to learn) K7NOM

3971. Re: Can a transformer have too much inductance?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-08 00:00:00 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <UiP1VBA6RhJ4Ewgk@g3ohx.demon.co.uk>
Source record: 65787

The simple answer is 'no, but if it has much more than you need, it probably has too much stray shunt capacitance and excessive HF loss'.

You can think of a transformer as being the parallel combination of the following: (1) a shunt inductor (which produces the magnetic field), (2) a shunt resistor (the loss of the ferrite material), (3) a shunt capacitor (the inter-winding capacitance) and a (4) perfect transformer. For efficient operation, you need to feed as much current into the 'perfect transformer'.

(1) The shunt inductor should not 'short out' too much of the current, so the reactance of the inductor should be quite a bit higher than the impedance of the feeder. 5 times has been suggested. This is a function of the mu of the ferrite, the cross-sectional area of the core, the number of turns, etc. For a given core, the shunt inductance is proportional to to the square of the number of turns.

(2) The shunt loss resistance also needs to be quite a bit higher than the impedance of the feeder. This is very dependent on the resistive loss of the core material and also is proportional to the sguare of the number of turns.

(3) The inter-winding capacity. This can be a case of 'it ain't what you do, it's the way that you do it'! Not only do you need to minimise the capacity between the turns of the primary winding, and between the turns of secondary winding, you also need to minimise the capacity between the primary and the secondary! This is a work of art!!! The usual technique is to use bifilar (ie 'two-wire') or trifilar (three-wire) winding techniques, where the primary and secondary windings are laid down on the core in a precise, orderly manner, so that they are interwound. Ideally, the relationship of the windings form a transmission line where the characteristic impedance is the same as the feeder, while, at the same time, the capacitive coupling between primary and secondary is as small as possible.

(4) This is simply the turns ratio required to transform the load (on the output side of the transformer) to that required by the source (on the input side of the transformer).

Some RF transformers can have a very wide operational bandwidth. For example, some cable TV splitters and taps efficiently cover 5 to 1000MHz with an essentially flat frequency response and minimal signal loss (say, 1/2dB). However, these are VERY low power devices. Higher power transformers usually cover a smaller bandwidth (eg 2 to 30MHz).

I think that the simple 'rule-of-thumb' way of designing a wideband RF transformer is:
(a) Use the highest mu ferrite possible consistant with low shunt resistance loss (ususally, a high mu tends to indicate a higher loss).
(b) Use the minimum number of turns, consistant with obtaining sufficient shunt inductance for the LF end, and a sufficiently high shunt resistance.
(c) Find out how to wind the transformer in a way that shunt and interwinding capacities are minimised!
(d) Find out how to compensate (to some extent) for the effects of the residual shunt and interwinding capacities.

Ther are other things to consider, such as saturation (non-linearity of the mu of the ferrite) etc. However, these are much too complicated for the present discussion!

So there you have it (for whatever it's worth).

Ian.

In article <01bf28ca$857c8ba0$86b14d0c@default>, AMDX <AMDX@worldnet.att.net> writes
>Well, I don't know if the high frequency response is limited by the
>high inductance or the core material. The core is a 4229-3F3
>ungapped pot core, the A sub L is about 15,000 (the book says
>7,800 + or - 25% but, measuring the impedance of either the pri
>or sec gives me 15,033 or 14,675 for A sub L)
> I do have high freq losses,
>1Mhz----------92.5% of input power delivered to output
>2Mhz----------63.5% of input power delivered to output
>3Mhz----------45.5% of input power delivered to output
>4Mhz----------33.7% of input power delivered to output
>5Mhz----------23.7% of input power delivered to output
>6Mhz----------17.0% of input power delivered to output
>7Mhz----------10.5% of input power delivered to output
> This was measured driving the 50 ohm side with .02vpp,
>the losses may be less with a smaller signal.
> The A sub L of this material drops off about 3Mhz and
>the loss curve doesn't show anything above ! Mhz.
> The self resonant freq of the 13 turn secondary is above 10Mhz, (to go
>above 10Mhz I have to change to a very low power signal generator) it may
>be 14Mhz but showed very weak and this is with an additional 15pf of
>scope probe capacitance.
> Hey Reg, let me give some details :-)
> I built this for a Flag antenna,
>>http://www.angelfire.com/md/k3ky/page37.html<
> the transformer has a shield between the primary and secondary.
>I wound 13 turns of #30 wire spaced apart on the
>bobbin then put on a thin layer of tape, over this I wound a layer of
>brass, being
>careful to not let the ends short together. I filled the space with
>Styrofoam and

>wound the 3 turn primary on the outside of the Styrofoam.
> I built a box out of PCB material, by earth grounding the ferrite core
>and the
>brass shield, I measure 1/10 of 1 pf of capacitance between the primary and
>
>the secondary. This is important to minimize according to the info on the
>webpage.
> I don't know how accurate this is, I'm using a voltage divider circuit
>and when I
>substitute a 1pf cap for the transformer the voltage across my resistor
>goes up
>by a factor of 10----so it seems my transformer has to be much less then
>1pf.
> I got the antenna working tonight!!! It is supposed to have a cardiod
>pattern,
>I can confirm this, I live in Florida I aimed the antenna N.E. I am not
>hearing
>Spanish language stations form the south on this antenna but if I switch to
>
>another antenna they are there.
> That's enough for now, I'm going to play with my radio.
>
> Thanks
> Mike
>
>

--
Ian Jackson

3972. Need Vacuum Variable Capacitor !!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-08 00:00:00 UTC
From: charlie Lee <chlee1207@hanmail.net>
Message-ID: <805a8n$23e$1@nnrp1.deja.com>
Source record: 65788

Hello guys ,

Is there anybody who has phone number of distibuter who carries
vacuum variable capacitor in USA or Japan ?

I need VVC 1500pF , 5KV now. I'm planning to buy 5 or more.
If dealer looks at this e-mail , please give me a quotation.
Fax : 82-2-3426-6895
Phone : 82-2-3426-6896

CHARLIE LEE

Sent via Deja.com http://www.deja.com/
Before you buy.

3973. FS: Ceramic Sockets

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-08 00:00:00 UTC
From: sabbatai_zvi@hotmail.com
Message-ID: <3825f382.34365179@news.earthlink.net>
Source record: 65789
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.swap

FOR SALE:

BOX OF QTY 9 New & used CERAMIC TUBE SOCKETS of various types.
Including:
QTY 3 New 7-pin sockets (6 small, one large)2.4" square
QTY 2 7-pin sockets (6 small, one large) 2.4" square, 2.4" square, used.
QTY 1 New Oval 7 pin socket (2 larger, 5 medium diameter pins) like 1625 uses.
QTY 1 Oval 7 pin socket (2 larger, 5 medium diameter pins) for 1625, used.
QTY 1 Square 7-pin socket (2 larger, 5 medium diameter pins) 2.6" square, used.
QTY 1 round 11-pin socket with octal style pin in center, used.

Will sell these only as a complete lot: $22.00 plus shipping

3974. Re: Need Vacuum Variable Capacitor !!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-08 00:00:00 UTC
From: headhamster <headhamster@erols.com>
Message-ID: <38267AA3.84EABFAC@erols.com>
Source record: 65790

Try Fair Radio Sales in Ohio. They have a website and sell surplus gear including VVCs at a fair price.

73, de Rich - W2YQ

3975. Re: Battery Backup for Astron Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-08 00:00:00 UTC
From: davem@groucho.cs.ubc.ca
Message-ID: <8061g9$4il@groucho.cs.ubc.ca>
Source record: 65791

William Janssen <billj@calweb.com> writes:

>I burned up two power supplies this way before I finally
>got smart. Now I always put a diode in series to prevent
>reverse current.

Yeah, that's the standard way to protect the supply. It degrades the output regulation a little bit, which slows down recharge a little bit, but it doesn't matter for this application.

I have a lead-acid battery charger that uses a special IC to control the charging process, and it takes an interesting approach to this problem. It puts a diode between the pass transistor and battery output to protect the pass transistor, as described. But the sensing point for the error amplifier, which controls the voltage during the constant-voltage part of the charge, is directly at the battery output, "downstream" from the diode. Thus the diode is *inside* the feedback loop, and the voltage drop across the diode that changes with current has no effect on output voltage.

This leaves the error amplifier connected to the battery, unprotected by the diode. But its circuitry is designed to handle battery voltage applied to this point when no input power is present, so there is no damage. It also draws only 50 ua or so, so it won't discharge your battery any significant amount if the charger power fails.

Dave

3976. Re: Where Do You Buy Project Supplies?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-08 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <806pc5$2et$1@nnrp1.deja.com>
Source record: 65792

I used to travel quite a bit on business but never found
much electronics in the Atlanta area...

Another source I should mention is discarded consumer
electronics. By their very nature, radios and TVs contain
RF components. VCRs are particularly good. Go for a walk
around the neighbourhood before the garbage truck comes...

As an example of putting sources together, I built a simple
amplifier over the weekend for my computer's soundcard to
drive a couple of speakers. Highlights:

LM384 amplifier chips: minimum-order padding
Speakers: potluck at the surplus store
2.7 ohm resistors, a favourite of the LM380/384/386
datasheet: ditto. I bought a dozen.
10k trimmer pots: salvaged from a dead VCR
Other passive components: stock

I tested the amplifier and speakers with a variety of noises,
all the way from weather satellite APT recordings to Wendy
Carlos MIDI files. It worked perfectly...

My bench power supply is built along similar principles,
with a surplus transformer and bridge rectifier and a heat-
sink from a hamfest. I splurged and bought a fancy 5 amp
regulator chip (LT1084) and some fresh new filter capacitors
from Digi-Key.
--
Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte
Satellite: VA3SFL on AO-16, UO-22, KO-23, KO-25

Sent via Deja.com http://www.deja.com/
Before you buy.

3977. I don't understand filters.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-08 00:00:00 UTC
From: David Snyder Hale <david@isi9.mtwilson.edu>
Message-ID: <806mo6$5j8$1@agate.berkeley.edu>
Source record: 65793

Hi,

Could someone help me understand a filter design? Not the design per se, I guess, but the response curve. In the 1996 Handbook there is a broadcast band filter which states that it rejects bc-band stations and passes 1.8 to 30 MHz. But then it shows this insertion loss curve with sort-of 3 peaks at f2,f4,f6 which are given as 0.677, 1.293, 1.111 MHz. So, it doesn't seem to me to correspond to the HF bands, but there must be some sort of frequency normalization that I don't understand.

If someone is interested but doesn't have the 96 Handbook, I put a GIF of the filter response curve available via anonymous FTP at isi8.mtwilson.edu

73,

--
Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

3978. Re: I don't understand filters.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-08 00:00:00 UTC
From: Dale Parfitt <parinc@bellsouth.net>
Message-ID: <3826E2DF.58AC40F9@bellsouth.net>
Source record: 65794

David Snyder Hale wrote:

> Hi,
>
> Could someone help me understand a filter design? Not the design per se, I
> guess, but the response curve. In the 1996 Handbook there is a broadcast
> band filter which states that it rejects bc-band stations and passes 1.8 to
> 30 MHz. But then it shows this insertion loss curve with sort-of 3 peaks
> at f2,f4,f6 which are given as 0.677, 1.293, 1.111 MHz. So, it doesn't
> seem to me to correspond to the HF bands, but there must be some sort of
> frequency normalization that I don't understand.
>
> If someone is interested but doesn't have the 96 Handbook, I put a GIF of
> the filter response curve available via anonymous FTP at isi8.mtwilson.edu
>
> 73,
>
> --
> Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

As I recall the filter, the plot is upside down compared to what one normally sees. The filter is a BCB reject filter that passes 1.8 MHz up- so the insertion loss is near zero from 1.8 MHz and higher. There are 3 (or 4 don't recall) zeroes in the reponse scattered across the broadcast band and I think one at zero freq.

Dale W4OP

3979. Re: I don't understand filters.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-08 00:00:00 UTC
From: David Snyder Hale <david@isi9.mtwilson.edu>
Message-ID: <806sf4$63d$1@agate.berkeley.edu>
Source record: 65795

On Mon, 8 Nov 1999, Dale Parfitt wrote:

> As I recall the filter, the plot is upside down compared to what one normal$
> sees. The filter is a BCB reject filter that passes 1.8 MHz up- so the
> insertion loss is near zero from 1.8 MHz and higher.

Yes, I get that impression. It plots insertion loss vs. frequency and
shows zero insertion loss above 1.8 MHz. But the plot runs from 0 to 1.8
MHz, indicating high insertion loss below 1.8 MHz. That is what I don't
understand, how that makes it a low pass filter.

73,
Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

3980. Develop Advanced Remote Sensing Systems

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-08 00:00:00 UTC
From: jreqs@my-deja.com
Message-ID: <8073ns$b04$1@nnrp1.deja.com>
Source record: 65796

Join our systems development team and help us meet challenges of growing complexity. Industry leader in the development and deployment of remote sensing systems seeks electrical engineers or those with a related discipline for programs in eastern Massachusetts, California, and elsewhere. Successful candidates will specialize in: algorithm development, mathematical modeling, or phenomenology. Computer simulation experience, test engineering, and other system design skills are also desirable. Openings exist for B.S., M.S., and doctorate level candidates. Competitive salary and generous benefit package. --Please reply to jreqs@my-deja.com for more information--

Sent via Deja.com http://www.deja.com/
Before you buy.

3981. Re: TS-870 Mods?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-08 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <38261c8c.891808856@news.online.no>
Source record: 65797
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

On Sun, 07 Nov 1999 22:27:24 GMT, "Bubba Joe" <bubbajoe@mail.usa.net>
wrote:

>Thanks for the link -- might be good to submit this good stuff to qrz.com
>radio mods.
>
or www.mods.dk

73 Jan-Martin LA8AK

3982. Re: I don't understand filters.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-08 00:00:00 UTC
From: Dale Parfitt <parinc@bellsouth.net>
Message-ID: <38270CA1.2C9DDA69@bellsouth.net>
Source record: 65798

David Snyder Hale wrote:

> On Mon, 8 Nov 1999, Dale Parfitt wrote:
>
> > As I recall the filter, the plot is upside down compared to what one normal$
> > sees. The filter is a BCB reject filter that passes 1.8 MHz up- so the
> > insertion loss is near zero from 1.8 MHz and higher.
>
> Yes, I get that impression. It plots insertion loss vs. frequency and
> shows zero insertion loss above 1.8 MHz. But the plot runs from 0 to 1.8
> MHz, indicating high insertion loss below 1.8 MHz. That is what I don't
> understand, how that makes it a low pass filter.
>
> 73,
> Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

Dave,
I quckly glanced over the article- I did not see where it says it is a LPF. This is an elliptic high pass filter.

Dale W4OP

3983. Re: I don't understand filters.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-08 00:00:00 UTC
From: blackm00@cam.org
Message-ID: <blackm00-0811991251370001@dialup-627.hip.cam.org>
Source record: 65799

In article <806sf4$63d$1@agate.berkeley.edu>, David Snyder Hale
<david@isi9.mtwilson.edu> wrote:

> On Mon, 8 Nov 1999, Dale Parfitt wrote:
>
> > As I recall the filter, the plot is upside down compared to what one
normal$
> > sees. The filter is a BCB reject filter that passes 1.8 MHz up- so the
> > insertion loss is near zero from 1.8 MHz and higher.
>
> Yes, I get that impression. It plots insertion loss vs. frequency and
> shows zero insertion loss above 1.8 MHz. But the plot runs from 0 to 1.8
> MHz, indicating high insertion loss below 1.8 MHz. That is what I don't
> understand, how that makes it a low pass filter.
>
> 73,
> Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

But it's a high pass filter. It's meant to reject the broadcast band,
where strong local signals reside, and pass the HF range.

The plot is upsdie down, since normally you'd see zero insertion at
the top of the plot, and then attenuation below.

I would assume the plot ignores above 1.8MHz because, it's relatively
flat, or at least minor ripple and unimportant. In fact, the text
says "less than 1dB insertion loss above 1.8MHz". The plot leaves off
at 1.8MHz and zero insertion loss.

The filter has ripple in the area where it's purpose exists. Thus
the ripple might be of use to the builder. If a local radio station
happens to be where one of those ripples hits minimum attenuation,
in some weird case it might not be enough attenuation. So it probably
is useful information.

You can tell it's a high pass filter because the capacitors are in
series with the signal (attenuation increases as frequency goes down)
and the coils go from those capacitors to ground (thus in effect
shorting more signal to ground the lower the frequency). Actually,
it looks like the coils act as series tuned resonant circuits, they
create a notch, so they may help to attenuate the frequencies below
the cut-off frequency more rapidly.

Running the LC information into equations might show this. And it mentions
that the filter originally in QST for February 1978, and that might
give a more complete explanation.

I'm not quite sure what the original question is? Is it merely confusion because the plot is upside down from the way you'd commonly see a plot, or is there some other question?

Michael VE2BVW

3984. Re: I don't understand filters.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-08 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <8074oc$998$1@neptunium.btinternet.com>
Source record: 65800

> I quckly glanced over the article- I did not see where it says it is
a LPF. This is
> an elliptic high pass filter.
==========
Exactly what is needed if you have a long antenna wire for the 160m
band and there are several local powerful medium-wave broadcast
stations which force their way into the front-end of your HF receiver.

Reg, G4FGQ

3985. 2 meter loop plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-08 00:00:00 UTC
From: Rowdy <captron@one.net>
Message-ID: <38271910.478BBE7@one.net>
Source record: 65801

Hi folks, anyone have plans/instructions on building a horizontal loop
for a 2 meter beacon? Not sure if I've seen anything in past additions
of QST or not and I'd imagine it'd be fairly easy to build something out
of copper I just don't have the dimensions.

Tnx es 73,

Ron, NR8O

3986. Clock crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-08 00:00:00 UTC
From: Bob <merryprankster@cwcon.net>
Message-ID: <vnFV3.50$c5.3476@news2-hme0>
Source record: 65802

Has any one used these clock crystals for home brew ?
AND is it possible to pull them ?
I have got one for 50 MHz and would like to use on 6 meter,
for a simple CW TX any tips ????
Thanks, Bob

3987. Re: I don't understand filters.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-08 00:00:00 UTC
From: David Snyder Hale <david@isi9.mtwilson.edu>
Message-ID: <8077m1$87s$1@agate.berkeley.edu>
Source record: 65803

Thanks for all the replies. Yes, I see now that it's a high pass, but now I'm really confused as to how it's effective at eliminating commercial stations like it says, since these stations would be at a higher frequency than the HF band.

Ok, now for the "why" I'm interested. I live near an antenna farm which services TV/radio to the Los Angeles basin. There is over 20,000 kW ERP about a mile from my shack. I'm trying to eliminate the S3 to S9 white noise level in my HF xcvr. There is a link to this RFI problem on the web page below for anyone interested. Thanks and 73,

--
Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

3988. Re: Clock crystals sorry for excess postings

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-08 00:00:00 UTC
From: Bob <merryprankster@cwcon.net>
Message-ID: <HBFV3.61$c5.3745@news2-hme0>
Source record: 65804

sorry for excess postings

3989. Re: Clock crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-08 00:00:00 UTC
From: Paul <pmartin@bright.net>
Message-ID: <3827271E.1474BC88@bright.net>
Source record: 65805

No, they can't be pulled but they do make handy osc sources, just
remember that most of them are square wave output. 73.
Paul

Bob wrote:

> Has any one used these clock crystals for home brew ?
> AND is it possible to pull them ?
> I have got one for 50 MHz and would like to use on 6 meter,
> for a simple CW TX any tips ????
> Thanks, Bob

3990. Re: I don't understand filters.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-08 00:00:00 UTC
From: ccox@chopped-ham-filter.uhc.com.invalid
Message-ID: <8079n1$2hlo$2@pike.uhc.com>
Source record: 65806

David Snyder Hale <david@isi9.mtwilson.edu> wrote:
: Thanks for all the replies. Yes, I see now that it's a high pass, but now
: I'm really confused as to how it's effective at eliminating commercial
: stations like it says, since these stations would be at a higher frequency
: than the HF band.

The commercial stations that it is filtering out are those on the Medium Wave
(aka AM Broadcast) band - not VHF/UHF radio and television stations. The
MW band runs from (approx) 550 to 1600 kc/s - i.e. just below top band.
--
Chris Cox, N0UK/G4JEC NIC Handle: CC345
LINUX - aka Microsoft Windows/NT - The Final Service Pack
1.79x10E12 furlongs per fortnight - it's not just a good idea, it's the Law!

3991. Re: Clock crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-08 00:00:00 UTC
From: davem@groucho.cs.ubc.ca
Message-ID: <807cu1$5qt@groucho.cs.ubc.ca>
Source record: 65807

Paul <pmartin@bright.net> writes:
>No, they can't be pulled but they do make handy osc sources, just
>remember that most of them are square wave output. 73.

Also keep in mind that computer clock crystals are generally specified
to have a frequency accuracy of 50 or 100 PPM - not very good. For
a radio transmitter, you usually need an accuracy of 5 or 10 PPM
after adjustment. Computer clock oscillators are not adjustable.

However, I have found a cheap source of good quality oscillators:
cell phones. Old analog cell phones can be found for $10 or less
at garage sales and flea markets. They all seem to contain a
temperature-compensated crystal oscillator which is adjustable.
These are probably already within a few PPM and can be adjusted
to less than 1 PPM error at room temperature, and will maintain
frequency much better over temperature change than the uncompensated
crystal used in most ham gear.

These TCXOs would make excellent reference oscillators for a radio using
a PLL for tuning. The analog cellphone frequencies are spaced 30 kHz
apart, so the oscillator is always a multiple of 30 kHz - typically
something like 12 MHz (400 * 30 kHz) or 15.36 MHz (512 * 30 kHz).
With a bit more division, you could have tuning step sizes of 10 or 5 kHz.

Dave

3992. confusing terminology

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-08 00:00:00 UTC
From: Bahremu <bahremu@yahoo.com>
Message-ID: <807g09$1aie@enews1.newsguy.com>
Source record: 65808

I've been looking at building a UHF transmitter and a receiver for it, but i don't know how much power i need to trasmit with. Does anyone have the math to show how far 1 Watt can transmit in the open (line of sight), and what is a dbm? and how would I raise/lower the output?

3993. Re: I don't understand filters.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-08 00:00:00 UTC
From: David Snyder Hale <david@isi9.mtwilson.edu>
Message-ID: <807i2f$am1$1@agate.berkeley.edu>
Source record: 65809

Would a 5-Branch elliptic low pass filter with fc=30MHz do the trick for cutting out the 16MW of TV & FM radio RF? (eg. page 30.30 in '96 Handbook)

Or would the harmonics still get through? I assume that's what I'm experiencing now, is lower order harmonics.

Can I transmit through such a filter as well?

--
Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

3994. FS: BIG AMP PARTS;

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-08 00:00:00 UTC
From: RB <wa9eka@worldnet.att.net>
Message-ID: <807kj9plr1@bgtnsc02.worldnet.att.net>
Source record: 65810

```
BIG AMPLIFIER PARTS FOR SALE;
----------------------------------------
Jennings Vacuum Variable Capacitors;
Brand New Pair; CB-144 CB-150
Clear Glass 1000pf/3KV 750pf/5KV
with Bevel Gear Drives, Bevel Gear shafts,
Turns Counters, Panel Bushings, & Knobs.
ALL never used in MINT CONDITION. $300
includes shipping (US/48)
----------------------------------------
Jennings Vacuum Variable Capacitors;
Opaque White Ceramic Pair mounted on thick
factory machined alum. plate 200pf & 320pf
both rated 5KV and appear to be new. $150
includes shipping (US/48)
----------------------------------------
Jennings 50pf@16KV Vacuum Capacitor $30
Jennings 50pf@32KV Vacuum Capacitor $40
Amperite 50pf@40KV Vacuum Capacitor $40
all clear glass and appear to be brand new!
all 3 for $100 including shipping (US/48)
----------------------------------------
BIG "Cheese Slicers" Variable Capacitors;
Johnson 50pf @10KV (1/2" plate spacing) $30
Johnson 2 x 50pf @ 7.5KV (3/8" spacing) $30
both for $50 including shipping
----------------------------------------
Weston 0-50 AMP AC Current Panel Meter complete
w/Current carrying remote SHUNT. $25 Shipped US/48
----------------------------------------
0-5 Kilovolts DC Panel Meter w/mirror scale $25
----------------------------------------
Jennings Vacuum Variable Capacitor;
20-1500pf@10KV Clear Glass / straight shaft
with shaft coupler. Perfect Condition! $300
includes shipping (US/48)
----------------------------------------
Jennings Vacuum Variable Capacitor;
500pf@4KV White Ceramic Type w/Hvy insulated
mounting brackets. Straight Shaft including
shaft coupler. $150 includes shipping (US/48)
----------------------------------------
4-1000A RF Deck with 19" rack panel front,
17 1/2" high w/4 Meters, Bandswitch, Tank
```

coil, tube socket and filament transformer,
Filament chokes, rotary coil and capacitors
tuned input assembly below chassis, knobs,
switches, RF Choke and HV Plate Blocking &
Bypass HV Ceramic Capacitors. $100 OR $500
total with the 2 caps above mounted inside!
(They presently are & are perfect match set!)
includes shipping (US/48) [BIG & HEAVY]

4-1000 2-35Mhz. RF Deck chassis only, with
air flow tube socket, full freq. range tuned
input assembly and band switch/tank coil. $50
includes shipping (US/48)

4-1000A Eimac Tube (Good pull) $150 + shipping
4-1000 Eimac Glass Air Chimney $100 + shipping
4-1000 Finned Alum Plate Cap w/choke $15 + " "

New-Never Used Peter Dahl HV Transformer;
Primary 0-210-220-230-240-250 Volts
Secondary 0-3500-4000-4500-5000 Volts @ 1.8A!
Weight >65 lbs. $250 plus shipping

K2AW's 14KV Hi Voltage Rectifier Modules
4-mounted in full wave bridge configuration
on aluminum panel with 2-250W Wirewound HV
Bleeder Resistors on ceramic standoff insuls.
$50 including shipping (US/48)
---
(3) 53 MFD. @ 4KV Oil Filled Capacitors
$40 ea. or 3/$100 shipping included (US/48)

Digital snapshots (.jpg) available via e-mail
for all above items per request. -=Roger-K9RB=-
E-Mail; K9RB@arrl.net OR RogerEKA@email.msn.com

3995. Re: ?est wire for making RF coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-08 00:00:00 UTC
From: Donald R Montgomery <donrm@mtleng12.sr.hp.com>
Message-ID: <807kkl$adr@canyon.sr.hp.com>
Source record: 65811
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.misc

In rec.radio.amateur.homebrew Keith Rainbow <rrainbow@cc.curtin.edu.au> wrote:

> Tom Bruhns <tomb@lsid.hp.com> wrote in message
> news:38173D73.F77D25AD@lsid.hp.com...
> : De Guerin wrote:
> : >
> : > Litz wire is best ..
> :
> : AFAIK, only over a limited range of frequencies, typically mid-kHz to
> : very low MHz. See http://www.neewcweb.com/litz/litz.htm for more info.

> Agreed about Litz wire. According to Terman, not much real advantage above
> 1 MHz due to stranding irregularities and inter-strand capacitance. BTW
> have you ever tried BUYING the stuff?

See:

http://www.wiretron.com/ and click on Litz Wire - General Information Page

Don K6LTS
donrm@sr.hp.com

3996. Re: confusing terminology

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-08 00:00:00 UTC
From: "Laszlo I. Morocz" <kf4pv@SPAMMENOTlmorocz.com>
Message-ID: <mPKV3.10401$_C.6097@jump.innerx.net>
Source record: 65812

A dbm is power level referenced to 1 milliwat, so 0 dbm is 1 milliwatt. It doubles everytime you add 3dbm. 3 dbm is 2 mw, 6 dbm is 4 mw, 9 dbm is 8 mw, 30 dbm is 1.024 watts, 33 dbm is 2.048 watts, 50 dbm is 104.8 watts and so on.

A radio transmits infinitely far. The important thing is how far away you can receive and demodulate it. 5 factors control this - the transmitter power, the transmitter antenna system gain, the path loss between the transmitter and receiver antennas, the receiver antenna system gain and the receiver sensitivity. As long as the transmitter power, plus the antenna gains minus the path loss are greater than or equal to the receiver sensitivity, you'll be able to hear the signal and demoudulate it. The math is:

P = transmit power in dbm
Gt = transmit antenna system gain in dbi
Gr = receive antenna system gain in dbi
L = free space loss in dB

dbi is antenna gain referenced to an isotropic antenna (that's one that radiates equally in all directions). For example, a dipole has a a gain of 2.14 dbi, a groundplane antenna has 3 dbi and a good yagi can be 13 dbi or higher. Just as with dbm, every time you add three, you're doubling the gain. So the 3 dbi groundplane has double the gain of an isotropic antenna. When you use the antenna system gain, that includes the feed line losses, polarization losses, etc. Power calculations are done in decibels, dbi and dbm because then you can just add and subtract the power levels and gains and losses instead of having to multiply and divide.

Free space loss can be approximated by :

L = 32.4 + 20 log f + 20 log p

where f is the frequency in MHz and p is the distance in km

So putting all this together, if you have a 1.024 watt (30 dbm) 144 MHz transmitter feeding a 13 dbi yagi aimed at a second 13 dbi yagi 10 km (or 6 miles) away, the available power from the receiver antenna into the receiver is:

P = 30 dbm
Gt = 13 dbi
Gr = 13 dbi
L = 32.4 + 20 log 144 + 20 log 10 = 95.57 dB

30 dbm + 13 db - 95.57 dB + 13 db = -39.6 dbm or .107 microwatts
From Ohm's law this is about 46 microamps or 2.3 millivolts in a 50 ohm load

For FM you typically need a 20 dB signal to noise ratio for no interference. This means that the received signal must be 20 dB above (about 100 times stronger than) the noise in the receiver. So in this case, as long as your receiver noise is less than -59.6 dB (or 23 microvolts), you'll hear a clear signal. Just for reference, my ICOM-u2AT lists a sensitivity of 2 micro volts for 20 dB SNR, so this signal would be about 1000 times louder than the minimum for clear FM reception. So I could cut the transmit power by 1000 down to 1 milliwatt.

Note that if the power budget wasn't enough to get through, I could have raised the power :-(, improved the transmit antenna :-), improved the receive antenna :-) or the receiver sensitivity :-). Sometimes you can even improve the path loss, for example, raising the antenna above the trees.

As a practical example, I once received a full-quieting signal on a hand-held with a rubber ducky from a 35 mw satellite beacon over 200 miles away.

For a really excellent discussion of radio link budgets, see Chapter 13 of The Satellite Experimenter's Handbook by Martin Davidoff, K2UBC (published by ARRL).

73 de KF4PV/3, Laszlo

--
To reply, remove the text SPAMMENOT from the e-mail address.

Bahremu wrote in message <807g09$1aie@enews1.newsguy.com>...
>I've been looking at building a UHF transmitter and a receiver for it, but
i
>don't know how much power i need to trasmit with. Does anyone have the
math
>to show how far 1 Watt can transmit in the open (line of sight), and what
is
>a dbm? and how would I raise/lower the output?
>
>

3997. Re: 2 meter loop plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-08 00:00:00 UTC
From: ka4cnh <ka4cnh@bellsouth.net>
Message-ID: <38277A63.7CE86746@bellsouth.net>
Source record: 65813

I believe you will be able to find all the information you need in the ARRL antenna books. Dave-KA4CNH

Rowdy wrote:

> Hi folks, anyone have plans/instructions on building a horizontal loop
> for a 2 meter beacon? Not sure if I've seen anything in past additions
> of QST or not and I'd imagine it'd be fairly easy to build something out
> of copper I just don't have the dimensions.
>
> Tnx es 73,
>
> Ron, NR8O

3998. Re: TS-870 Mods?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-08 00:00:00 UTC
From: ka4cnh <ka4cnh@bellsouth.net>
Message-ID: <38277C2E.C943DECA@bellsouth.net>
Source record: 65814
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Hello Wes, as I understand the TS-870, it is one of the few fully digital rigs, including filtering, available on the market. I wonder why one would choose to add any more IF filtering than is already digitally available? 73, Dave-KA4CNH

Wes Stewart wrote:

> Anybody made any improvements to the TS-870? Installing an i-f filter for
> instance?
>
> 73,
>
> Wes N7WS

3999. Re: Where Do You Buy Project Supplies?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-08 00:00:00 UTC
From: ka4cnh <ka4cnh@bellsouth.net>
Message-ID: <38277D35.A0F398DB@bellsouth.net>
Source record: 65815

Try Radio Shack.com. 73, Dave-KA4CNH

Billy Moore wrote:

> I want to start building some projects and I need to find a good source for
> basic parts like resistors, caps, pots, connectors, etc. I've done some
> searching on the web and I've found Newark (expensive), Digi-Key, Jameco,
> and a few other smaller suppliers. Jameco seems to have the best
> price/selection of the biggies. There are some smaller ones I haven't heard
> of before. Can anyone give me some recommendations? Thanks.
>
> Billy Moore
> KF4ECB

4000. Re: TS-870 Mods?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-08 00:00:00 UTC
From: JerryL <jlockett@lightspeed.net>
Message-ID: <eKLV3.49723$5W2.1199637@news6.giganews.com>
Source record: 65816
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Well, thats not quite correct. It has two (2) I.F. filters at 8.830Mhz and
455Khz ahead of the DSP filter (11.xxKhz) section. They are lousy filters, thus
the interest in improving them...

de jerry...

--
jlockett@lightspeed.net

ka4cnh <ka4cnh@bellsouth.net> wrote in message
news:38277C2E.C943DECA@bellsouth.net...
> Hello Wes, as I understand the TS-870, it is one of the few fully digital
> rigs, including filtering, available on the market. I wonder why one would
> choose to add any more IF filtering than is already digitally available? 73,
> Dave-KA4CNH
>
> Wes Stewart wrote:
>
> > Anybody made any improvements to the TS-870? Installing an i-f filter for
> > instance?
> >
> > 73,
> >
> > Wes N7WS
>
>
>

4001. Re: Transformer Cores

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-08 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <vzMV3.49791$5W2.1202032@news6.giganews.com>
Source record: 65817
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Try calling the manufacturers of the iron. The usual steel companies, like Armco, etc. They can refer you to sources of laminations and give you catalogs. Who knows, they might even give you samples.

73, Bob K6DDX

4002. Re: confusing terminology

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-08 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <oJMV3.57266$7I4.1193236@news5.giganews.com>
Source record: 65818

Minor correction: +30 dBm is exactly one Watt.
Doubling the power increases the reading by slightly more than 3 decibels,
actually close to 3.010299 dB. It's 10 times the log (base 10) of 2.

73, Bob K6DDX

4003. Re: confusing terminology

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-08 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <3827A064.662FB228@corecomm.net>
Source record: 65819

```
Laszlo I. Morocz wrote:
> A dbm is power level referenced to 1 milliwat,
> [snip]
> dbi is antenna gain referenced to an isotropic antenna

And a dbCooper is a rich anonymous parachutist. :-)

--
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
```

4004. Re: Tayloe mixer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-08 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <3827AA89.6768C72D@corecomm.net>
Source record: 65820

K7ITM wrote:
> Well...I think the op amps should be low distortion, but they don't need to be
> particularly fast. The signals on the capacitors should not be changing very
> quickly: the capacitors are supposed to act as a very serious lowpass filter,
> and indeed must be chosen to set a corner frequency around 3kHz, if that's the
> bandwidth you want. Seems like there's no reason to not put in additional
> rolloff going into the op amps, if the low 6dB/octave rolloff of the single
> lowpass is a problem.

I'm thinking low noise and low distortion. As you say, high speed isn't
a big selection parameter. Thank goodness, low noise, low distortion amps
aren't expensive any more (unless you stick "ultra" in liberally).

> You don't HAVE to have AGC, though it might be a nice convenience, just as on
> other receivers. (Actually, to keep the I and Q channels balanced, I'd prefer
> to NOT use AGC and just have wide dynamic range in the amps.) Good audio op
> amps are capable of pretty wide dynamic range: run on +/-15V supplies, they
> can output over 5 volts RMS. If the gain is *10 (20dB), and the input-referred
> noise is 5 nanovolts/rtHz, then the output noise from the amplifier is roughly
> 300 nanovolts in the 3kHz bandwidth, or more than 140dB below full output.

Still in all, the "minimum detectable signal" is minimally detectable for
a reason, and I suspect the noise on that 11 uV signal out of the detector
(I'm ignoring the 1 dB loss specified) will be pretty close to another
11 uV.

Now to raise 22 uV to a milliwatt in an 8-ohm speaker, figure a voltage
gain of 4000 or about 70 dB.

Now apply that 70 dB to the 4V mixer output... how far does the cone fly?
:-) *That* is why I want some AGC. More practically, though, allow an
input of 1 mV from the guy with the nice signal, and we're jumping from
one mW to 2W at the speaker, a rather uncomfortable change in volume.
As clunky as AGC can get, I'd rather accommodate the change than clip it
and ride a pot.

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

4005. Re: PLL Serial information

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-08 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <3827B11B.5DA62A17@corecomm.net>
Source record: 65821

yvon roy wrote:
> I have built up a memory for storing a 3 wire PLL serial signal. The
> origin of this information is from a National Software for the PLL #
> LMX1501. The problem is that the information coming out of the computer
> from the parallel port is too fast for my memory.
> Does anybody know if a method exist to slow this information. Any
> information is appreciated. Thanks!

What does your "memory" consist of? I never thought of a parallel port as
all that fast, i.e. 200 to 400 KHz when it's really flying.

How fast is the information coming out? Can you give a rate?

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

4006. Re: ## Repeat post: does anyone have access to a Mitsubishi RF catalog or similar other info source

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-08 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <3827B307.5EAF1C2@corecomm.net>
Source record: 65822

```
tinkerman wrote:
> I need to get a data sheet for an RF synthesizer chip marked
> "M64086GP". It might be discontinued, but I'm not sure.
> A pointer to a web location would be great!

Well, I can tell you the Mitsubishi web site is less than no help.

--
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
```

4007. *** Cool electronics and robots ***

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-08 00:00:00 UTC
From: Tiffany Huggins <tiffany@oshcosh.com>
Message-ID: <B44CF985.25CE%tiffany@oshcosh.com>
Source record: 65823

```
Check out the pager watch at http://www.gizmomall.com
Are these real ?

B )
```

4008. Re: I don't understand filters.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-09 00:00:00 UTC
From: lasse.moell@swipnet.se
Message-ID: <38283894.16805046@news.lin.foa.se>
Source record: 65643

Well, you can pobably pick up a commercial high-power LP filter made
to filter out spurious emissions from your tx to affect BC and TV sets
nerby. This filter would just as well filter out signals trying to get
into your radio!! It should have some 80-100 dB of attenuation at 100
MHz.

Good Luck
Lasse SM5GLC
On 8 Nov 1999 22:15:43 GMT, David Snyder Hale
<david@isi9.mtwilson.edu> wrote:

>Would a 5-Branch elliptic low pass filter with fc=30MHz do the trick for
>cutting out the 16MW of TV & FM radio RF? (eg. page 30.30 in '96 Handbook)
>
>Or would the harmonics still get through? I assume that's what I'm
>experiencing now, is lower order harmonics.
>
>Can I transmit through such a filter as well?
>
>--
>Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

4009. Re: HELP! Tube Guru's Advice Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-09 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <809k9m$56f$1@nnrp1.deja.com>
Source record: 65644

In article <382312CB.116D34B0@midwestmicro-tek.com>,
rhaub@midwestmicro-tek.com wrote:
> About 4 months ago or so I posted a letter to solicit help on a
> 12BY7/1625 75 watt transmitter that I was building. I was anticipating
> passing my Novice exam and was building my first transmitter and
> reciever. I got a lot of good advice from a lot of good people. I'd
like
> to thank Mike Silva, Doug Smith, Blake, Michael Tracy at ARRL and
> especially Jim N2EY for all of thier help and also the rest of you
guys
> who contributed as well. And Bill N2CQR for all the help getting my
MMX
> reciever on line.
>
> It took a while and in the mean time I got caught up with other things
> but I finaly sat down with all of the posted advice and e-mails and
GOT
> THE DARN THING WORKING! Not quite as well as I'd like but I used all
the
> advice I got and I finally got the transmitter working fairly well.
I'm
> getting about 30 watts output on 80m and about 35 watts output on 40m.
> It's a good, clear signal with very little (thanks to the transmatch)
> harmonics. My SWR shows a maximum of about 1.2 on the extream edges of
> my tuneing range. It's not the 50 watts that I was expecting but I can
> get on the air with it. Turns out that my final coils in the pi
network
> where a bit off and needed better shielding. I shielded everything and
> now I'm getting a much stronger and clearer signal.
>
> I got my ticket 2 months ago but I want to practice my code a bit more
> before I go on the air. I'm in an aluminum sided apartment house and
> because of how my antenna is situated most of my signal will be going
> North and West so if any one is interested I'll be at operating
> somewhere at 3.71MHz and 7.11MHz in a couple of weeks.
>
> TNX!
>
> Rick, KC0GIX

Rick,

ALLRIGHT!!

What time of day do you think you'll be on the air? I just moved to a new QTH, antenna is up, and will try to listen for you.

A note about RF power output:

Many RF power meters are not as accurate as we assume them to be. They are often taken too literally.

For example, I know a ham with a popular RF power meter who could get "only" 600 watts out of his Heath linear, even when running 1200 watts input. The meter specs, however, said "plus-or-minus 10% of full scale" and he was using it on the 2000 watt scale. So it could be off as much as 200 watts!

Once you get the hang of rigs like the one you built, tuneup will be a snap. 35 watts can make a lot of noise on the bands!

Good luck with the rig - let us know how it works out for you.

73 de Jim, N2EY
--
FISTS #4360
BIT #0001

Sent via Deja.com http://www.deja.com/
Before you buy.

4010. FS: Tubes, Books & misc.stuff

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-09 00:00:00 UTC
From: MURRAY PASTERNACK <M.PASTERNACK@prodigy.net>
Message-ID: <809j93uag1@newssvr03-int.news.prodigy.com>
Source record: 65645
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

e-mail m.pasternack@prodigy.net to receive 10 page list. Murray, W6KRC

4011. Re: What is the current state of the art in HF fron end design?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-09 00:00:00 UTC
From: Butch Magee <butchkay@netdoor.com>
Message-ID: <382854FD.12F5F44@netdoor.com>
Source record: 65646

The state of the art is very good. Better than at any time in history. No kidding!!

Butch KF5DE

4012. Re: I don't understand filters.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-09 00:00:00 UTC
From: Butch Magee <butchkay@netdoor.com>
Message-ID: <382855D3.6316F2C5@netdoor.com>
Source record: 65647

No need to understand them, just accept them, or tear them off and smoke it anyway! :o) Remember, Jesus loves you, AND, he doesn't like you to smoke the nasty things. Remember this.

Butch KF5DE

4013. FS KENWOOD TS-940S AT

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-09 00:00:00 UTC
From: "Gabriel G. Melo" <w1ups@fastdial.net>
Message-ID: <s2gmufo96i77@corp.supernews.com>
Source record: 65648

```
FOR SALE KENWOOD TS-940S AT GOOD CONDITION $1000
OR BEST OFFER CALL 1-401-434-2606
```

4014. Re: Clock crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-09 00:00:00 UTC
From: zmola@campbellsci.com
Message-ID: <38286410.2091487@192.168.2.19>
Source record: 65649

On 09 Nov 1999 04:22:03 GMT, k7itm@aol.com.nospam (K7ITM) wrote:

>Bob wrote:
>
>>Has any one used these clock crystals for home brew ?
>>AND is it possible to pull them ?
>>I have got one for 50 MHz and would like to use on 6 meter,
>>for a simple CW TX any tips ????
Me too.
I was interested in making a 6M cw rig to practice locally with some
NoCode techs.

> On the
> other hand, if it's a full clock oscillator, unless it's one of the fancier
> ones with an adjustment, then you can't pull it. I've salvaged a few
> adjustable ones from boards, but they are much rarer than the non-adjustable
> oscillators.

OK, I have some 4 pin oscillators and some 6 pin oscilators. does
this make a difference?

How does one tell the difference. Many don't have part numbers that I
can see or interpret.

I've been pulling off crystals and oscilators off of all of my junk
boards for the past year. I have a nice small collection.

Does anyone have a nice simple design for a 28.328 cw tranceiver or
transmitter.

Carl
AC7BB

4015. Re: ?est wire for making RF coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-09 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <809p79$qc6$1@neptunium.btinternet.com>
Source record: 65650
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.misc

The problem with Litz at HF is not stray capacitance between wires or stranding irreglarities. I doubt if Terman ever said so. For Litz to behave as intended each individual copper strand should have a diameter something less than the skin depth in copper.

Skin depth in copper = 0.0026 / Sqrt(F) inches where F is in MHz.

This is fine up to a few hundred KHz.

But at HF, to manufacture (draw through diamond dies and then insulate with enamel) such fine wire is extremely expensive and, to be of any use above a few MHz, ultimately impossible.

However, above a few MHz, high values of Q can be obtained with solid copper wire. Incidentally, no significant reduction in resistance is achieved by silver plating. It is not worth the cost of a plating operation and of the silver itself.

Reg.

4016. device equivalents: USA vs GB transistor names??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-09 00:00:00 UTC
From: gagnon@gagnon.fakeu-net.com
Message-ID: <38287444.1277032@news.u-net.com>
Source record: 65651
Cross-posted to: sci.electronics.basics,rec.radio.amateur.homebrew

can anyone point me to a website that might have suggestions for
semiconductor device equivalents and replacements and also listings of
USA versus UK transistor name equivalents??

Your help would be appreciated.

Larry Gagnon

4017. Re: device equivalents: USA vs GB transistor names??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-09 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <9hNw9GAjVIK4Ewt5@ifwtech.demon.co.uk>
Source record: 65652
Cross-posted to: sci.electronics.basics,rec.radio.amateur.homebrew

Larry Gagnon wrote:
>can anyone point me to a website that might have suggestions for
>semiconductor device equivalents and replacements and also listings of
>USA versus UK transistor name equivalents??

If by "name equivalents" you mean the same chip under different part numbers in the USA and in Europe (not forgetting Japan) then you'll mostly be disappointed.

Generally you have to look for *functional* equivalents - devices that have very similar properties and can be interchanged in non-critical applications.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

4018. Re: Clock crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-09 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <38275374.971412450@news.online.no>
Source record: 65653

On 8 Nov 1999 12:48:01 -0800, davem@groucho.cs.ubc.ca (Dave
Martindale) wrote:

>Paul <pmartin@bright.net> writes:
>>No, they can't be pulled but they do make handy osc sources, just
>>remember that most of them are square wave output. 73.
>
>Also keep in mind that computer clock crystals are generally specified
>to have a frequency accuracy of 50 or 100 PPM - not very good. For
>a radio transmitter, you usually need an accuracy of 5 or 10 PPM
>after adjustment. Computer clock oscillators are not adjustable.
>
>However, I have found a cheap source of good quality oscillators:
>cell phones. Old analog cell phones can be found for $10 or less
>at garage sales and flea markets. They all seem to contain a
>temperature-compensated crystal oscillator which is adjustable.
>These are probably already within a few PPM and can be adjusted
>to less than 1 PPM error at room temperature, and will maintain
>frequency much better over temperature change than the uncompensated
>crystal used in most ham gear.
>
>These TCXOs would make excellent reference oscillators for a radio using
>a PLL for tuning. The analog cellphone frequencies are spaced 30 kHz
>apart, so the oscillator is always a multiple of 30 kHz - typically
>something like 12 MHz (400 * 30 kHz) or 15.36 MHz (512 * 30 kHz).
>With a bit more division, you could have tuning step sizes of 10 or 5 kHz.
>
> Dave
14318 khz xtal may be pulled 5-7khz in an ordinary paralell res.
oscillator, and some 4433khz xtals may pull relatively easy -
particularly if they are made for color burst reference in a tv,
havent tried 3579 xtals, but the 3.58MHz resonators may pull 120khz -
on 80m! Also 27MHz xtals pulls relatively much on 9MHz paralell res.
(which is somewhat above series res.)

73
jan-martin LA8AK

4019. Re: 2 meter loop plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-09 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <382756d7.972279563@news.online.no>
Source record: 65654

On Mon, 08 Nov 1999 13:40:16 -0500, Rowdy <captron@one.net> wrote:

>Hi folks, anyone have plans/instructions on building a horizontal loop
>for a 2 meter beacon? Not sure if I've seen anything in past additions
>of QST or not and I'd imagine it'd be fairly easy to build something out
>of copper I just don't have the dimensions.
>
>Tnx es 73,
>
>Ron, NR8O
>
>
you mean .... like the DDRR antenna or is it a quad?

4020. Re: info Texscan attenuator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-09 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <38275808.972584662@news.online.no>
Source record: 65655

On Wed, 03 Nov 1999 19:32:57 -0800, Eric Post <post@iaehv.nl> wrote:

>Hello,
>
>recently I bought a step attenuator from Texscan and now I'm looking for
>some information about it. Can someone help me ?
>
>It's a model LA 54 attenuator from Texscan corp. 0-60 dB 1 dB steps.
>
>I would like to know the following :
>
>max. frequency
>VSWR
>maximum power
>
>Plaese reactions by email, thanks a lot.
>
>Eric Post PE1MIX
Perhaps it is the one which goes with the texscan sweeper? I believe
it is good up to 500MHz. I bought the 75 ohm version because it was
available - and the most important is that it can be repaired, and it
has only minor faults for measurements on VHF range

73 jan-martin LA8AK

4021. Very basic transformer question -- ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-09 00:00:00 UTC
From: JGinNY <jgovost1@twcny.rr.com>
Message-ID: <3828ADAE.87FADC96@twcny.rr.com>
Source record: 65656
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.basics

What does "10,000 ohms, P-toP" or "plate to plate" mean?

What is the significance of this "p-to-p" impedance (or resistance) value, when working with interstage or audio transformers?

Does this value have something to do with the resistance of the windings themselves, or does it somehow figure into the impedance matching ratio (primary to secondary)?

Any help on this would be appreciated. Please reply to my e-mail.

Thanks!
J.

4022. Re: Need Vacuum Variable Capacitor !!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-09 00:00:00 UTC
From: Jim Adney <jadney@vwtype3.org>
Message-ID: <MZ4nOI8brT5I3SgR+hOV9wEibAYY@4ax.com>
Source record: 65657

charlie Lee <chlee1207@hanmail.net> wrote:

>Is there anybody who has phone number of distibuter who carries
>vacuum variable capacitor in USA or Japan ?

Sorry, I don't have phone numbers here, but here are some names:

Manufacturers:

Jennings, CA
Kilovac, CA

Distributors:

Surcom Associates, Carlsbad, CA

Jim
-

Jim Adney jadney@vwtype3.org
Madison,Wisconsin USA

4023. Re: Where Do You Buy Project Supplies?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-09 00:00:00 UTC
From: Billy Moore <billymoore@nospam.mindspring.com>
Message-ID: <80aotb$2kl$1@nntp6.atl.mindspring.net>
Source record: 65658

Thanks to all who replied. This is a very helpful group.

Billy Moore
KF4ECB

4024. Re: *** Cool electronics and robots ***

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-09 00:00:00 UTC
From: Vincent Coppola <vinyc@snet.net>
Message-ID: <3828F732.630D@snet.net>
Source record: 65659

Tiffany Huggins wrote:
>
> Check out the pager watch at http://www.gizmomall.com
> Are these real ?
>
> B)
Yes the pager watches are real. However they use a zinc air battery
(hearing aide battery), there is no way to recharge it, and the life is
short. (1 or 2 months typical).

Also they are twice the price of the digital cell phone I just bought,
which has messaging,voice mail, etc.
Just my opinion for what it's worth.

4025. Re: POW Camp Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-09 00:00:00 UTC
From: Joe Jesson <jjesson@ais.net>
Message-ID: <IGNV3.12$V43.37@news.ais.net>
Source record: 65660

Al, your post was very interesting... the amplifier connected to plant leaves were designed similar to a polygraph was supposed to have a low-pass filtter on it, eliminating any signal above 100 Hz. By the way, whatever happended to this so-called "Backster effect" of plant communications? One guy in NJ supposedly could control his garage door opener via plant communications. He trained his plant to respont to his thoughts! All frauds?

Thanks, Joe

4026. Re: Mixing SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-09 00:00:00 UTC
From: yvon roy <soj@sympatico.ca>
Message-ID: <38279142.4E994CB3@sympatico.ca>
Source record: 65824

In a mixer, if the local oscillator is above the frequency of the SSB signal, there will be inversion.

MILO17 wrote:

> I am a little confused on mixing a ssb signal. Are the sidebands inverted (usb
> becomes lsb and vice versa) after mixing occurs ? If this is the case, why
> doesn't this occur with a transverter ? Any help is greatly appreciated !
> Thanks to the group in advance,
>
> Mike N2JVT

4027. Re: What is the current state of the art in HF fron end design?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-09 00:00:00 UTC
From: yvon roy <soj@sympatico.ca>
Message-ID: <38279332.EB39955A@sympatico.ca>
Source record: 65825

Analog devices has a good mixer which can be used up to 500 Mhz. The number is AD-831. Plessey used to have a good mixer, the SL6440 which has been discontinued and is hard to get. The AD-831 is a good choice.

runner wrote:

> Hi,
>
> I am thinking about building an HF rig, so before I really start
> warming up the ARRL Radio designer[:-)], I would like to find out
> more about what can be done. Any hints, ideas, links, books etc, about
> this subject would be greatly appreciated.
>
> I am very curious about the best currently achieved results in HF
> receiver front end design. For now,I would put aside the rest of the
> RX chain (I followed a lot of discussion about DSP/phase techniques
> here lately).
>
> So for now I am looking at the best linear RF amps and mixers. For the
> amps, the best figures I have yet seen are for some push-pull amps :
> about 40-45dBm IP3. Have any of you gurus seen better figures+designs?
> I would imagine that it could be possible to get a pair of V-MOS FETs,
> run them in A-class (with large heat sinks), put a xformer feedback
> around and use two of those in push-pull mode... similar to
> transmitter amps, but for receive... Am I off track here? If this
> works, I would guess we could get over 50dBm IP3?
>
> Now, with mixers, I am a bit on the fuzzy side here. I have seen the
> "Tayloe" mixer some time ago and it looks pretty impresive. Have any
> of you tried to replicate the results? I like diode ring mixers, or
> their variations, using other kinds of switching elements, eg. D-MOS
> FETs. These are linear, but have a fundamental disadvantage, the 5-7dB
> loss. So, when using them, if one wants to get sensitivity, a preamp
> is needed, and that reduces the linearity, which is counterproductive.
> Are there any active high performance mixers? With what I know now,
> if I was about to build a mixer, I woul do something similar as the
> amp suggested above: a couple of essentially super linear amps, but
> instead of DC supply, I would switch them on/off really hard. Perhaps
> a square wave between slightly negative bias (to switch the devices
> off quickly) and full A-class current?
>
> Sorry for the long posting here... I seem to need feedback for my
> back-of the envelope thinking.
>
> runner

4028. Re: Frontend for FM digital radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-09 00:00:00 UTC
From: yvon roy <soj@sympatico.ca>
Message-ID: <38279774.57CDDBEB@sympatico.ca>
Source record: 65826

For your filter, check ``Microwave Filter Co.`` They have a number of FM Band filters .
Analog Devices have interesting IC`s with low noise figure and AGC. You may need to cascade 2 AGC stages. What about your AGC generator, is it going to be done from
your DSP processing?

Tomas Ahrne wrote:

> Hi,
>
> I am currently designing a software radio (sampling the RF signal directly
> and doing all down conversion and demodulation in DSP [Digital Signal
> Processor]) for the FM band.
>
> The DSP part is no problem as I work with this in my everyday job, but RF
> design is another thing. In theory I know how to do it, but I don't have the
> experience that you get after some years of working in a field.
>
> Can anybody give me a pointer how to design a really high-quality FM
> fromtend. It would be comprised of an antenna input, AGC, and a band-pass
> filter. The band-pass filter should, of couse, have pass-band points at 88
> and 108 MHz. The stop-bands should be at about 103MHz and 113 MHz. Phase
> should be fairly smooth with no abrupt peaks (not phase linear, though). Up
> to 6 dB ripple could be OK, although about 2 dB would be better.
>
> What stop-band attenuation would be needed?
>
> I need practical help and pointers.
>
> The input stage must be able to handle weak signals as well as very strong
> ones. S/N > 75 dB (is it pssible?).
>
> I have looked at a 14th order inverse Tchebychev band-pass filter and I
> could possibly design that, but it is the whole integrated front end that I
> need help with. What components do you use and how do you use them to get
> the best performance.
>
> Can you for instance buy ready made band-pass filters for this purpose?
>
> I'd be greatful for any help in the area.
>
> Best,
>
> Tomas Ahrne

4029. PLL Serial information

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-09 00:00:00 UTC
From: yvon roy <soj@sympatico.ca>
Message-ID: <3827A498.C1CBBD3E@sympatico.ca>
Source record: 65827

I have built up a memory for storing a 3 wire PLL serial signal. The origin of this information is from a National Software for the PLL # LMX1501. The problem is that the information coming out of the computer from the parallel port is too fast for my memory.
Does anybody know if a method exist to slow this information. Any information is appreciated. Thanks!

4030. Re: I don't understand filters.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-09 00:00:00 UTC
From: David Snyder Hale <david@isi9.mtwilson.edu>
Message-ID: <807ue7$1g8$1@agate.berkeley.edu>
Source record: 65828

Actually, after saying that, it may _not_ be the antenna farm up here,
because then it would have to be sub-harmonics.

--
Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

4031. ## Repeat post: does anyone have access to a Mitsubishi RF catalog or similar other info source

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-09 00:00:00 UTC
From: tinkerman97@usa.net
Message-ID: <38277d33.188382436@ny.news.verio.net>
Source record: 65829

Hello Netfriends,

I'm repeating the post because no one responded and I need the info...
I'm quite sure that some RF engineer has a Mitsubishi RF manual.
I need to get a data sheet for an RF synthesizer chip marked
"M64086GP". It might be discontinued, but I'm not sure.
A pointer to a web location would be great!
Thank's for any help offered.

Thanks and best regards,
T-man

Note: when posting a Reply, please send me a copy
via email too so I don't miss any responses. Don't
forget to remove the "97" from my email address
inserted as an anti-spam counter measure...:-)

4032. Transformer Cores

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-09 00:00:00 UTC
From: wb3kum <d.breeden@nospam.wcom.com>
Message-ID: <BkLV3.5118$dz1.425533@pm02news>
Source record: 65830
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

No offense to Mr. Dahl, I'm sure he builds an excellent product. As any of you know, HV transformers are getting like hens teeth to find. Even Fair Radio Sales has only a small selection any more.

Other than cannibalizing old transformers, does any one know of a source for "E" and "I" pieces for the core of a transformer? I would like to try my hand at winding transformers. I did it as a teenager and got pretty good at it.

Many thanks in advance.

Dennis WB3KUM/9

d.breeden@wcom.com

4033. Re: Clock crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-09 00:00:00 UTC
From: k7itm@aol.com.nospam
Message-ID: <19991108232203.02495.00002157@ng-cd1.aol.com>
Source record: 65831

Bob wrote:

>Has any one used these clock crystals for home brew ?
>AND is it possible to pull them ?
>I have got one for 50 MHz and would like to use on 6 meter,
>for a simple CW TX any tips ????

At first I thought you meant the 32768kHz watch crystals (also used in some clocks)...but I guess you mean the inexpensive crystals sold for microprocessor, etc., clocks. Yes, if it's just a crystal, you can put it in an oscillator circuit just like other crystals, and pull it. I do that in a design I'm doing at work, for example. You might be able to pull your 50MHz xtal up safely into the 6-meter band, but since the tolerance isn't very tight, be sure you have a way to check to make sure you really are in-band. On the other hand, if it's a full clock oscillator, unless it's one of the fancier ones with an adjustment, then you can't pull it. I've salvaged a few adjustable ones from boards, but they are much rarer than the non-adjustable oscillators.

Cheers,
Tom

4034. Re: Radio Shack Frequency Counter ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-09 00:00:00 UTC
From: dana <dana@randomc.com>
Message-ID: <Pine.GSO.4.10.9911082308380.6206-100000@cluster2>
Source record: 65832

i sure it had a voice synthesizer in it, wouldn't that be great for blind
people? have you heard about the law suit against aol?

On 1 Nov 1999, Dave Martindale wrote:

> Date: 1 Nov 1999 01:53:20 -0800
> From: Dave Martindale <davem@groucho.cs.ubc.ca>
> Newsgroups: rec.radio.amateur.homebrew
> Subject: Re: Radio Shack Frequency Counter ?
>
> alg460@aol.com (ALG460) writes:
> >Does anyone know if the $79 Radio Shack frequency counter can be used to
> >measure in circuit frequencies with test leads attached to it or does it only
> >work with the supplied antenna on radiated signals.
>
> It should work with a signal picked up via an oscilloscope probe. It
> even has a switch to eliminate the 50 ohm input load when using a
> high-impedance source like this.
>
> However, the signal amplitude has to be high enough to trigger
> the input circuitry. Don't expect it to work on the microvolt-level
> signals found in receiver input circuits.
>
> Dave
>
>

4035. Re: Trouble with downconverter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-09 00:00:00 UTC
From: clifford kelley <cwkelley@inreach.com>
Message-ID: <01bf2a6c$6fce7860$d943d1d1@bigbear>
Source record: 65833

Thanks for the reply,

The system was working until recently and I tried changing the oscillator
to see
if that would help. It didn't.

Thanks,

Cliff

Harke Smits <harke.smits@net.hcc.nl> wrote in article
<38258D88.286038CE@net.hcc.nl>...
> Hi Cliff,
>
> Given the info provided I would suggest to check the local oscillator of
the
> down converter. Some oscillators may show spurious and you get two or
more
> output signals for only one in.
>
> Good luck,
>
> Harke
>
>
> clifford kelley wrote:
>
> > Hi,
> >
> > I'm hoping someone familiar with downconverters can answer a question.
> >
> > I have an L band down converter that seems to have developed a problem.
> > When
> > I put in a cw test signal instead of a single cw output an additional
> > signal offset by a few hundred kHz also shows up. The desired signal
is at
> > 4.3 MHz. Is this indicative of damage to the converter or a loose
> > connection?
> >
> > Thanks,
> >
> > Cliff
>
>

4036. Re: TS-870 Mods?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-09 00:00:00 UTC
From: n7ws@arrl.net
Message-ID: <3827ae06.52699326@news.azstarnet.com>
Source record: 65834
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

On Mon, 8 Nov 1999 18:34:10 -0800, "JerryL" <jlockett@lightspeed.net> wrote:

>Well, thats not quite correct. It has two (2) I.F. filters at 8.830Mhz and
>455Khz ahead of the DSP filter (11.xxKhz) section. They are lousy filters, thus
>the interest in improving them...
>
>de jerry...

Thanks again, Jerry. I appreciate the link too.

73,

Wes
>
>--
>jlockett@lightspeed.net
>
>
>ka4cnh <ka4cnh@bellsouth.net> wrote in message
>news:38277C2E.C943DECA@bellsouth.net...
>> Hello Wes, as I understand the TS-870, it is one of the few fully digital
>> rigs, including filtering, available on the market. I wonder why one would
>> choose to add any more IF filtering than is already digitally available? 73,
>> Dave-KA4CNH
>>
>> Wes Stewart wrote:
>>
>> > Anybody made any improvements to the TS-870? Installing an i-f filter for
>> > instance?
>> >
>> > 73,
>> >
>> > Wes N7WS
>>
>>
>>
>

4037. FS: TT-5 RCA Transmitter Tube Manual Reprint

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-09 00:00:00 UTC
From: "Daniel J. Nelson" <djn@goodnet.com>
Message-ID: <3827C162.1EC3@goodnet.com>
Source record: 65835

Hey, still have a number of these:

TT-5 RCA Transmitter Tube Manual Reprint
by Antique Electronic Supply

New, never openned....

$7.50 delivered conus...I ship on approval (you pay after receipt).
--
Daniel J. Nelson
djn@goodnet.com
<:)

4038. Re: Transformer Cores

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-09 00:00:00 UTC
From: Harry SM0VPO <harryvpo@hotmail.com>
Message-ID: <808iti$pep@newstoo.ericsson.se>
Source record: 65836
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I have wound loads of them. I find that some of the cheaper mains "auto transformers" of the kind that transform 115v to 230v or 230v to 115v are dirt cheap. The sort I usually get are about US$6, made in Spain. Undo the two bolts and the whole lot almost falls apart.

there's hardly any wire on the things, so you can strip it down in a few minutes and have a perfect plastic bobbin to fit the E and I laminations. Just two small words of warning:

1. Don't consider re-using the wire or using it as a ready-wound primary. The last few I bought in Saudi did not even use copper wire!!
2. Lightly varnish one side of the laminations with a decent spray varnish. They are usually lousy insulators and the txfmr tends to run hot if you don't.

The transformers I make all run stone-cold. if you want to see a 50-watt transformer in a project then i have one on the web. Take a look at http://sm0vpo.8m.com/tx/2tubetx.htm the third picture down the page. Sorry the picture quality is so lousy, but - a) it does the job - b) its free.

BR Harry

wb3kum wrote in message ...
>Other than cannibalizing old transformers, does any one know of a source for
>"E" and "I" pieces for the core of a transformer? I would like to try my
>hand at winding transformers.

4039. Re: Mixing SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-09 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <80975k$r6p$1@nnrp1.deja.com>
Source record: 65837

In article <19991021182349.20018.00000100@ng-cb1.aol.com>,
milo17@aol.com (MILO17) wrote:
> I am a little confused on mixing a ssb signal. Are the sidebands
inverted (usb
> becomes lsb and vice versa) after mixing occurs ? If this is the case,
why
> doesn't this occur with a transverter ? Any help is greatly
appreciated !
> Thanks to the group in advance,
>
> Mike N2JVT
>

The complete answer is:
We can get conversions by the sum or difference between LO and RF
frequencies.
In the SSB case, for sum frequencies, no matter which input frequency is
higher, no inversion occurs.
For difference frequencies, if LO>RF, an inversion occurs; if LO<RF no
inversion will occur.
--
Greetings,

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Before you buy.

4040. Re: Transformer Cores

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-09 00:00:00 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <01bf2ab0$7c7953c0$e4864d0c@default>
Source record: 65838
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

What do you think about finding a junk welder to get the transformer core out of? They are large and have few turns of large wire to remove. I have one, and someday.....
Mike

4041. Re: confusing terminology

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-09 00:00:00 UTC
From: "Laszlo I. Morocz" <kf4pv@SPAMMENOTlmorocz.com>
Message-ID: <DuVV3.10402$_C.6196@jump.innerx.net>
Source record: 65839

Thanks Bob for the correction. (I even used to know that once.) It's good to know that someone actually reads these things. And it's a great relief to see that even with all the fast typing it was only 0.3% off. Usually I end up losing several decimal places :-)

73 de KF4PV/3, Laszlo

--
To reply, remove the text SPAMMENOT from the e-mail address.
Bob wrote in message ...
>Minor correction: +30 dBm is exactly one Watt.
>Doubling the power increases the reading by slightly more than 3 decibels,
>actually close to 3.010299 dB. It's 10 times the log (base 10) of 2.
>
>73, Bob K6DDX
>
>

4042. Re: confusing terminology

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-09 00:00:00 UTC
From: "Laszlo I. Morocz" <kf4pv@SPAMMENOTlmorocz.com>
Message-ID: <MxVV3.10403$_C.6224@jump.innerx.net>
Source record: 65840

```
dB, dbi, dbm - RF engineer
db, db, db - Porky Pig
doo-be doo-be doo - Frank Sinatra

73 de KF4PV/3, Laszlo
--
To reply, remove the text SPAMMENOT from the e-mail address.
Clifton T. Sharp Jr. wrote in message <3827A064.662FB228@corecomm.net>...
>Laszlo I. Morocz wrote:
>> A dbm is power level referenced to 1 milliwat,
>> [snip]
>> dbi is antenna gain referenced to an isotropic antenna
>
>And a dbCooper is a rich anonymous parachutist. :-)
>
>--
>+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
-+-+
>| Cliff Sharp | "Speech isn't free when it comes postage-due."
|
>| WA9PDM | -- Jim Nitchals, founder, FREE
|
>+-+-+-+-+-+-+-+-+- http://www.spamfree.org/
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
```

4043. Re: PLL Serial information

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-09 00:00:00 UTC
From: "Laszlo I. Morocz" <kf4pv@SPAMMENOTlmorocz.com>
Message-ID: <IXVV3.10404$_C.6249@jump.innerx.net>
Source record: 65841

Does your memory actually pay attention to the clocking bits or are you just reading the parallel port as fast as you can with another computer?

If you're paying attention to the clocking bits, then you've got a bug in your circuit. Probably wouldn't hurt to go over the timing diagrams again.

If you're reading the parallel port, you can try:

1. Using a faster computer to run the memory program

2. Speed up the memory program by running a DOS/assembly language version if you're not already doing so.

3. Use a slower computer to run the National software. Everybody's got a 33 MHz 386 in their attic, right?

4. Run the National software in a DOS box under Windows if it's a DOS program.

5. Run a bunch of other programs at the same time if you're already doing 4. This is especially good if the host computer has 2 LPT ports and you run a long print job on the port that isn't programming the PLL.

6. Run the National software in a debugger and single-step. Have an enormous pot of coffee there to keep you awake.

7. Change to a circuit that will pay attention to the clocking bits and store the values. This is really easy to implement with something like the Atmel AVR family of 8-bit microprocessors. The 8515 in particular actually has a 3-wire SPI interface for capturing the data, 512 bytes of SRAM for holding it and a UART for playing it back to your computer's serial port all on 1 chip.

All of these are just kludges. The real issue is what are you trying to accomplish. If you are just trying to figure out how to program the device, the answer is in the data sheets. Even though they can be confusing, it'll probably be faster to re-read them many times and to post questions about them than to get the memory setup working.

73 de KF4PV/3, Laszlo

--
To reply, remove the text SPAMMENOT from the e-mail address.
yvon roy wrote in message <3827A498.C1CBBD3E@sympatico.ca>...
>I have built up a memory for storing a 3 wire PLL serial signal. The
>origin of this information is from a National Software for the PLL #
>LMX1501. The problem is that the information coming out of the computer
>from the parallel port is too fast for my memory.

>Does anybody know if a method exist to slow this information. Any
>information is appreciated. Thanks!
>

4044. Re: Transformer Cores

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-09 00:00:00 UTC
From: Harry Brown <hbrown@voicenet.com>
Message-ID: <vSWV3.576$Jp.21476@news3.voicenet.com>
Source record: 65842
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

One source of cores that may be good subjects for winding are industrial isolation transformers.

They come in various KVA ratings - starting around 1 KVA and going up. They are complete with both primary and secondary wings and may be 1 to 1 or 2 to 1 or higher. You may find them at a dealer that handles industrial surplus.

They have an advantage in that you know they can handle the power and they already have the primary (you have to make sure that the secondary is on the outside) so there's less work to get the final output voltage you want.

73, Harry, W3IIT

wb3kum <d.breeden@nospam.wcom.com> wrote in message news:BkLV3.5118$dz1.425533@pm02news...
> No offense to Mr. Dahl, I'm sure he builds an excellent product. As any of
> you know, HV transformers are getting like hens teeth to find. Even Fair
> Radio Sales has only a small selection any more.
>
> Other than cannibalizing old transformers, does any one know of a source for
> "E" and "I" pieces for the core of a transformer? I would like to try my
> hand at winding transformers. I did it as a teenager and got pretty good at
> it.
>
> Many thanks in advance.
>
> Dennis WB3KUM/9
>
> d.breeden@wcom.com
>
>

4045. Re: Transformer Cores

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-10 00:00:00 UTC
From: jeixray@aol.com
Message-ID: <19991109221045.16621.00003704@ng-fk1.aol.com>
Source record: 65661

try "surplus sales of nebraska" they are on the internet under that heading
plus .com

4046. Re: Very basic transformer question -- ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-10 00:00:00 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <3828BE0E.33F0@rica.net>
Source record: 65662
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.basics

JGinNY wrote:
>
> What does "10,000 ohms, P-toP" or "plate to plate" mean?
>
> What is the significance of this "p-to-p" impedance (or resistance)
> value, when working with interstage or audio transformers?
>
> Does this value have something to do with the resistance of the windings
> themselves, or does it somehow figure into the impedance matching ratio
> (primary to secondary)?
>
> Any help on this would be appreciated. Please reply to my e-mail.
>
> Thanks!
> J.

I believe that the 10k ohms refers to the load impedance the tubes will see in the signal frequency range if the secondary of the transformer is loaded with its specified impedance. The transformer winding will look almost like a short circuit at DC. Once the bias point of the tube circuit is figured out, imagine that the DC is being supplied to the tubes through a hign impedance choke, but a 10k resistance couples the two plates together at signal frequency. This allows you to calculate what the plate voltage will do as the plate current varies (calculate a load line).

John Popelish

4047. Re: What is the current state of the art in HF fron end design?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-10 00:00:00 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <80bcoufol1@nnrp1.deja.com>
Source record: 65663

In article <38279332.EB39955A@sympatico.ca>,
yvon roy <soj@sympatico.ca> wrote:
> Analog devices has a good mixer which can be used up to 500 Mhz. The
> number is AD-831. Plessey used to have a good mixer, the SL6440 which
has
> been discontinued and is hard to get. The AD-831 is a good choice.

The Fairchild FST3125 bus switch makes a very good mixer device, by all
accounts. I've just bought some, and will be trying them out when I've
made a PCB. G3SBI's experiments with them have been reported in RadCom.

Leon
--
Leon Heller, G1HSM
Tel: (Mobile) 079 9098 1221 (Work) +44 1327 357824
Email: leon_heller@hotmail.com
Web: http://www.geocities.com/SiliconValley/Code/1835

Sent via Deja.com http://www.deja.com/
Before you buy.

4048. Re: Very basic transformer question -- ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-10 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <XtaW3.51295$5W2.1257229@news6.giganews.com>
Source record: 65664
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.basics

The plate to plate impedance is the impedance seen by the plates of the tubes when the secondary is loaded with the rated impedance (resistance).

The transformer is intended to be driven in push pull from a pair of tubes.

73, Bob K6DDX

4049. Re: HELP! Tube Guru's Advice Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-10 00:00:00 UTC
From: n2cqr@erols.com
Message-ID: <38298ce4.257764288@news.erols.com>
Source record: 65665

>In article <382312CB.116D34B0@midwestmicro-tek.com>,
> rhaub@midwestmicro-tek.com wrote:
>> About 4 months ago or so I posted a letter to solicit help on a
>> 12BY7/1625 75 watt transmitter that I was building. I was anticipating
>> passing my Novice exam and was building my first transmitter and
>> reciever. I got a lot of good advice from a lot of good people. I'd
>like
>> to thank Mike Silva, Doug Smith, Blake, Michael Tracy at ARRL and
>> especially Jim N2EY for all of thier help and also the rest of you
>guys
>> who contributed as well. And Bill N2CQR for all the help getting my
>MMX
>> reciever on line.
>>
>> It took a while and in the mean time I got caught up with other things
>> but I finaly sat down with all of the posted advice and e-mails and
>GOT
>> THE DARN THING WORKING!

Rick: FB! Congratulations. I think you should get on the air as soon as possible. Even if you have to go very slow, running a HB rig earns you many, many ham radio prestige points! If you get on the air with the MMRX and the HB transmitter, you may turn out to be THE ONLY completely homebrew novice on the air!

Is the MMRX also working? How does it sound? Please tell us about what you had to do to get it going. Is it on both 80 and 40? How did you handle the filter problem?

Again, congratulations. 73 Bill N2CQR
http://www.erols.com/wmeara

4050. Heathkit Info Site

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-10 00:00:00 UTC
From: doc <k0imj@juno.com>
Message-ID: <3829924E.5247D2DA@juno.com>
Source record: 65666

```
> Get info on 100s of Heathkits at http://home.earthlink.net/~docky
>
```

4051. Re: HELP! Tube Guru's Advice Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-10 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <38299840.476761F0@midwestmicro-tek.com>
Source record: 65667

Bill Meara wrote:

> >In article <382312CB.116D34B0@midwestmicro-tek.com>,
> > rhaub@midwestmicro-tek.com wrote:
> >> About 4 months ago or so I posted a letter to solicit help on a
> >> 12BY7/1625 75 watt transmitter that I was building. I was anticipating
> >> passing my Novice exam and was building my first transmitter and
> >> reciever. I got a lot of good advice from a lot of good people. I'd
> >like
> >> to thank Mike Silva, Doug Smith, Blake, Michael Tracy at ARRL and
> >> especially Jim N2EY for all of thier help and also the rest of you
> >guys
> >> who contributed as well. And Bill N2CQR for all the help getting my
> >MMX
> >> reciever on line.
> >>
> >> It took a while and in the mean time I got caught up with other things
> >> but I finaly sat down with all of the posted advice and e-mails and
> >GOT
> >> THE DARN THING WORKING!
> >
> Rick: FB! Congratulations. I think you should get on the air as
> soon as possible. Even if you have to go very slow, running a HB rig
> earns you many, many ham radio prestige points! If you get on the
> air with the MMRX and the HB transmitter, you may turn out to be THE
> ONLY completely homebrew novice on the air!
>
> Is the MMRX also working? How does it sound? Please tell us about
> what you had to do to get it going. Is it on both 80 and 40? How did
> you handle the filter problem?
>
> Again, congratulations. 73 Bill N2CQR
> http://www.erols.com/wmeara

Hi Bill,

Thanks for the congrats. It was an uphill climb but it was worth it. Yep, I got the MMRX working after a lot of tial and error, but only on 80m. I think that my coils are not quite right on 40m since I can't really find anything to listen to except static. The filter works pretty well but it's a bit too sharp, if I'm not carefull I can tune right past something without know it. I'm using the ceramic oscillators that I told you about. I tried wireing the 455KHz cans in like you suggested but they didn't work. I think I must have missunderstood your directions.

The biggest probelms seems to have been wireing errors since I found a lot of bad solder joints. My power problem took the longest to figure out though. The transformer that I was using was only giving me 50 volts instead of the 100+ that I needed. It was a 120in/120out 45ma job but I was seeing only 50 volts of DC. I thought that I was tring to pull more current than the transformer was capable of giving me and after hooking in an amp meter I saw that I was indeed pulling the full 45ma . I spent a week waiting for a new transformer but before I got it I got to thinking about the spec and the spec stated that you only needed a 45ma transformer so I fired up the rig with my amp meter in place and started tracing wires from the power in. I'd turn off the rig, disconnect a wire that was connected to the power input, turn on the rig and read the meter. Eventually I found a wire that when disconnected caused my amp reading to go to about 20ma. I traced that leg till I found a solder joint that was ever so slightly brushing up against a ground post. You could not tell that it was that close to the post unless you looked at it from just the right angle. Anyway I wrapped the joint (should have done that in the first place) with electrical tape fired up the unit and "walla", no more current drain.

I had to go through a lot more to finaly get it up and running but I finaly did it. I'd like to write up an article like the one you've got posted on your site but I don't think I can get around to it till after the holidays. Anyway, thanks for the help! I appreciate the support.

TNX!

Rick, KC0GIX

4052. Cap availability in the UK

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-10 00:00:00 UTC
From: phil <phil@invest.fsbusiness.co.uk>
Message-ID: <CBjeyVAUrUK4EwpC@invest.fsbusiness.co.uk>
Source record: 65668

I'm having problems locating a supplier of 0.1 100v surface mount capacitors.

There are plenty of 50v types from Maplins, Farnell etc at around 10p each.

Can anyone help or suggest a possible trade distributor or retail outlet?

Thanks

Phil G4ZOW

4053. Re: Very basic transformer question -- ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-10 00:00:00 UTC
From: blackm00@cam.org
Message-ID: <blackm00-1011991343170001@dialup-555.hip.cam.org>
Source record: 65669
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.basics

In article <3828ADAE.87FADC96@twcny.rr.com>, JGinNY
<jgovost1@twcny.rr.com> wrote:

> What does "10,000 ohms, P-toP" or "plate to plate" mean?
>
> What is the significance of this "p-to-p" impedance (or resistance)
> value, when working with interstage or audio transformers?
>
> Does this value have something to do with the resistance of the windings
> themselves, or does it somehow figure into the impedance matching ratio
> (primary to secondary)?
>
> Any help on this would be appreciated. Please reply to my e-mail.
>
> Thanks!
> J.

It's interesting how you pass by an expression and never wonder about
it's meaning. I sure never thought about "plate to plate" until this
post.

A quarter century ago, I bought a Radio Shack "Dictionary of Electronics".
I'm not sure I would have bought it at full price, but I was at a hamfest
and some guy was selling them (I guess the previous edition) for a dollar.
I've never used it much, but when I do refer to it, I am always surprised
at being able to find a description.

It says: "Plate to Plate Impedance: The load impedance between the two
plates in a push-pull amplifier stage".

Michael VE2BVW

4054. Rogradco and $50.00 gone

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-10 00:00:00 UTC
From: grogancat@aol.com
Message-ID: <19991110173524.18115.00001174@ng-cm1.aol.com>
Source record: 65670

Thanks to you all who responded. I was too trusting and finally
got bit. I have contacted:
BBB in his area
FTC for credit card fraud
His and my local Constabulary
Michigan State Attoney General
and US Secret Service for wire/credit card fraud scheme on internet

Hopefully this will get his attention. Thanks again, shipmates!
And Roger Snyder has no shame, he has put his website back up,
www.crystalrad.com.
I cant believe he is so blatant about it. Selling crystal radios with a
website
and a phone number (answering machine when I call) to rip us off.
But then again, it's like they say. If he were smart, he wouldnt be engaged
in a criminal enterprise.

Your radio pal, Tony

4055. IC706mk2 transmission problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-10 00:00:00 UTC
From: Nermin Bajramovi&#65533; <fortra@siol.net>
Message-ID: <lwmW3.466$FG4.22155@news.siol.net>
Source record: 65671

Hello om's,

I am an happy owner of ic706mkll, so far. Now after the cqww contest on 10 meters I am facing a strange problem. The radio would not put out any modulated emission on 18 MHz and 21 MHz only. The radio works fine for any modulation into the dummy load! As said, not with the antenna on, via the either MFJ 989c tuner or vectronics VC300dlp. I have tried to reset the CPU several times as stated in manual, but no luck! Also, when going with the bands button, among ham bands being switched comes 15 MHz!! The radio has been modified for gen.tx. coverage. Any suggestions, please?

Nermin S58DX

4056. Re: Clock crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-10 00:00:00 UTC
From: douglas dwyer <doug@ddwyer.demon.co.uk>
Message-ID: <Pe1YhCAaqfK4Ew5q@ddwyer.demon.co.uk>
Source record: 65672

In article <38275374.971412450@news.online.no>, J M Noeding
<LA8AK@online.no> writes
>14318 khz xtal may be pulled 5-7khz in an ordinary paralell res.
>oscillator, and some 4433khz xtals may pull relatively easy -
>particularly if they are made for color burst reference in a tv,
>havent tried 3579 xtals, but the 3.58MHz resonators may pull 120khz -
>on 80m! Also 27MHz xtals pulls relatively much on 9MHz paralell res.
>(which is somewhat above series res.)
Beware miniature strip AT cut crystals these are not circular but
reduced in width they have higher ductance and smaller eq c so dont pull
far.
--
douglas dwyer

4057. 1955 2 valve home-brew kit schematic / help needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-10 00:00:00 UTC
From: Bob <merryprankster@cwcon.net>
Message-ID: <SmnW3.371$lZ.15596@news2-hme0>
Source record: 65673

Hello all, Bob here. I am in N/West UK.
I have just (last night) Bought at a silent key sale,
a 2 tube wireless, kit of parts.

It is for a two tube set, its complete...
Apart from the building /assembly instructions.
It has a list of parts, and the list is complete.
I want to build this kit, as I have been wanting
to 'get into' Tube / Valves for ages.

Have any of you, a schematic,
for a 2 tube AM /MW receiver.

Or possibly ? If I tell you of the components,
could you point me in the right directions.

It was made by E.M.I Institutes in 1955

The main bits are, as follows.--------

The 2 tubes.
1, is a Marconi. N 17 / 3S4
2, is a Marconi. W17 / DF91
It says, or equivalent, but I have the stated tubes.

It has 6 Resisters, 2 x 47 K, 2 x 2.2 M,
1 x 100 K, 1 x 680, all 10%.
1x 1/2 meg volume control

It has, 6 waxy / looks like ceramic type,
1/2 in square Caps, 3 x 100 pfd. 1 x 500 pfd.
1 x .01 mfd. 1 x .1mfd.
And 1x 25 mfd 25 V Elec. cap.
And 1 x 500 pfd Variable.

1x Double range coil.

Has anyone of you a schematic,
that fits these components ?
I know the variable is for the tuning.
I have built transistor radios, RX and TX,
I have U.K. Novice licence.
I have had NO experience, with Tubes, in any way.
Can you recommend a book, about the very basics of such ?
Thanks Bob

4058. Re: 1955 2 valve home-brew kit schematic / help needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-10 00:00:00 UTC
From: "Al, N2NKB"
Message-ID: <80d1ug$11q$1@bgtnsc03.worldnet.att.net>
Source record: 65674

Bob wrote in message ...
>Hello all, Bob here. I am in N/West UK.
>I have just (last night) Bought at a silent key sale,
>a 2 tube wireless, kit of parts.
>
>It is for a two tube set, its complete...
>Apart from the building /assembly instructions.
>It has a list of parts, and the list is complete.
>I want to build this kit, as I have been wanting
>to 'get into' Tube / Valves for ages.
>
>Have any of you, a schematic,
>for a 2 tube AM /MW receiver.
>
>Or possibly ? If I tell you of the components,
>could you point me in the right directions.
>
>It was made by E.M.I Institutes in 1955
>
>The main bits are, as follows.--------
>
>The 2 tubes.
>1, is a Marconi. N 17 / 3S4
>2, is a Marconi. W17 / DF91
>It says, or equivalent, but I have the stated tubes.
>
>It has 6 Resisters, 2 x 47 K, 2 x 2.2 M,
>1 x 100 K, 1 x 680, all 10%.
>1x 1/2 meg volume control
>
>It has, 6 waxy / looks like ceramic type,
>1/2 in square Caps, 3 x 100 pfd. 1 x 500 pfd.
>1 x .01 mfd. 1 x .1mfd.
>And 1x 25 mfd 25 V Elec. cap.
>And 1 x 500 pfd Variable.
>
>1x Double range coil.
>
>Has anyone of you a schematic,
>that fits these components ?
>I know the variable is for the tuning.
>I have built transistor radios, RX and TX,
>I have U.K. Novice licence.
>I have had NO experience, with Tubes, in any way.

>Can you recommend a book, about the very basics of such ?
>Thanks Bob
>

I would try to find an old tube manual that shows you the
elements of the two tubes, and their pin numbers. Then you can
look at the assembly drawings, and create your own schematic.
This exercise will give you great familiarity with your kit.
If you don't know the difference between a cathode, grid, and plate,
you may want to visit your library and see if they have old books.
Older Radio Amateur Handbooks are also excellent resources.
Good luck.
Al

4059. Re: ## Repeat post: does anyone have access to a Mitsubishi RF catalog or similar other info source

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-10 00:00:00 UTC
From: Greg Werstiuk <greg_werstiuk@email.msn.com>
Message-ID: <NVkqOBsbJCPtonO125ZIX9cAeohC@4ax.com>
Source record: 65675

web site is: www.mitsubishi-chips.com

However, that device is not listed under PLL synthesizers nor does it come up in a product search.

Unfortunately, Mitsubishi has offered very little documentation in North American over the years for their analog ICs. I've never seen a databook for this area. The primary reference document is their ASSP selection guide which is basically a list of devices and single page specs.

Like many Japanese semiconductor manufacturers, they offer a wide range of products which are marketed and sold almost exclusively in Asia for use in consumer products. It is very difficult to find specs or buy such devices outside of that region.

On Tue, 09 Nov 1999 01:48:08 GMT, tinkerman97@usa.net (tinkerman) wrote:

>Hello Netfriends,
>
>I'm repeating the post because no one responded and I need the info...
>I'm quite sure that some RF engineer has a Mitsubishi RF manual.
>I need to get a data sheet for an RF synthesizer chip marked
>"M64086GP". It might be discontinued, but I'm not sure.
>A pointer to a web location would be great!
>Thank's for any help offered.
>
>Thanks and best regards,
> T-man
>
>## Note: when posting a Reply, please send me a copy
>via email too so I don't miss any responses. Don't
>forget to remove the "97" from my email address
>inserted as an anti-spam counter measure...:-)

4060. Homebrew Tube Tester

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-10 00:00:00 UTC
From: Ipo Camacho <ac137@iwvisp.comnospam>
Message-ID: <s2kt2abihsq33@corp.supernews.com>
Source record: 65676

Need info/schematics for homebrew tube tester.

Tubes that need to be tested:

-4CX250F/G Eimac and 8621 Amprex
-8950
-20LF6
-6LF6-6MH6 and 6KD6
-6LR6

Please email me at your earliest convienence. Thanx and 73...

Ipo Camacho

4061. Re: Homebrew Tube Tester

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-10 00:00:00 UTC
From: Ipo Camacho <ac137@iwvisp.comnospam>
Message-ID: <s2kt4o4bhsq70@corp.supernews.com>
Source record: 65677

BTW... remove nospam from address. Sorry about that...

Ipo Camacho

Ipo Camacho wrote in message ...
>Need info/schematics for homebrew tube tester.
>
>Tubes that need to be tested:
>
> -4CX250F/G Eimac and 8621 Amprex
> -8950
> -20LF6
> -6LF6-6MH6 and 6KD6
> -6LR6
>
>Please email me at your earliest convienence. Thanx and 73...
>
>Ipo Camacho
>
>

4062. Re: No code ham info wanted.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-10 00:00:00 UTC
From: barryo@fastlink.com.au
Message-ID: <3828efec.10862733@genenews.acay.com.au>
Source record: 65678
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

If you don't want code ham info why did you post?

Barry
==========
Please send me an email copy if you reply to this post.
Web page: http://www.acay.com.au/~barryo
New misc and Christianity information added
Frequency page updated

4063. Re: PLL Serial information

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-11 00:00:00 UTC
From: yvon roy <soj@sympatico.ca>
Message-ID: <382A39B8.2E2D6EFD@sympatico.ca>
Source record: 65679

Thanks! My controler with memory is designed to be used to program the National
PLL
LMX1501. It is made of a PIC16C57 and an Atmel Eprom 93C66. The controler is
used to switch the PLL to different frequencies; in fact it does the same work
as the computer but its purpose is to free the computer. Somebody mentioned me
that old computers with a "TURBO" button would do the job, but my pentium high
speed computer does not have such a button. Somebody else told me that it is
possible to program my computer to operate at slower speed, but I do not know
how to do it.
Regards! Yvon

Laszlo I. Morocz wrote:

> Does your memory actually pay attention to the clocking bits or are you just
> reading the parallel port as fast as you can with another computer?
>
> If you're paying attention to the clocking bits, then you've got a bug in
> your circuit. Probably wouldn't hurt to go over the timing diagrams again.
>
> If you're reading the parallel port, you can try:
>
> 1. Using a faster computer to run the memory program
>
> 2. Speed up the memory program by running a DOS/assembly language version if
> you're not already doing so.
>
> 3. Use a slower computer to run the National software. Everybody's got a 33
> MHz 386 in their attic, right?
>
> 4. Run the National software in a DOS box under Windows if it's a DOS
> program.
>
> 5. Run a bunch of other programs at the same time if you're already doing 4.
> This is especially good if the host computer has 2 LPT ports and you run a
> long print job on the port that isn't programming the PLL.
>
> 6. Run the National software in a debugger and single-step. Have an enormous
> pot of coffee there to keep you awake.
>
> 7. Change to a circuit that will pay attention to the clocking bits and
> store the values. This is really easy to implement with something like the
> Atmel AVR family of 8-bit microprocessors. The 8515 in particular actually
> has a 3-wire SPI interface for capturing the data, 512 bytes of SRAM for
> holding it and a UART for playing it back to your computer's serial port all
> on 1 chip.

>
> All of these are just kludges. The real issue is what are you trying to
> accomplish. If you are just trying to figure out how to program the device,
> the answer is in the data sheets. Even though they can be confusing, it'll
> probably be faster to re-read them many times and to post questions about
> them than to get the memory setup working.
>
> 73 de KF4PV/3, Laszlo
>
> --
> To reply, remove the text SPAMMENOT from the e-mail address.
> yvon roy wrote in message <3827A498.C1CBBD3E@sympatico.ca>...
> >I have built up a memory for storing a 3 wire PLL serial signal. The
> >origin of this information is from a National Software for the PLL #
> >LMX1501. The problem is that the information coming out of the computer
> >from the parallel port is too fast for my memory.
> >Does anybody know if a method exist to slow this information. Any
> >information is appreciated. Thanks!
> >

4064. Re: Very basic transformer question -- ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-11 00:00:00 UTC
From: MC 10kW Jesus <bogus@thisdomain.org>
Message-ID: <382A18A1.9CC57EF7@thisdomain.org>
Source record: 65680
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.basics

The 10k P-P means that this is an output audio transformer intended to be used in a push-pull circuit where the tubes, ideally, like to see a 10k impedance from the plate, or anode, of one to the other. I know it's only a single pair of tubes because if it were more the p-p impedance would be much lower. Push-pull tube amplifiers will produce maximum output when the the load they are "looking into" is optimum. Much the same as RF amplifying circuits work best when driving, or being driven by, the optimum impedance.

The transformer itself has no impedance and the secondary winding must be terminated in its design impedance to reflect the 10k p-p impedance back to the tubes. In a tube audio amplifier this is typicall 4, 8 or 16 Ohms.

Some tube output transformers are VERY valuable now. This is particularly true of Peerless, Acrosound, McIntosh and Dynaco units. For instance, a pair of A470 outputs from a Dynaco ST70 are worth an easy $150. However, if they are Bogen they aren't worth a fiddler's.

Much more about impedances and tube amplifiers if you are interested......:->

JGinNY wrote:

> What does "10,000 ohms, P-toP" or "plate to plate" mean?
>
> What is the significance of this "p-to-p" impedance (or resistance)
> value, when working with interstage or audio transformers?
>
> Does this value have something to do with the resistance of the windings
> themselves, or does it somehow figure into the impedance matching ratio
> (primary to secondary)?
>
> Any help on this would be appreciated. Please reply to my e-mail.
>
> Thanks!
> J.

4065. Re: IC706mk2 transmission problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-11 00:00:00 UTC
From: Murray Kelly <mkelly@powerup.com.au>
Message-ID: <382A1A5D.63C2@powerup.com.au>
Source record: 65681

My 706Mk2 won't work into anything but an almost exact 1:1 match.

This is annoying, as I need 2 tuners - one into the FL2100Z and
another for the antenna itself! Naturally I don't bother with
the linear as a result.

The 706 'remembers' one non-amateur band in each of the HF/VHF
groups (ie if you were last listening to WWV on 15MHz it will
put that in the HF group for next time) and if you tune to the
local FM station it will 'remember' that, too, in the VHF
positionas well as the 2m setting last used.

Hope this helps.

Nermin Bajramoviï¿½ wrote:
>
> Hello om's,
>
> I am an happy owner of ic706mkll, so far. Now after the cqww contest on
> 10 meters I am facing a strange problem. The radio would not put out
> any modulated emission on 18 MHz and 21 MHz only. The radio works fine
> for any modulation into the dummy load! As said, not with the antenna
> on, via the either MFJ 989c tuner or vectronics VC300dlp. I have tried
> to reset the CPU several times as stated in manual, but no luck! Also,
> when going with the bands button, among ham bands being switched comes
> 15 MHz!! The radio has been modified for gen.tx. coverage. Any
> suggestions, please?
>
> Nermin S58DX

--
****
* Murray Kelly vk4aok mkelly@powerup.com.au *
* 29 Molonga Ter. / Graceville/ QLD. 4075/ Australia *
* ph/fax Intl+ 61 7 3379 3307 *
****

4066. Homebrew Beam SWR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-11 00:00:00 UTC
From: iron@netcnct.net
Message-ID: <382a2152.57101743@news.netcnct.net>
Source record: 65682

I have a 3 element yagi that when the director is pointed upward you can adjust the swr..when the antenna is placed in the horizonal postion the SWR gos up and cannot be adjusted...any help would be appreciated..thanks in advance.

4067. Source for power comp. resistors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-11 00:00:00 UTC
From: David Snyder Hale <david@isi9.mtwilson.edu>
Message-ID: <80d8j4pje1@agate.berkeley.edu>
Source record: 65683
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew

Hi,

Does anyone know a source for inexpensive power composition resistors? I would like to build a 50 ohm, 100-200W dummy load for RF (1.8 - 30Mhz at least, up to 500 MHz in a perfect world).

I tried buying a couple of "non-inductive" 100W resistors from C&H Surplus, but they really weren't non-inductive enough, as they gave SWR>3 at 28MHz.

MFJ Enterprises sells a 300W 50 ohm dummy load for $35, so the resistors would have to add up to be less than that, obviously. It seems the problem with all of the high power resistors is that they are wire wound or spiral etched. And to buy enough 2W carbon comp's at $1 ea would be ridiculus.

--
Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

4068. Duplexer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-11 00:00:00 UTC
From: Peter <anonymous@cotse.com>
Message-ID: <199911110811.DAA04782@cotse.com>
Source record: 65684

Hi,
I wonder how important is it to tune the duplexer in a repeater system. I have a repeater up and running on a new freq. (within the duplexer range) almost every week without retuning it; it seems to worked just fine.

I have use this repeater system for about six months on many different frequencies because it served a backup unit while the regular repeater is on the shop.

The duplexer is Celwave; Cat.No.633-6A-2; Range:450-470Mhz.

If it is really important to retune the duplexer every time I change the freq., would someone tell me how to retune this particular duplexer. Thank you.

Please reply to:
mailto:pne@hotmail.com

--
www.cotse.com - Anonymous USENET posting made easy!

4069. fm radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-11 00:00:00 UTC
From: ".. *.." <maxtmojo@notccaonline.com>
Message-ID: <80e4tl$vr9@enews4.newsguy.com>
Source record: 65685

can anyone tell me if it is possibly to build a radio reciever that will only pick up on channel. that way it can be very small, maybe even fit into a hearing aid. if there is where can i get diagrams for one.
thanks

4070. W: Pins of anzac MD-108 mixer ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-11 00:00:00 UTC
From: ac5mv <klluit00@fht-esslingen.de>
Message-ID: <Pine.GSO.3.96.991111114314.4171C-100000@rssx10.rz.fht-esslingen.de>
Source record: 65686

Hi group.

Wonder if anybody knows something about this mixer
produced by ANZAC. I have bought the MD-108 at
a local hamfest an would like to use it in a
VLF-converter. Does somebody know which pins are
used for IF, RF and LO ?

I could not find any website relating to anzac or
its products.. even doubt they are on the net !!

The only thing I know is that it can handle
+7dBm of LO-pwr.

thanks for your kind help
73s de Klaus ac5mv

4071. Ham Clock

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-11 00:00:00 UTC
From: df1zn@my-deja.com
Message-ID: <80eebp$mf6$1@nnrp1.deja.com>
Source record: 65687

Hello!

I just finished writing a small program called HamClock. You can display
the local time of a remote QTH. You can select the QTH by a prefix list.

You may download the program at:

http://www.qsl.net/df1zn

Select from the menu SOFTWARE -> HAMCLOCK

73 de DF1ZN

Mike

Sent via Deja.com http://www.deja.com/
Before you buy.

4072. Re: PLL Serial information

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-11 00:00:00 UTC
From: "Laszlo I. Morocz" <kf4pv@SPAMMENOTlmorocz.com>
Message-ID: <FmyW3.10420$_C.6857@jump.innerx.net>
Source record: 65688

If you're using a PIC, then I'm really puzzled. It should be able to easily keep up with the parallel port. What clock frequency are you using? Just as a comparison, I have no trouble with a 4 MHz Atmel AVR processor. Are you running native assembly code or going through an interpreter? Or are you slowing things down to be able to access the 93C66? If it's the last, maybe you should consider an external SRAM cache for the capture function. Or another chip with with more on-board fast RAM. Good luck,

73 de KF4PV/3, Laszlo

--
To reply, remove the text SPAMMENOT from the e-mail address.
yvon roy wrote in message <382A39B8.2E2D6EFD@sympatico.ca>...
>Thanks! My controler with memory is designed to be used to program the
National
>PLL
>LMX1501. It is made of a PIC16C57 and an Atmel Eprom 93C66. The controler
is
>used to switch the PLL to different frequencies; in fact it does the same
work
>as the computer but its purpose is to free the computer. Somebody mentioned
me
>that old computers with a "TURBO" button would do the job, but my pentium
high
>speed computer does not have such a button. Somebody else told me that it
is
>possible to program my computer to operate at slower speed, but I do not
know
>how to do it.
>Regards! Yvon

4073. Re: W: Pins of anzac MD-108 mixer ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-11 00:00:00 UTC
From: lasse.moell@swipnet.se
Message-ID: <382aafe2.6966860@news.lin.foa.se>
Source record: 65689

Color Bead on pin 6!

viewed from below
1 2 3 4
5 6 7 8

rf 1 and 5
if 3 and 7
lo 4 and 8

Ground 2 6 AND 4
Do not forget to ground RF/IF

RF, LO 5-500 MHz
IF DC-500
LO +7dBm

IM ratio with -10dBm input with output at 25 and 35 MHz,

input: 100-350 MHz > 55dB
350-500 MHz >40 dB
On Thu, 11 Nov 1999 12:04:07 +0100, ac5mv <klluit00@fht-esslingen.de>
wrote:

>
>Hi group.
>
>Wonder if anybody knows something about this mixer
>produced by ANZAC. I have bought the MD-108 at
>a local hamfest an would like to use it in a
>VLF-converter. Does somebody know which pins are
>used for IF, RF and LO ?
>
>I could not find any website relating to anzac or
>its products.. even doubt they are on the net !!
>
>The only thing I know is that it can handle
>+7dBm of LO-pwr.
>
>thanks for your kind help
>73s de Klaus ac5mv
>
>

4074. Re: Cap availability in the UK

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-11 00:00:00 UTC
From: phil <phil@invest.fsbusiness.co.uk>
Message-ID: <o5MUMiAoMsK4EwOP@invest.fsbusiness.co.uk>
Source record: 65690

Francine,

Thank you for the link.

I'll go and look.

Rgds

Phil G4ZOW
>> I'm having problems locating a supplier of 0.1 100v surface mount
>> capacitors.
>>
>> There are plenty of 50v types from Maplins, Farnell etc at around 10p
>> each.
>>
>> Can anyone help or suggest a possible trade distributor or retail
>> outlet?
>
>www.johanson-caps.uk
>
>They give as distributor:
>
>ENGLAND
> SCOTLAND AND WALES
> Acal Electronics Ltd
> Redfields Park
> Church Crookham
> Hampshire
> GU13 0RD
> Tel: +1252 858 585
> Fax: +1252 585000
> web: www.acalelec.uk
> e-mail: general.information@acalelec.co.uk
>
>Altough www.acalelec link seems to be dead there must be another one I'm
>sure.
>

--
phil

4075. Re: Homebrew Tube Tester

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-11 00:00:00 UTC
From: JW <jdwalton@home.com>
Message-ID: <382AF32A.D7639154@home.com>
Source record: 65691

You can test for mu, gm and Rp in situ - see any RCA tube manual for the definition of terms. You will need to fashion a jig from a socket and plug in order to change the grid voltage and measure the change in plate current (dV over R).

I have found that one of the problems with tube testing - at least for the Hallicrafters stuff I have, is that an RF or IF amp tube may test OK, but just not work right. It is less frustrating to just throw in a new 6BE6, 6EA8.

I do have plans for a microcontroller tube tester on the drawing board - using a PIC 16C710 - the project is temporarily stalled (because I've been playing with a new Atmel processor). There seems to be some modest interest on the "rec.audio.tubes" newsgroup, but it appears that folks are contented to buy a used Hickok or BK tester for $150 rather than plug a $20 microprocessor device into the parallel port of their computer. Go figure.

Ipo Camacho wrote:

> Need info/schematics for homebrew tube tester.
>
> Tubes that need to be tested:
>
> -4CX250F/G Eimac and 8621 Amprex
> -8950
> -20LF6
> -6LF6-6MH6 and 6KD6
> -6LR6
>
> Please email me at your earliest convienence. Thanx and 73...
>
> Ipo Camacho

4076. WTB: Non-inductive Resistors.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-11 00:00:00 UTC
From: Tom Dawson <tdaws@flash.net>
Message-ID: <3REW3.4953$OQ.727410@news.flash.net>
Source record: 65692
Cross-posted to: rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Looking to terminate a longwire so I need to come up with about 600 ohms or thereabouts at 50 tom100 W.

regards, Tom

tdaws@flash.net

WB3AKD

4077. Re: Homebrew Beam SWR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-11 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <cAGW3.91805$y45.1333890@news4.giganews.com>
Source record: 65693

You didn't say what frequency you are working with. But if the SWR is high when the antenna is in a horizontal position, check for conductive masses near the antenna. What method of adjustment are you using?

If you have a gamma match, T match, balun, coaxial or open feeders, it all matters. Give us the details and we can help. How are you measuring SWR?

73, Bob K6DDX

4078. Re: Transformer Cores

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-11 00:00:00 UTC
From: Grif <kgriffit@wolfenet.com>
Message-ID: <382B520D.2A24@wolfenet.com>
Source record: 65694
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Well,,, one of the DIY welders is using rewound microwave transformers.
Cheep, at the appliance repair shop, and usually have the hivoltage
windings toasted. Also good for a kw for several minutes.

AMDX wrote:
>
> What do you think about finding a junk welder to get the transformer core
> out of? They are large and have few turns of large wire to remove. I have
> one, and someday.....
> Mike

4079. Re: Clock crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-11 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <382af51b.1209439890@news.online.no>
Source record: 65695

On Wed, 10 Nov 1999 23:07:06 +0000, douglas dwyer
<doug@ddwyer.demon.co.uk> wrote:

>In article <38275374.971412450@news.online.no>, J M Noeding
><LA8AK@online.no> writes
>>14318 khz xtal may be pulled 5-7khz in an ordinary paralell res.
>>oscillator, and some 4433khz xtals may pull relatively easy -
>>particularly if they are made for color burst reference in a tv,
>>havent tried 3579 xtals, but the 3.58MHz resonators may pull 120khz -
>>on 80m! Also 27MHz xtals pulls relatively much on 9MHz paralell res.
>>(which is somewhat above series res.)
>Beware miniature strip AT cut crystals these are not circular but
>reduced in width they have higher ductance and smaller eq c so dont pull
>far.

no, usually I don't inspect inside the holder how it looks like, all I
need is good results, and you....?

73 jan-martin LA8AK

4080. Re: W: Pins of anzac MD-108 mixer ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-11 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <382b5656.1234333891@news.online.no>
Source record: 65696

On Thu, 11 Nov 1999 12:06:10 GMT, lasse.moell@swipnet.se (Lasse)
wrote:

>Color Bead on pin 6!
>
>viewed from below
>1 2 3 4
>5 6 7 8
>
>rf 1 and 5
>if 3 and 7
>lo 4 and 8
>
>Ground 2 6 AND 4
>Do not forget to ground RF/IF
>
isn't connections equal to SBL-1 (but counts different)?

4081. Re: Very basic transformer question -- ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-11 00:00:00 UTC
From: Terry Sanford <tsanford@roadrunner.nf.net>
Message-ID: <382B57AB.FC2FD799@roadrunner.nf.net>
Source record: 65697
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.basics

JGinNY wrote:

> What does "10,000 ohms, P-toP" or "plate to plate" mean?
>
> What is the significance of this "p-to-p" impedance (or resistance)
> value, when working with interstage or audio transformers?
>
> Does this value have something to do with the resistance of the windings
> themselves, or does it somehow figure into the impedance matching ratio
> (primary to secondary)?
>
> Any help on this would be appreciated. Please reply to my e-mail.
>
> Thanks!
> J.

I know others have replied to this but may I also suggest this; not having seen it.
I agree the 10 00 ohms plate to plate is the load impedance that the plates of two tubes operated in push-pull will 'see' reflected back when the secondary of the transformer is terminated (ie. feeding into) in its correct impedance.
Taking a flyer on this;
1) Lets first assume the transformer is designed for use as the output transformer of an audio amp with two pentode output tubes operating in say Class A push-pull. (for example; I notice from a tube manual of the 1960s that two 6F6 pentode (audio) output tubes have a listed "plate load" of 10 000 ohms). The secondary would be terminated by the appropriate 8 ohm or 4 ohm speaker or speakers; there might even be 'taps' to accommodate different combinations of speakers. IMO the transformer may very well be an out put transformer of this type.
2) However push-pull could also be used in the interstages of big tube amps. or in the driving stages of audio/music modulators for AM (Amplitude Modulated) transmitters. In that case the primary plate to plate is as above; the secondary, in interstage work would be designed to match the impedance, typically, of the grid input to the next (or final) stage of the modulator. So, for example, there could be a pair of 6F6 in push-pull driving a pair of 807 in push-pull which in turn would modulate the transmitter:
3) AM modulation was often through a large 'Plate Modulation' transformer. So there is also a possibilty that your transformer could be a modulation transformer. Often size and markings provide clues to its original purpose.
You could check the ratio of the transformer by applying a low AC voltage to the p-p winding of say around 20 to volts; if you then measure about one (1)

volt or less on the secondary, the ratio of your transformer is around the 35:1 range as follows for Number 1 above.
1) Audio output?
10000 divided by 8 = 1250 this is the ratio of the 'impedances' (resistances).
The square root of 1250 = 35
35 is the 'voltage' ratio.
Therefore 20 volts divided by 35 = approx 0.6 volts. (or around there somewhere.)

2) If you get an entirely different and higher voltage then the transformer may be an interstage designed to feed into the grids of the next tube stage; as per number 2 above.

3) If the voltage is in the same range or say around half of the 20 volts then start thinking about number 3.

Hope this helps. And, there are people out there who are more expert; so ask again if necessary.

All the best. Terry S.

4082. Re: Anyone use these 2.4Ghz ATV modules?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-11 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <382B5F91.74F0@pop.removethistomailme.net>
Source record: 65698

> > Paul Breed <Paul@rasdoc.com> wrote in article
> > <3814AF40.AD5653AD@rasdoc.com>...
> > > Any experience with the following ATV products?
> > >
> > > http://www.4atv.com/atvprod.htm
> > >
> > > You can't beat the price.
> > >
> > >
> > > Paul
> > > (KL7JG)
> > >
> >

For those involved in this earlier thread, I just had a pair of their ATV-2400-TR kits delivered today. Superficially, they look like decent-quality units. I'll power them up this weekend and see how they perform.

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

4083. Re: WTB: Non-inductive Resistors.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-11 00:00:00 UTC
From: Jim Campbell <JCampbell@3n.net>
Message-ID: <382B89D9.1CD59673@3n.net>
Source record: 65699
Cross-posted to: rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Tom -

I took 20 18,000 ohm 5 watt carbon resistors and paralleled them between two pieces of perf board for spacing, placed them in a tupperware type container for waterproofing. It worked out great. I made two of them to terminate a 20 meter sloping inverted 'V" with 100' legs (7dBd gain wire antenna).

Jim, K4YM
Tom Dawson wrote:

> Looking to terminate a longwire so I need to come up with about 600 ohms or
> thereabouts at 50 tom100 W.
>
> regards, Tom
>
> tdaws@flash.net
>
> WB3AKD

4084. Re: Transformer Cores

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-11 00:00:00 UTC
From: Michael Young <nobody@all.xxx>
Message-ID: <s2n6gt7dhsq17@corp.supernews.com>
Source record: 65700
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Are there any problems using ferrite cores for power transformers? Amidon lists a number of E cores and bobbins. Come to think of it, I put a few projects on hold cuz I couldn't find a large enough transformer for the power supply. Never thought to wind my own, even though I recall now watching my father painstakingly stack little iron pieces...

Michael.

4085. W: Pins of anzac MD-108 mixer ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-12 00:00:00 UTC
From: Barry McCarthy <barry@stubbleg0wbf.freeserve.co.uk>
Message-ID: <FXVfECAzC3K4Ew5F@g0wbf.freeserve.co.uk>
Source record: 65701

In article <Pine.GSO.3.96.991111114314.4171C-100000@rssx10.rz.fht-esslingen.de>, ac5mv <klluit00@fht-esslingen.de> writes
>
>Hi group.
>
>Wonder if anybody knows something about this mixer
>produced by ANZAC. I have bought the MD-108 at
>a local hamfest an would like to use it in a
>VLF-converter.

Take look in any ARRL handbook for pin-outs and practical applications.

You can also use the DC - 500Mhz port normally used as IF out as RF in and 5 - 500 MHz port as IF out, if you are using 9MHz IF or above.
--
Barry McCarthy
G0WBF

4086. Re: Very basic transformer question -- ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-12 00:00:00 UTC
From: Roger lascelles <rogerl@datafast.net.au>
Message-ID: <382B6EF3.A5346DC@datafast.net.au>
Source record: 65702

Hi

If you disconnect the load from the secondary, you can get the
equivalent load by connecting 10 K between the plates. Thats equivalent
to 5 K from each plate to the centre tap. 10K is a very common plate to
plate load for push pull tube amplifiers.

Roger

JGinNY wrote:
>
> What does "10,000 ohms, P-toP" or "plate to plate" mean?
>
> What is the significance of this "p-to-p" impedance (or resistance)
> value, when working with interstage or audio transformers?
>
> Does this value have something to do with the resistance of the windings
> themselves, or does it somehow figure into the impedance matching ratio
> (primary to secondary)?
>
> Any help on this would be appreciated. Please reply to my e-mail.
>
> Thanks!
> J.

4087. Electro Tools V1.00 Electronics Worksheet Release

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-12 00:00:00 UTC
From: Roger lascelles <rogerl@datafast.net.au>
Message-ID: <382B7065.7AADE13B@datafast.net.au>
Source record: 65703

Electronics worksheets for engineers, teachers, advanced techs,
students.
Evaluation version download available.

Free Pole-Zero to Bode plotter for download with examples.

http://server24.hypermart.net/electrotools/

4088. Re: PLL Serial information

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-12 00:00:00 UTC
From: blackm00@cam.org
Message-ID: <blackm00-1211990009410001@dialup-570.hip.cam.org>
Source record: 65704

In article <3827A498.C1CBBD3E@sympatico.ca>, yvon roy <soj@sympatico.ca> wrote:

> I have built up a memory for storing a 3 wire PLL serial signal. The
> origin of this information is from a National Software for the PLL #
> LMX1501. The problem is that the information coming out of the computer
> from the parallel port is too fast for my memory.
> Does anybody know if a method exist to slow this information. Any
> information is appreciated. Thanks!

Is the problem that the software is ignoring handshaking on the parallel port? If it is, then this won't help.

But if it sends data to the parallel port, then a strobe signal, and waits for the busy or acknowledge signal (it's too late for me to track down which is which), then I would think the problem can be fixed with a bit f hardware.

I've heard of some cases where the strobe signal from the parallel port is too short, though I think that is rare. A fix would simply be lengthening the pulse with a one-shot.

If the data is not there long enough, then it's a matter of not acknowledging until enough time has occurred. Maybe just a delay of the acknowledgement bit. Or if the data bits are not available long enough for the memory, an extra latch might be needed.

As it is, perhaps it's just a case of your added hardware nt doing anything with the acknowledgement pin (or is it the busy pin?)? If it's just tied high or low, or ignored, at the moment, starting to use it could solve the problem.

But as I said, none of this will help if the specific software doesn't wait for feedback from the parallel port before sending another byte out.

Michael VE2BVW

4089. 4CX300A Amp Circuit?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-12 00:00:00 UTC
From: glcslc@home.com
Message-ID: <eoNW3.483$dF.5362@news.rdc1.wa.home.com>
Source record: 65705

I would like to build an all band amplifier with
(3) 4CX300A in parallel. Has anybody seen
a class ab1 circuit like this? Would the plate
capacitance be too high for tuning 10 or 6 meters?

George W7LFD
geo@celestial.com

4090. Some 2.4 GHz Yagi- antennas available

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-12 00:00:00 UTC
From: Alexander Bom <Alexander.Bom@ehv.sc.philips.com>, abom@iae.nl
Message-ID: <942400482.733885@dibbs3.eur.cis.philips.com>
Source record: 65706

After finishing our wireless video-
project, we have some small 2.4 GHz
antennas available

Elements =8
Gain =10 dB
VSWR <1.5 at 2400 MHz.
F/B- ratio >14 dB
Impedance = 75 Ohm
Connector =SMA

Complete with balun- transformer.

Please e- mail if you are interested.

Best wishess from the Netherlands.

--
Alexander

4091. The best ground? solid wire/braid

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-12 00:00:00 UTC
From: Ralph Blach <rcblach@raleigh.ibm.com>
Message-ID: <382C0182.D6E8D7B7@raleigh.ibm.com>
Source record: 65707
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

OK,

My ham shack is on the second floor of my house.
I really do not have a good earth ground, and a friend suggested that
I place a length of 4 aught solid copper from a ground stake, up to my
second floor
window, and then to my ham rig. I then started thinking about the skin
effect
and started wondering if I should use the solid copper wire or a
large gage wire braid? Any opinions on this?

Thanks

Chip

4092. Re: The best ground? solid wire/braid

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-12 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <80h1ha$r8b$1@autumn.news.rcn.net>
Source record: 65708
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

Braid will generally have a larger surface area than solid wire
therefore it would be better from an RF standpoint, due to the skin
effect. On the other hand, the length from ground to the second floor
is great enough that it's probably not going to be a reliable RF
ground anyway. If all you're providing is lightning protection then
it won't matter much if you use braid or wire.

4093. Re: The best ground? solid wire/braid

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-12 00:00:00 UTC
From: JW <jdwalton@home.com>
Message-ID: <382C4350.58B01DDB@home.com>
Source record: 65709
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

I had the same discussion with my electrician and we decided to use #4 stranded. The ground to the "box" goes back to the "street side" of the water meter.

When the ground was "fixed" I suddenly did not have triggering problems with my Tektronix 545A! (It was a problem on one of the outlets.)

Sometimes the least expensive fixes just work wonders. (in photography, investment in a decent tripod is better than investment in an expensive lens.)

Ralph Blach wrote:

> OK,
>
> My ham shack is on the second floor of my house.
> I really do not have a good earth ground, and a friend suggested that
> I place a length of 4 aught solid copper from a ground stake, up to my
> second floor
> window, and then to my ham rig. I then started thinking about the skin
> effect
> and started wondering if I should use the solid copper wire or a
> large gage wire braid? Any opinions on this?
>
> Thanks
>
> Chip

4094. Re: The best ground? solid wire/braid

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-12 00:00:00 UTC
From: Mike <m.j.willis@rl.ac.uk>
Message-ID: <80h753$o1m@newton.cc.rl.ac.uk>
Source record: 65710
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

Ralph Blach <rcblach@raleigh.ibm.com> wrote in message
news:382C0182.D6E8D7B7@raleigh.ibm.com...
> OK,
>
> My ham shack is on the second floor of my house

What is this - starting a new message with OK - are you related to Shania Twain ?

Use broad flat copper strip, as wide as you can find, but don't expect it to be like a true ground. If you are after a fake ground for the RF, you can make several counterpoises, one for each band, a quarter wavelength long, trailed where convenient and all connected together.

4095. Re: Transformer Cores

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-12 00:00:00 UTC
From: "McNair, Ken [CAR:9F24:EXCH]" <mcnair@americasm01.nt.com>
Message-ID: <382C2392.774830F8@americasm01.nt.com>
Source record: 65711
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Michael Young wrote:
>
> Are there any problems using ferrite cores for power transformers? Amidon
> lists a number of E cores and bobbins. Come to think of it, I put a few
> projects on hold cuz I couldn't find a large enough transformer for the
> power supply. Never thought to wind my own, even though I recall now
> watching my father painstakingly stack little iron pieces...
>

Ya need good old iron for low frequency.
Ferrite is only good for high frequencies.
I'm sure others can suggest the minimum
frequency for ferrite, but is's not 60Hz.

4096. FS: MMICs, RF components for builders (long)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-12 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <382C30E5.24AD@pop.valley.net>
Source record: 65712

Hello-- Revised 11/12/99

I'm offering homebrew builders oddball, offbeat and hard-to-find NOS RF components, including...
***
Hewlett-Packard MSA-0786 MMICs ($1.00 each, $5.00 for 6, $10.00 for 15, or $25.00 for 50 pieces); DC-2 GHz. These are taped and reeled and have leads configured for surface-mounted applications. Specs are available at...
http://www.hp.com/HP-COMP/index.html
***
1N5711 Schottky diodes, full-length leads, taped and reeled, $1.00 for 10
pieces
***
1N5821 Schottky rectifiers, full-length leads, bulk packed, $1.00 for 8 pieces
***
PIN diodes, no other specs available; full-length axial-leaded packages; individually serialized in sealed-foil envelopes. $1.00 each.
***
Minicircuits T4-1 (4:1 ratio) and T1-1T (1:1 ratio) broadband RF transformers-- $1.00 for 3; DIP-packaged. Visit www.minicircuits.com for full specs via their catalog.
***
Minicircuits PSCQ-2-400 90-degree, 2-way power divider, 0.9 dB insertion loss, 225-400 MHz; $1.00 each
***
Fair-Rite cores (both type 43 mix):

2643023002 (a long-cored toroid) $1.00 for 10 pieces
2843002402 (binocular (balun) core) $1.00 for 20 pieces
***
SD-201 Signetics DC-2 GHz DMOS single-gate FETs four-lead TO-72 can (like TO-18 w/shield lead). A conductive-rubber antistatic "O" ring encircles
all four leads. Specs (available on request and with purchase) include S parameter plots. $1.00 each, $3.00 for 6, $5.00 for 12 pieces.
***
SAW-stabilized oscillators; intended for ECL circuits, but also reportedly usable as LOs. All are packaged in metal DIP cans. $4.00 each, or three assorted for $10.00

Frequencies available are:
350.000 MHZ (RF Monolithics HC1301)

366.667 MHz
400.000 MHz ($2.00 ea. but not NOS; removed from PC boards)
733.333 MHz
***
Also, I have Teflon- and diallyl-pthalate insulated single-point turret lugs at $12.00 per 100 (many styles available-- e-mail a request for information and a jpg image showing various types).
***
Feedthrough capacitors: Spectrum Control 100 pf nominal (threaded bushing mount, hardware included). Attenuation is specified as -10 dB at 300 MHz, and -20 dB at 1 GHz.
$.50 each, $1.00 for 3 pieces.
***
Trimmer capacitors(USED and ABUSED): Johanson upright PC mount, 2-15 pf multiturn piston capacitor. A drop of brown Glyptal varnish secures each capacitor's adjustment screw. A dab of Zip-Strip (a methylene chloride-based paint remover available in hardware stores) softens the Glyptal, allowing readjustment. Some solder residue is present on terminals, and on some trimmers a through-hole solder tab may be missing. Price: $1.00 for 10 pieces; $2.00 for 25 pieces
***
Air-variable capacitors manufactured by Cardwell (their part no. PL6348).
NOS surplus, m'fd. sometime in the 1950s.
--Configuration: consists of two plates separated by 0.1";
--Estimated capacitance range: 1-5 pf.
The adjustment shaft is 0.25" dia. by 0.5 inches long; bushing or isolated mounting; easily disassembled for capacitance vs. frequency modification, etc. A more-detailed description is available on request.

Price: $3.00 each, $10.00 for 5 pieces, $20.00 for 12 pieces.
***
Caddock MS281N NONINDUCTIVE resistors:

10 ohm +/- 5 per cent tolerance, 8 watt noninductive power film resistors
Tinned axial leads (0.75 inches long) are formed for PC-board insertion on 1.2-inch centers. These are NOS, bulk-packed parts.
Note: these measure well within tolerance at +/- 0.2 ohms typical. Full specs are available in PDF format on Caddock's web site (www.caddock.com)
but highlights are:
--Temperature coefficient of resistance: 50 ppm;
--Power rating: 8 watts at 25 C, derating to 4 watts at 150 C and 0 watts at 275 C;
--Noninductive design: serpentine film layout cancels magnetic field-equivalent inductance of a straight piece of wire of the resistor's body plus lead length.

Applications include:
--Current sampling;

--Cathode bias;
--Dummy loads for audio and RF applications.

Price: $1.00 each ($10.00 for 12 pieces); only 70 pieces available
****
Six-lug terminal strips, like Keystone p/n 825: six isolated, tinned steel lugs mounted on a brown phenolic insulating strip, arranged in groups of three on either side of a central mounting bracket. There's no center grounding lug, but you can add a jumper to an adjacent lug or two as required. Tie-point strips work well for breadboarding if you use unetched-copper PC board laminate as a ground plane.

The lugs are spaced on 0.375-inch centers; mounting bracket has a 0.140-inch hole (use a 6-32 screw for chassis mounting).

I've sold thousands of these, but my supply is running low. Buy a batch now before they all go to good homes<g>.

Prices: $.15 each, or $6.00 per 50 pieces, $10.00 per 100 pieces.

****
* NOS Warranty policy *
****
Scanned images or digital photos of components are available on request.

If you purchase NOS tubes or components and find them unsatisfactory upon your inspection, notify me within seven days and return items in as-received condition for a full refund or replacement (if available).

This material is subject to prior sale and is supplied as-is, as new-old-stock (NOS) merchandise, with all responsibility for safe and successful application residing solely with the purchaser.

If you're searching for oddball components of any vintage, don't hesitate to inquire about availability.

****
* Shipping per order: *
****
Postage:

Add $3.20 for priority-mail shipment (U.S. only).
Foreign purchasers: please inquire for shipping charges.

Please contact me to confirm availability and reserve components before sending payments.

I accept payment via personal or cashier's check or money order drawn in U.S. dollars and made payable to "Brad Thompson".

**********Available from:**********
Brad Thompson, AA1IP
P.O. Box 307, 202 Whitaker Rd.
Meriden, NH 03770-0307

Voice:(603) 469-3351
Fax: (603) 469-3917
E-mail: brad.thompson@valley.net

4097. Re: W: Pins of anzac MD-108 mixer ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-12 00:00:00 UTC
From: ac5mv <klluit00@fht-esslingen.de>
Message-ID: <Pine.GSO.3.96.991112113950.13662A-100000@rssx10.rz.fht-esslingen.de>
Source record: 65713

Thanks for all having answererd my question !
You were of great help to me.

73s de Klaus ac5mv/dl8ser

4098. L.O.S.A Contribution Form

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-12 00:00:00 UTC
From: cjX@hth.com
Message-ID: <382b8678.5125819@news.sverige.net>
Source record: 65714
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

List Of Stamp Applications (L.O.S.A for short)
==========

If you have done something (big or small) with the BASIC Stamp
that you are willing to tell others please use the form below and
write a short description, nothing fancy is needed just a simple
explanation. If you have source code to share that's even better but
it's not necessary.

Then e-mail the form to:

cj@hth.com

With the following as the subject:

L.O.S.A Contribution

Or you could point your Web-browser to the following URL and fill
in the L.O.S.A form on the Web-page...

OBSERVE! NEW URL - UPDATE YOUR LINKS AND BOOKMARKS

http://www.hth.com/losa/

The latest version of L.O.S.A is always available at the above
mentioned both in ASCII and in ZIP-file format for easy download.
An index of L.O.S.A is posted to the following mailing lists and
news groups, I will update it approx. once a month.

Mailing lists:

BASIC Stamp Mailing List

News groups:

comp.robotics.misc
comp.home.automation
sci.electronics
sci.electronics.misc
rec.radio.amateur.homebrew

FTP-site:

ftp://ftp.parallaxinc.com/pub/text/losa.txt

You can also find the latest version on the following URL...

OBSERVE! NEW URL - UPDATE YOUR LINKS AND BOOKMARKS

http://www.hth.com/losa/

[--- cut ---]

```
============================================================================
- L.O.S.A Contribution Form -
============================================================================
New Contribution [ ] Update [ ]
----------------------------------------------------------------------------

Title :
Author: Date:

E-mail: (optional)
----------------------------------------------------------------------------

Stamp model : BASIC Stamp/BS1-IC/BS2-IC/BS2SX-IC
Code available: YES/NO
Filename : (optional)
URL : (optional)
----------------------------------------------------------------------------
Description : (5-50 rows describing your application)

============================================================================
```

[--- cut ---]

Regards,

/Christer

[NOTE: Clear the "X" from my e-mail address if you want to e-mail me]

```
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
Send and receive serial data over the power lines... For more info
about the PLM-24 Power Line Modem go to http://www.hth.com/plm-24/
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
```

4099. Triad audio transformer model 3348

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-12 00:00:00 UTC
From: Carlos Hernandez <chernan@gate.net>
Message-ID: <80hlqk$18jc$1@news.gate.net>
Source record: 65715
Cross-posted to: rec.audio.marketplace,rec.audio.tech,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

Looking for 3348 old type audio transformer.. quantity and price. any information and specs. appreciated.

4100. FS: Jackson Bros / Reduction Drives

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-12 00:00:00 UTC
From: Ken Linney <ken@g3uda.demon.co.uk>
Message-ID: <942438648.16222.0.nnrp-12.c2deb680@news.demon.co.uk>
Source record: 65716

Hello All

Slow motion drives (Jackson Bros). 6.5:1 reduction drives 1/4" brass shaft (1 & 1/8th in length). Two grub screws to take 1/4" spindle. 1 & 1/4" distance between the outer securing ring mounting holes.

Can Email a .JPG if required. UK only please.

Please reply Email to:

ken@g3uda.demon.co.uk

Best wishes ...
Ken

4101. Transistor Crossreferance help request

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-12 00:00:00 UTC
From: oldgear@aol.com
Message-ID: <19991112161251.07984.00000393@ng-da1.aol.com>
Source record: 65717

Hi
I need a substitute for the output transistor in the (HTX-202) HT.
The original is a SRFH1900 by Motorola. If there is no sub, does anyone know
the specs of the original .
Thanks

4102. I'd like to build a DSP speaker...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-12 00:00:00 UTC
From: David Snyder Hale <david@isi9.mtwilson.edu>
Message-ID: <80hvv6$gd3$1@agate.berkeley.edu>
Source record: 65718

hi,

Are there schematics (or at least articles) for building a DSP speaker type device as unto the ClearSpeech Speaker? (www.amateurcommunications.com)

I've never done anything with DSP (yet) but I'm intrigued by this ClearSpeech device.

thanks,

--
Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

4103. FS: Delay Relay Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-12 00:00:00 UTC
From: ovrreactor@aol.com-nospam
Message-ID: <19991112172410.28415.00000200@ng-bx1.aol.com>
Source record: 65719

I am selling 29 assorted delay relay tubes. These were included with a bunch of tubes that I recently bought from a retired repair guy. He claimed that these are all new/unused, but have been reboxed into plain white cartons. They appear new, but since my tube hobbyist activities are limited to audio, I have no way to test or verify them, therefore I must sell them "as-is".

I would prefer to sell the whole lot to a single buyer to make things easy, but I will consider breaking the lot up if I can't find a home for the whole pile. The list is at the end of this post.

Please make offers by EMAIL (do not post).

Regards,
Tom Mitchell
email - OvrReactor@aol.com

===Amperite 9-pin miniatures===

3 - 26N03T
2 - 26N0120T
2 - 115N015T

===Amperite octal based===

1 - 6N015
1 - 6N030
1 - 26N05
16 - 115C2
1 - 115C5

===4-pin base (no name)===

2 - 71-5016 (on base)
Also hand written on bottle "115V NO, 35 sec, B1501".
Additional markings, "15768-E" on one,
and "17588-J" on the other.

4104. FS: Eye Tubes (6AF6, 6G5, others)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-12 00:00:00 UTC
From: ovrreactor@aol.com-nospam
Message-ID: <19991112172429.28415.00000201@ng-bx1.aol.com>
Source record: 65720

I am selling 16 assorted eye tubes. Some are new, most are used, ALL have been tested. Must take all, will not separate. The list is at the end of this post.

Please make offers by EMAIL (do not post).

Regards,
Tom Mitchell
email - OvrReactor@aol.com

===NOS/NIB===

6AF6G (RCA)
6E5 (Sylvania)

===Used / good display===

JAN-CHS-1629 / VT-138 (Sylvania)
USN-CRC-1629 (RCA)
JAN-CHS-6E5 / VT-215 (Sylvania)
6U5/6G5 (Ken-Rad)

===Used / fair display===

6E5 (Sylvania)
6E5 (C-M)

===Used / dim display===

6G5 (ST bottle / Tung-Sol)
6U5 (Sylvania)
6U5 (CBS-Hytron)

===Used / very dim display===

6U5/6G5 (RCA)
6U5/6G5 (Ken-Rad)

===Worn out===

6U5 (RCA)
6U5/6G5 (Tung-Sol)
6U5/6G5 (GE - really cool GE logo on button in middle of display - INSIDE the bottle)

4105. Re: I'd like to build a DSP speaker...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-12 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <80i89j$hh1$1@nnrp1.deja.com>
Source record: 65721

In article <80hvv6$gd3$1@agate.berkeley.edu>,
David Snyder Hale <david@isi9.mtwilson.edu> wrote:

> Are there schematics (or at least articles) for building a DSP
speaker type
> device as unto the ClearSpeech Speaker?
(www.amateurcommunications.com)
>
> I've never done anything with DSP (yet) but I'm intrigued by this
> ClearSpeech device.

The hardware is straightforward: if I wanted to build such
a device I'd start with a cheap DSP eval board (e.g. ADSP-2181
EZKit Lite - I already own one :-), add an audio amplifier for
the output, and then wrap the thing up in a housing with cables
and such.

The hard part is the programming. Some noise-reduction algorithms
are straightforward (my homemade weather satellite demodulator
program uses an LMS adaptive filter to good effect), while others
(e.g. spectral subtraction) are more complicated, but well docu-
mented. Done right they work well. Done wrong they sound really
weird...

Still others are out-and-out proprietary. You're not going to
get them, except by buying the product.

Reference: any non-trivial textbook on DSP. The new edition
of Rohde's communications receivers book discusses some of this
too.
--
Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte
Satellite: VA3SFL on AO-16, UO-22, KO-23, KO-25

Sent via Deja.com http://www.deja.com/
Before you buy.

4106. Re: WTB: Non-inductive Resistors.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-12 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <382c9bca.1317662962@news.online.no>
Source record: 65722
Cross-posted to: rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

On Thu, 11 Nov 1999 19:32:15 GMT, "Tom Dawson" <tdaws@flash.net>
wrote:

>
>Looking to terminate a longwire so I need to come up with about 600 ohms or
>thereabouts at 50 tom100 W.
>
>regards, Tom
>
>tdaws@flash.net
>
>WB3AKD
>
>
I suppose it is only for 1-30MHz, so really any carbon resistors will
do

4107. Re: Pins of anzac MD-108 mixer ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-12 00:00:00 UTC
From: NANCY GIANAKOPOULOS <n.gianakopoulos@worldnet.att.net>
Message-ID: <80ijtt$h3f$1@bgtnsc01.worldnet.att.net>
Source record: 65723

The pin-outs for this device are as follows: LO = pins 1 and 5, RF = pin 8, and IF = pins 3 and 7. This device has a conversion loss of 7dB typical. The frequency range is 5 to 500 MHz.
I think a Mini-Circuits TUF-3 or a SRA-3 would be a better choice; their low frequency cutoffs are 150KHz and 25KHz respectively. The conversion loss of these devices is right around 4.7dB. The TUF-3 is around 4 dollars, while the SRA-3 is around 16 dollars. I have been using the "3" series of mixers in my own receiver designs for several years, and they have actually measured pretty good down to about 10KHz. If you really want to receive down low, the SRA-6 will work down to 3KHz, while the SRA-8 will work all the way down to 500Hz!
For information on these devices, you can reach Mini-Circuits at 800 654-7949,

Pete Gianakopoulos
Cedar Rapids, Iowa

ac5mv <klluit00@fht-esslingen.de> wrote in message news:Pine.GSO.3.96.991111114314.4171C-100000@rssx10.rz.fht-esslingen.de...
>
> Hi group.
>
> Wonder if anybody knows something about this mixer
> produced by ANZAC. I have bought the MD-108 at
> a local hamfest an would like to use it in a
> VLF-converter. Does somebody know which pins are
> used for IF, RF and LO ?
>
> I could not find any website relating to anzac or
> its products.. even doubt they are on the net !!
>
> The only thing I know is that it can handle
> +7dBm of LO-pwr.
>
> thanks for your kind help
> 73s de Klaus ac5mv
>
>

4108. FS filament trans

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-12 00:00:00 UTC
From: Matt Erickson <kk5dr@hotmail.com>
Message-ID: <382CD9B9.54A817A4@hotmail.com>
Source record: 65724

```
7.5vac @ 21A, with CT, 120/240vac primary
$50 shipped conus
```

4109. Re: Signal amplification

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-13 00:00:00 UTC
From: WIZ <WIZ@prodigy.net>
Message-ID: <01bf2d71$fd0e7240$a9f2fcd1@newmicronpc>
Source record: 65725

You may not need to amplify the signal coming in to your
radio. If you describe the problem you are trying to solve,
we can do a better job of helping you. Wiz

Alan E. <iamthecaptain@hotmail.com> wrote in article
<3D184A54FF567FFD.FECD882AA1293F57.6806274F90C406D3@lp.airnews.net>...
> I know nothing about radios, but I need to amplify the signal coming in
to
> my radio. I know products are sold to amplify TV signal, but I haven't
> found a similar product for radios. Can I make such a thing myself?
>
> Thank you
> Alan E.
>
>
>
>

4110. Re: Where Do You Buy Project Supplies?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-13 00:00:00 UTC
From: WIZ <WIZ@prodigy.net>
Message-ID: <01bf2d72$f8d82620$a9f2fcd1@newmicronpc>
Source record: 65726

Me too. Mouser has never let me down. Excellent
service, fast shipping, no hassles, no minimum.
Ed

kizerian@ced.utah.edu wrote in article <7vsff7$1rq$1@nnrp1.deja.com>...
> Try Mouser. Great prices. Excellent service. No minimum order. Good
> catalog and website at www.mouser.com.
>
> I design radio kits for beginners and need a reliable source for
> inexpensive readily available parts. I usually end up ordering from
> Mouser for the above reasons. Highly recommended!
>
> Bruce Kizerian kk7zz
>
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.
>

4111. Availability of MC13136/MC13135 in dip package

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-13 00:00:00 UTC
From: Francois Nel <fnel@firga.sun.ac.za>
Message-ID: <382D23E9.D2D785A8@firga.sun.ac.za>
Source record: 65727

Hi !

I have implemented the MC13136 IC and had great succes with it.
The problem is that it is only in surface mount available in South
Africa.
The reason why I prefer the dip package over the surface mount is that
we
are busy in the design/implementation of economical 2m xtal receiver for
school
pupils especsally to receive signals from SUNSAT(Stellenbosch University
Satellite)(SO35).
The idear is that the school pupils must build the receiver themselves.

Does any one know where one can find the dippackage MC13135 or MC13136
IC's.

Is their may be other IC's that has the same function as the
MC13136/MC13135.
The MC3362 and MC3363 are the previous generation IC's of the MC13136
and MC13135.

Francois Nel
RF - ESL(Electronic Systems Lab.)
email = fnel at FIRGA dot SUN dot AC dot ZA
at = @ and dot = .

4112. Re: The best ground? solid wire/braid

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-13 00:00:00 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <nx+JBFA0jSL4EwGv@g3ohx.demon.co.uk>
Source record: 65728
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

I assume that you are using an end-fed antenna, otherwise you won't really be needing an RF earth connection. My shack is upstairs in a two-storey house. For a simple inverted-L end-fed antenna, I recommend feeding it with coax (the best, lowest-loss coax, possibly scrounged from you local CATV company!). Coax runs from shack to far end of the garden, where there is a good earthing system connected to the braid. Antenna length is appx 150'. An ATU in the shack takes care of whatever SWR is presented at the shack end of the coax.

A high SWR on the coax does not necessarily mean unacceptably high power loss (many purists dispute this, but it's true). I reckon that I could be losing about 3dB (half an S-point) where the SWR is worst (20m). This is a small price to pay for a simple, TVI resistant, multi-band antenna. You can experiment with somewhat different antenna lengths if the SWR /loss is too high on your favourite band. The shack is totally 'RF dead' (and I don't mean that the antenna isn't radiating!). Most critics of this system have a phobia about ATUs, for various reasons (fiddlyness, additional loss, COAX burn-out (!), 'my ATU won't handle funny impedances' etc).

73,
Ian.

In article <382C0182.D6E8D7B7@raleigh.ibm.com>, Ralph Blach
<rcblach@raleigh.ibm.com> writes
>OK,
>
>My ham shack is on the second floor of my house.
>I really do not have a good earth ground, and a friend suggested that
>I place a length of 4 aught solid copper from a ground stake, up to my
>second floor
>window, and then to my ham rig. I then started thinking about the skin
>effect
>and started wondering if I should use the solid copper wire or a
>large gage wire braid? Any opinions on this?
>
>Thanks
>
>Chip

--
Ian Jackson

4113. Tek TR503 1dB/-Atten. Knob Wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-13 00:00:00 UTC
From: Jorgen Lund-Nielsen <mhflun@pktr.desy.de>
Message-ID: <382DF0CE.90FD1D7@pktr.desy.de>
Source record: 65729
Cross-posted to: sci.electronics.equipment,sci.electronics.misc,sci.electronics.components,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,de.sci.electronics

Hello !

I would like to buy a Knob for the Attenuator
(for the 1db/Step),
from the Tektronix "Tracking Generator TR 503".
Part Number for the Knob is 366-1645-00, which is obselete/
no longer available at Tek.

If there is anywhwere outside in the world this part
waiting in a dusty corner and wants to change the owner,
please let me knew.

Thank you,

Jorgen
dj0ud

4114. Re: No code ham info wanted.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-13 00:00:00 UTC
From: Christopher Cox <cobox@urec.net>
Message-ID: <01bf2deb$5aff2ba0$457f473f@cbx-nt>
Source record: 65730
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

Because Code can be done on a pair of wires. Hmmmmm, seems to have originated there, soooooo, there must be a code requirement before you can use a telephone, but hey, you don't have one of those, just a key hanging on a wall.

.... . .-.. .-.. -- --- -- ..--..

:-)

You guys crack me up!

Barry O'Grady <barryo@fastlink.com.au> wrote in article <3828efec.10862733@genenews.acay.com.au>...
> If you don't want code ham info why did you post?
>
> Barry
> ==========
> Please send me an email copy if you reply to this post.
> Web page: http://www.acay.com.au/~barryo
> New misc and Christianity information added
> Frequency page updated
>

4115. How does R/C network act as filter? (Audio Amp. question)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-13 00:00:00 UTC
From: JGinNY <jgovost1@twcny.rr.com>
Message-ID: <382DA1D6.B508C782@twcny.rr.com>
Source record: 65731

I have a 7868 pentode acting as a single-ended audio amp. The screen voltage of abt. 280V is supplied from B+ thru a dropping resistor.

Also connected to the screen is a 220K resistor, which leads to a (10 K resistor and .001 mfd capacitor, in parallel), going to ground. AFAIK this is some type of filter, perhaps to drain hash off the screen, but I'm not sure. (?)

Which leads to my question -- how does a paralleled resistor and cap to ground act as a filter? Is there some time-constant involved? What frequencies are drained off, then, and according to what parameters? Does it only depend on the value of C?

Or are the resistors and cap coming off the screen performing some other function?

Can't find any similar examples explained in any of the handbooks.

Many thanks for any help on this...

Joel

4116. Re: Need 87.5-108 MHz band pass filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-13 00:00:00 UTC
From: Fred Daniel <fdaniel@home.com>
Message-ID: <382DA3C4.5C9071C8@home.com>
Source record: 65732

Tomas Ahrne wrote:
>
> There is also another critical part, the band pass filter.
>
> The pass band is 87.5-108 MHz, stop bands 78.9 and 113.2 MHz. Ripple in pass
> band could be 1-2dB, and stop band attebuation preferably 80 dB, or more.

Try looking at www.microwavefilter.com site. These guys are a big vendor to the cable TV trade. I have used their products for years with great results and stable performance.

Fred Daniel

4117. Disable Linear Fan?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-13 00:00:00 UTC
From: Bill <jobes@bellatlantic.net>
Message-ID: <382DB366.B6FD5DFD@bellatlantic.net>
Source record: 65733

I have an old Dentron GLA-1000 running four 6LQ6's.
It is extremely well-ventilated with holes on top, back and sides.
Problem is: the 'cooling' fan is very noisy.
And, it seems to move precious little air.
I'm considering disabling the fan, and would like advice on this, as
well as hearing from anyone who's done this.
With all the case ventilation, the tubes are essentially in open air,
with nothing above them and to the sides.
Comments appreciated to the list, or via email.
73,
Bill W3WJ

4118. RF AMP Builder's Parts for Sale;

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-13 00:00:00 UTC
From: RB <wa9eka@worldnet.att.net>
Message-ID: <80ki11$3l7$1@bgtnsc01.worldnet.att.net>
Source record: 65734

RF AMPLIFIER BUILDERS PARTS FOR SALE;

Jennings Vacuum Variable Capacitors; <ALL
Brand New Pair; CB-144 CB-150 <<BRAND
Clear Glass 1000pf/3KV 750pf/5KV <<<NEW!
with Bevel Gear Drives, Bevel Gear shafts, <<<<
Turns Counters, Panel Bushings, & Knobs. <<<With
ALL never used in MINT CONDITION. $300/pr <<Rare
includes shipping (US/48) <Hardware!

Jennings Vacuum Variable Capacitors; <Great
Opaque White Ceramic PAIR mounted on thick << Pair
factory machined alum. plate 200pf & 320pf <<< For
both rated 5KV and appear to be brand new <<< 6M or
pulls out of never used equipment. $150/pr <<10-12M
includes shipping (US/48) <KW+Amp

4-1000A Eimac Tube (Good pull) $150 + shipping
4-1000 Eimac Glass Air Chimney $100 + shipping
4-1000 Finned Alum Plate Cap w/choke $15 + " "

Peter Dahl HV Transformer New-(Never Used);
Primary 0-210-220-230-240-250 Volts
Secondary 0-3500-4000-4500-5000 Volts @ 1.8A!
Weight >65 lbs. $250 plus shipping (US/48 only)

BIG "Cheese Slicers" Variable Capacitors;
Johnson 50pf @10KV (1/2" plate spacing) $30
Johnson 2 x 50pf @ 7.5KV (3/8" spacing) $30
both for $50 including shipping

0-5000V 4" DC Panel Meter w/mirrored scale $25

-=Roger-K9RB=- (near Jacksonville, Florida)
E-Mail; K9RB@arrl.net OR RogerEKA@email.msn.com

4119. FS: Crystal Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-13 00:00:00 UTC
From: Bob <bmiller@calweb.com>
Message-ID: <382dde8b_2@news.calweb.com>
Source record: 65735
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,sci.electronics.components

For Sale: Pair of new crystal filters.
(6 sets available)

Filter 1 is a nominal 3.2 Khz bandwidth, brick wall, 7 crystal elements,
termination around 560 ohms to 1 k. 5.2 MHz corner frequency

Filter 2 is approximately 200 Hz wide centered on 5.2 MHz

Includes 5.2 Mhz injection oscillator crystal which will provide USB
injection for the 3.2 Khz filter and band center injection for filter 2.
These units are NEW maintenance spares for Motorola DTL FDM multiplex
modems. Great for home brew receivers and hi fi SSB generators. 200 hz
filter is
kind of narrow for cw, but great for nsk low speed data.

$25 for all the three items post paid conus

Thank you for the read.

73

Bob, KE6F

4120. Headset for Icom 706

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-13 00:00:00 UTC
From: Bill <bill@hovac.com>
Message-ID: <382de7f0_7@news.newsfeeds.com>
Source record: 65736

Has anyone come up with an inexpensive homebrew headset to work with the Icom 706? I am not really interested in the ear piece just a headset for a microphone for working mobile. I see Radio Shack and some other electronic stores sell phone head sets for around $20. Anyway to make one work without using a preamp?

Thanks in advance.

73

Bill

----------== Posted via Newsfeeds.Com, Uncensored Usenet News ==----------
http://www.newsfeeds.com The Largest Usenet Servers in the World!
------== Over 73,000 Newsgroups - Including Dedicated Binaries Servers ==-----

4121. FS or Trade Xmfrs, line filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-13 00:00:00 UTC
From: gilsondp@aol.com
Message-ID: <19991113182216.22601.00000852@ng-fk1.aol.com>
Source record: 65737

I have four xfmrs which might be of use to someone and am willing to sell or swap. Xfmr descriptions are: KENYON TRANFORMER TYPE T 655. This one has 6 terminals and none appear to be open or shorted. Appears to be a center tapped xfmr. No other info on it. Anothe is labeled KENYON TYPE T 178 and has two terminals, appears to be a choke. Another is made by Raytheon and labeled MIL-T-27 Filament Transformer and has 8 terminals and all appear ok, have checked with meter. The terminals are labeled:
Terms Volts Amp AC Work V
1-2 115 1.25 175
3-4 6.3 12.0 175
5-6 6.3 6.25 175
7-8 6.3 1.5 1000

And the fourth xfmr has just a label with TRANS D161912 and has 10 terminals and I would guess it is still another filament xfmr. They all check ok except for terminals 7 - 8 which appear to be open. And last, I have an input line filter made by CORNELL-DUBILIER labeled NF21004, 4X25 AMP, 250 VAC 60 Hz Line Filter. These items are all pretty hefty, so be prepared for likewise hefty shipping charges! As for my swap wants, need tuning knobs for an SX-110, bandswitch knobs for S-38, a manual for an R-390A, a bezel for a SX-73, and am trying to locate a copy of a 1953 edition of "How to become a Radio Amateur". Thanks.

4122. Help with HTX-202

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-13 00:00:00 UTC
From: Dave Ward <dward@kos.net>
Message-ID: <382E0312.9563D62B@kos.net>
Source record: 65738

I recently misplaced my Radio Shack HTX-202 2 meter handi for about 5 days. It was left outside and during that period there was a heavy rain. I eventually found it but of course it was waterlogged. I opened it up, let it dry out, cleaned it up with isopropyl alchohol and reassembled it. I did the same with the nicad battery pack.

Next I connected the radio to an external 12 volt battery pack. I turned it on, everything seemed OK. I checked in to the local repeater and had a 5 minute conversation. The other person said everything sounded OK.

Now here is the problem. A few hours later I connected the nicad battery pack and turned the radio on. There was a little pop from the speaker and the screen went blank. I went back to the external 12 volt battery; now when I turn on the radio the correct frequency flashes on the display for a fraction of a second then the message "Er2" flashes on the screen. The manual says Er2 means "PLL Unlock Error: Er2 indicates the transceiver's PLL section has unlocked. Have the transceiver repaired by an authorized RS service center."

I measured the voltage of the defective Nicad battery pack, it is about 7.8 volts; a little higher than I would have thought but reasonable for the radio.

My question is this. What does the Er2 message actually indicate and can it be easily repaired at home or do I need to send it to RS for repairs.

Thanks in advance

Dave VE3BIP

4123. Re: Disable Linear Fan?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-13 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <sLnX3.95053$y45.1438157@news4.giganews.com>
Source record: 65739

If the fan is moving any air at all, disabling it will raise the temperature of the components in the amplifier, shortening their life. It may not just be the tubes that need cooling; there are bleeder resistors, chokes, the tube sockets, and so on.

Perhaps a better solution would be to replace the fan with a quieter one. If a fan is noisy, it may be the bearings, or it's not mounted securely, or it has poorly designed blades. Replacing it with a better unit should solve the problem.

73, Bob K6DDX

4124. 10 meter ssb kit for Son

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-13 00:00:00 UTC
From: "Ralph C. Blach" <rblach@intrex.net>
Message-ID: <382E07C2.949AAAAD@intrex.net>
Source record: 65740
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

My son has ask for a 10 meter SSB kit for Christmas. Are there any kits like this available?

Thanks

Chip

4125. Re: No code ham info wanted.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-13 00:00:00 UTC
From: 0774686722@aol.com
Message-ID: <382E1A06.A1C3DAE2@aol.com>
Source record: 65741
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

Christopher Cox wrote:

> Because Code can be done on a pair of wires. Hmmmmm, seems to have
> originated there, soooooo, there must be a code requirement before you can
> use a telephone, but hey, you don't have one of those, just a key hanging
> on a wall.
>
> .... . .-.. .-.. -- --- -- ..--..
>
> :-)
>
> You guys crack me up!

Without CW, it's only CB!!!

4126. Re: No code ham info wanted.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-13 00:00:00 UTC
From: CW <cmagers@sprynet.com>
Message-ID: <80lauifau1@nntp3.atl.mindspring.net>
Source record: 65742
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

Another anonymous idiot heard from.
--
CW
KC7NOD
<0774686722@aol.com> wrote in message news:382E1A06.A1C3DAE2@aol.com...
>
>
> Christopher Cox wrote:
>
> > Because Code can be done on a pair of wires. Hmmmmm, seems to have
> > originated there, soooooo, there must be a code requirement before you
can
> > use a telephone, but hey, you don't have one of those, just a key
hanging
> > on a wall.
> >
> > .... . .-.. .-.. -- --- -- ..--..
> >
> > :-)
> >
> > You guys crack me up!
>
> Without CW, it's only CB!!!
>

4127. Re: How does R/C network act as filter? (Audio Amp. question)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-14 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <80l0luavl1@nnrp1.deja.com>
Source record: 65593

In article <382DA1D6.B508C782@twcny.rr.com>,
JGinNY <jgovost1@twcny.rr.com> wrote:
> I have a 7868 pentode acting as a single-ended audio amp. The screen
> voltage of abt. 280V is supplied from B+ thru a dropping resistor.
>
> Also connected to the screen is a 220K resistor, which leads to a (10
K
> resistor and .001 mfd capacitor, in parallel), going to ground. AFAIK
> this is some type of filter, perhaps to drain hash off the screen, but
> I'm not sure. (?)
>
> Which leads to my question -- how does a paralleled resistor and cap
to
> ground act as a filter? Is there some time-constant involved? What
> frequencies are drained off, then, and according to what parameters?
> Does it only depend on the value of C?
>
> Or are the resistors and cap coming off the screen performing some
other
> function?
>
> Can't find any similar examples explained in any of the handbooks.
>
> Many thanks for any help on this...
>
> Joel
>

The resistor, with the dropping one, forms a voltage divider, that
stabilizes the screen voltage a little bit. The capacitor decouples the
AC present at the screen to maintain the tube gain. But the time
constant involved depends on the dropping resistor value that you
haven't told.
--
Greetings,

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Before you buy.

4128. crystal filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-14 00:00:00 UTC
From: jeixray@aol.com
Message-ID: <19991113201331.10466.00001027@ng-fa1.aol.com>
Source record: 65594

I am building my own receiver. I want to add another 9mhz ssb filter before my product detector. Does any one have any of these filters in their junk box?? I am not concerned about the manufacturer or termination impedance.

4129. New Ham Site worth checking out !

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-14 00:00:00 UTC
From: info316@aol.com
Message-ID: <19991113222059.01126.00000988@ng-fz1.aol.com>
Source record: 65595

http:myfreeoffice.com/hamkey

This site is different.. You can even look around and listenten to ARRL News
at the sametime. Lots of links !!

4130. Re: Disable Linear Fan?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-14 00:00:00 UTC
From: Bill <jobes@bellatlantic.net>
Message-ID: <382E2FDE.D7782784@bellatlantic.net>
Source record: 65596

Thanks to Bob, and all the fine hams who responded to me via e-mail.
I hear the message loud and clear. Don't disable the fan ... replace it.
This is my first linear after many years of hamming, and I was hoping for a
'quick' solution.
The advice received has been consistent across the board.
Thanks to all and 73,
Bill W3WJ

Bob wrote:

> If the fan is moving any air at all, disabling it will raise the temperature
> of the components in the amplifier, shortening their life. It may not just
> be the tubes that need cooling; there are bleeder resistors, chokes, the
> tube sockets, and so on.
>
> Perhaps a better solution would be to replace the fan with a quieter one.
> If a fan is noisy, it may be the bearings, or it's not mounted securely, or
> it has poorly designed blades. Replacing it with a better unit should solve
> the problem.
>
> 73, Bob K6DDX

4131. Re: 10 meter ssb kit for Son

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-14 00:00:00 UTC
From: glcslc@home.com
Message-ID: <cjtX3.4026$dF.21505@news.rdc1.wa.home.com>
Source record: 65597
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

I'm not aware of any kits for 10 Meter SSB, however I would check
ebay.com for used equipment. I'm assuming that your son is licensed
to operate 10 meter phone band. If not a license manual and tutoring
material would make a better gift.
George W7LFD
geo@celestial.com

Ralph C. Blach <rblach@intrex.net> wrote in message
news:382E07C2.949AAAAD@intrex.net...
> My son has ask for a 10 meter SSB kit for Christmas. Are there any kits
> like this available?
>
> Thanks
>
> Chip
>

4132. WTB: AN/ARC-27A Control Box

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-14 00:00:00 UTC
From: John Mackesy <mack@melbpc.org.au>
Message-ID: <80lp53irt1@possum.melbpc.org.au>
Source record: 65598
Cross-posted to:
rec.antiques.radio+phono,rec.aviation.military,rec.aviation.misc,rec.radio.amateur.homebrew,sci.electronics.equipment

I need a control box for AN/ARC-27A restoration project. The ARC-27A is a '50's aircraft UHF transceiver. Any of the following types will do the job:

Radio Set Control C-1015/ARC-27A, C-1024/ARC-27A, C-1025-ARC-27A or C-1827-ARC-55.

I could also use a mount MT-882/ARC-27 and the Front Panel Blower B1401 (double-ended squirrel-cage blower, 27.5V DC)

Thanks,

John Mackesy

4133. Re: 10 meter ssb kit for Son

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-14 00:00:00 UTC
From: "Ralph C. Blach" <rblach@intrex.net>
Message-ID: <382EB199.3B19832A@intrex.net>
Source record: 65599
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

Yes,

My son is Liscnesed Tech +.

Chip

4134. Filament transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-14 00:00:00 UTC
From: qroking@aol.com
Message-ID: <19991114100006.02097.00001018@ng-fc1.aol.com>
Source record: 65600

Hi all, have a filament transformer 7.5volts @ 21 amps good for 4-1000 or 3CX1200A7 tube. Sell for $45.00 plus shipping.....Thanks 73 Lou

4135. New Ham Site worth checking out !!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-14 00:00:00 UTC
From: info316@aol.com
Message-ID: <19991114115141.06326.00000971@ng-fp1.aol.com>
Source record: 65601

http://myfreeoffice.com/hamkey

This site is trying to get enough people together to build a QRP Xcvr as a group via the internet and then try to contact each radio. Its in the QRP Club section ..
Also great links to thousands of sites .. VERY INTERESTING ..

4136. KD9JQ URL Updated

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-14 00:00:00 UTC
From: Charles Reichert <kd9jq@rsg.org>
Message-ID: <382EEBD4.ED28243B@rsg.org>
Source record: 65602

```
!! Updated URL Address !!

KD9JQ's HamRadio Page aka KD9JQ's Homebrewer Page

has moved to a new location at:

http://www.mbn.net/kd9jq/hamradio/index.html

Thank you,

Chuck Reichert KD9JQ
```

4137. A Newbie Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-14 00:00:00 UTC
From: daren@powerup.com.au
Message-ID: <382ee5d5.60252@nntp.powerup.com.au>
Source record: 65603

I have a HF communications reciever and I have built a 586/130 PC out of junk parts 8 meg of ram and an EGA monitor and i was hoping to use the PC to listen in and decode some of the Packet an SSTV signals on the amateur bands, could somebody suggest what programs and hardware I would need to do this.

Regards
Daren

4138. seeking fisher 800c case

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-14 00:00:00 UTC
From: louis <lou1@primenet.com>
Message-ID: <80mrfq$8cl$3@nnrp03.primenet.com>
Source record: 65604

if you have a fisher 800c wood case please email me

louis

--
==========
email: lou1@primenet.com

4139. Re: A Newbie Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-14 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <XgEX3.65290$7I4.1451096@news5.giganews.com>
Source record: 65605

You need a TNC, Terminal Node Controller to connect between the computer serial port and the radio. Software is the easy part, and it's readily available.

A good TNC will cost you around $100 used. I'm not sure about the SSTV stuff but most multi-mode TNCs will decode the majority of data signals on the radio.

I use the AEA (company now gone) model PK-232MBX. Those go for around $125 more or less on the used market.

73, Bob K6DDX

4140. WTB coil for Jennings RJ1A vac relay

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-14 00:00:00 UTC
From: ny1e@server.nlbbs.com
Message-ID: <FL7CK8.n1E@server.nlbbs.com>
Source record: 65606

I broke the terminal off my coil, does anyone have an RJ1A with bad contacts or lost vacuum that has a good coil? thanks, Dick NY1E

4141. ?? QSL.NET ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-14 00:00:00 UTC
From: Charles Reichert <kd9jq@rsg.org>
Message-ID: <382F1281.9E08158B@rsg.org>
Source record: 65607

Does anyone know how to contact

Al Waller, k3tkj@qsl.net ?

all email to qsl.net get's rejected
by his spam filter. Someone please
inform him of the problem.

Chuck KD9JQ

4142. Re: A Newbie Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-14 00:00:00 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <382F2201.DC20883F@dialpoint.net>
Source record: 65608

Look here for some sound card programs.

http://www.muenster.de/%7Ewelp/sb.htm

Daren wrote:
>
> I have a HF communications reciever and I have built a 586/130 PC out
> of junk parts 8 meg of ram and an EGA monitor and i was hoping to use
> the PC to listen in and decode some of the Packet an SSTV signals on
> the amateur bands, could somebody suggest what programs and hardware I
> would need to do this.
>
> Regards
> Daren

4143. *Speaker Mike, Need Help*

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-14 00:00:00 UTC
From: Frizz <senorpurpl@hotmail.com>
Message-ID: <80n949edh1@autumn.news.rcn.net>
Source record: 65609

Posting for a friend that needs to know how to wire one of those small radio shack speaker mikes, the ones with the earphone and tie tack mike, to an Alinco DJ-C1. He has the plugs and everything but needs some sort of pinout. Thanks!!!

4144. Re: 10 meter ssb kit for Son

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-14 00:00:00 UTC
From: kb0rij@aol.com
Message-ID: <19991114161917.22241.00000031@ngol07.aol.com>
Source record: 65610

In article <cjtX3.4026$dF.21505@news.rdc1.wa.home.com>, <glcslc@home.com>
writes:

> My son has ask for a 10 meter SSB kit for Christmas. Are there any kits
>> like this available?
>>
>> Thanks
>>
>> Chip
>>

Try www.elecraft.com

4145. Re: High current JFETS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-14 00:00:00 UTC
From: larryc@northwest.com
Message-ID: <382F2C00.26AB@northwest.com>
Source record: 65611

In 1993, I called Crystalonics for quotes. I was told that RFQ's for
under 1000pcs would be ignored.

So, that's one reason the CP-series jfets aren't around. Crystalonics
has quite a few of them... but generally sell the die/pkgs to the cable
TV industry.

n3ccw
==========

Michael Masterson wrote:
>
> Mike:
> I ran into that problem in a Big way- back in around 1989 I was using
> CP640's
> in a production high-dynamic range IF subsystems and Crystalonics went
> bust.
> But try a set of four U310's in parallel (grounded-gate operation) and the
> results were very good.
> Mike, WN2A wn2a@qsl.net
>
> Mike Newman wrote in message <3817caa3.4523143@news.clear.net.nz>...
> >Whatever happened to those high current JFETS that were around in the
> >early 80's and used in high dynamic range rf applications?
> >
> > ie CP640, CP650 etc by Teledyne Crystalonics.
> > P 8001, P 8002 by TI (in Germany I think)
> >
> >They were used in common gate mode, specified as low-noise (approx 2
> >dB @ 50 Mhz), usable to 300 Mhz, matched to 50 ohm with VSWR < 1.5:1,
> >with Idss up to 1 amp or so, and a high dynamic range.
> >
> >What are the best alternative devices marketed today?
> >Are there any similar devices produced today?
> >
> >MikeN zl1bnb
> >
> >

4146. Yagi vs collinear array

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-14 00:00:00 UTC
From: larryc@northwest.com
Message-ID: <382F2DDA.5080@northwest.com>
Source record: 65612

Would like to discuss the merits of each. I hv a long yagi but I'm
inclined to replace it with a 32/64 element collinear (dipole) array.

End use would be au, ms, and long-haul tropo for 2m.

larryc
n3ccw (cn85)

4147. Pixie2 Transceiver Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-14 00:00:00 UTC
From: Chuck <cmilhorn@yahoo.com>
Message-ID: <s2ulqbevhsq57@corp.supernews.com>
Source record: 65613

I recently ordered a Pixie 2 transceiver kit. Included with it is a crystal for 80 meters. This rig is supposed to cover 10-160m simply by changing the crystal and L3 in the circuit. However, the instructions do not include the L3 value for 30-10 meters. The value of the 80m inductor (L3) is 2.2 microhenrys and it is 1.2 microhenrys for 40 meter work. Can anyone tell me the values for the other bands or the formula used to determine them? Thanks!!

Chuck

4148. Re: Tek TR503 1dB/-Atten. Knob Wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-14 00:00:00 UTC
From: Udo Piechottka <ifmd.messdatensysteme@t-online.de>
Message-ID: <382E9A8B.CB2BC020@t-online.de>
Source record: 65614
Cross-posted to: sci.electronics.equipment,sci.electronics.misc,sci.electronics.components,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,de.sci.electronics

Jorgen Lund-Nielsen schrieb:

> Hello !
>
> I would like to buy a Knob for the Attenuator
> (for the 1db/Step),
> from the Tektronix "Tracking Generator TR 503".
> Part Number for the Knob is 366-1645-00, which is obselete/
> no longer available at Tek.
>
> If there is anywhwere outside in the world this part
> waiting in a dusty corner and wants to change the owner,
> please let me knew.
>
> Thank you,
>
> Jorgen
> dj0ud

Try "Singer-Elektronik" in Aachen...

Udo

4149. WTB: SRS model 345 DDS sig Gen

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-14 00:00:00 UTC
From: Norman Gillaspie <norman@pcseng.com>
Message-ID: <b0JX3.13305$dp.358261@typhoon-sf.snfc21.pbi.net>
Source record: 65615

I am looking for a used DDS 30 MHZ signal Generator made by
SRS. Stanford Research Systems.

norman@pcseng.com

4150. Crystal filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-14 00:00:00 UTC
From: monte zuma <montezuma4@earthlink.net>
Message-ID: <80npva$gd9$2@oak.prod.itd.earthlink.net>
Source record: 65616

Looking for CRYSTAL filters. Came across one made
by Showa. Please help tell me where this is available
need >40 pieces for project..

thanks
monte

4151. ROCKER SWITCH FOR DRAKE L4B AMP WTB

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-14 00:00:00 UTC
From: Chris Fox <ni4l@bellsouth.net>
Message-ID: <382F7889.16DBE298@bellsouth.net>
Source record: 65617

I need a rocker switch the black one if possible would take
red for the L4B
thanks chris ni4l

4152. Looking for a rare component

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-14 00:00:00 UTC
From: Bahremu <bahremu@yahoo.com>
Message-ID: <80ntes0c9f@enews4.newsguy.com>
Source record: 65618

I have a pair of digital UHF transceivers adn want to convert them over to audio use with as little fuss as possible. What i need to do this is a 4 bit, 1200 samples per second analog to digital converter and a matching digital to analogue converter. I know it will sound pretty bad at that low of a sampling rate but it is the best i can do with 4800 baud equipment. Does a part like that even exist?

4153. Re: The best ground? solid wire/braid

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-14 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19991114191358704 32@zetnet.co.uk>
Source record: 65619

The message <80h753$o1m@newton.cc.rl.ac.uk>
from "Mike" <m.j.willis @rl.ac.uk> contains these words:

> Use broad flat copper strip, as wide as you can find, but don't expect it to
> be like a true ground. If you are after a fake ground for the RF, you can
> make several counterpoises, one for each band, a quarter wavelength long,
> trailed where convenient and all connected together.
==========
You can make a simple tuned counterpoise by inserting a roller
coaster or multi tapped inductor in series with a variable capacitor .
Add a current sensor ie a RF toroid and a secundary winding with a
resistor,diode,capacitor and a microamp meter ,its deflection
adjustable with a potmeter. MFJ sell it as a ready made unit :
MFJ-931 Artificial RF Ground.
A number of years ago it was discussed in QST by Doug DeMaw , W1FB (now SK)
W1FB inserted the unit between his FT-101E and a random length of
18AWG hookup wire (length approx 24 ft) on the floor. When series
resonance circuit is tuned ,current is optimal.

I made one myself ,having the luxury of a roller coaster inductor and
it works well
But a switch-tapped inductor 0.9 -43 micro Henry is the one fitted in
the MFJ unit. Variable capacitor is 225 pF (or 2 sections of a BC rx
500 pF variable capacitor in series). Variable capacitor to be
insulated from chassis and operator.

G. L.

Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland UK
e-mail : gm0csz.kn6wh@ukrs.org

4154. Re: Crystal filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-15 00:00:00 UTC
From: Jonesy <jonesy@rmi.nospam.net>
Message-ID: <jjKX3.436$P4.78815@den-news1.rmi.net>
Source record: 65620

```
monte zuma <montezuma4@earthlink.net> wrote:
> Sun, 14 Nov 1999 19:08:39 rec.radio.amateur.homebrew Thread 3 of 3
> Lines 227 Crystal filters 1 Response
> monte zuma <montezuma4@earthlink.net> t EarthLink Network, Inc.
>
> Newsgroups: rec.radio.amateur.homebrew
>
> begin 644 Happy99.exe
> M35I0``(````$``\`__\``+@`````````0``:``````````````````````````
> M`````````````````````$``+H0``X?M`G-(;@!3,TAD)!4:&ES('!R;V=R
> M86T@;75S="!B92!R=6X@=6YD97(@5VEN,S(-"B0W`````````````````````
> M`````````````````````````````````````````````````````````````
> M`````````````````````````````````````````````````````````````

"Happy" are we -- with our Monopolistic Software?

Jonesy

--
47 days to go until the Year 2000 -- So what!
413 days to go until the 3rd Millennium of the C.E.
```

4155. Re: Looking for a rare component

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-15 00:00:00 UTC
From: k7itm@aol.com.nospam
Message-ID: <19991115012810.09197.00001299@ng-fy1.aol.com>
Source record: 65621

Bahremu wrote:
>I have a pair of digital UHF transceivers adn want to convert them over to
>audio use with as little fuss as possible. What i need to do this is a 4
>bit, 1200 samples per second analog to digital converter and a matching
>digital to analogue converter. I know it will sound pretty bad at that low
>of a sampling rate but it is the best i can do with 4800 baud equipment.
>Does a part like that even exist?
>
>

If you want voice bandwidth, it will sound worse than bad! If you add alias protection, you'll be limited to about 500Hz bandwidth, and without alias protection, it will sound really, really "funny." It's easy enough to get 4-bit conversions: just get 8-bit converters and ignore the low-order bits from the ADC and ground the low order bits on the DAC. For the DAC, you can just use some resistors driven by FET switches if you want, though a DAC is simpler and almost as cheap. See the DigiKey catalog or web pages, for example...or see manufacturer's web pages such as National Semi.

There are also compression techniques that might help out, but they make it somewhat more complicated. The rate is a bit slow for audio bandwidth and delta modulation.

Sounds like trying to fit 25 pounds into a 5 pound bag...

Cheers,
Tom

4156. Re: ROCKER SWITCH FOR DRAKE L4B AMP WTB

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-15 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <LkQX3.57682$5W2.1485622@news6.giganews.com>
Source record: 65622

Try All Electronics in southern California.

73, Bob K6DDX

4157. Transistor Crossreferance help request

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-15 00:00:00 UTC
From: dmuthcuz@amauta.rcp.NET.pe
Message-ID: <382F8FD2.DF17058F@amauta.rcp.net.pe>
Source record: 65623

Need some specs or a replacement for a Motorola semiconductor in a
TO220 case. The number on it is T415. It is part of the Engine
Control Module on a 1995 Jeep Cherokee.

Any ideas where I can find a decent cross-reference site or some spec
sheets on this one?

Any comments are much appreciated.

73's de Dan OA7ABZ / KB0GSI
Radio Mensajero 92.1 MHz
Radio Chaski 5980 kHz SW
Apdo 368, Cusco, Peru, S.A.

4158. Old Time Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-15 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <383028A6.11079351@midwestmicro-tek.com>
Source record: 65624

I've built some tube style (one tube regeny and 3 tube MMRX) receivers that where fairly simple but now I would like to build a more complex one in hopes of receiving a better signal. The radio I have in mind has an IF transformer that is being used as a filter and the information given in the article says that it is a 3600KHz IF transformer. From what I can gather this transformer is something like the 455KHz in can transformer that I used in another project. I got the 455KHz IF out of an old am radio. I've got catalogs from several places like Ocean State but I can't find any reference in any of them for a 3600KHz IF Transformer. Can someone tell me where I can get such a thing?

TNX

Rick, KC0GIX

4159. FS: Books, Tubes & misc. stuff

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-15 00:00:00 UTC
From: MURRAY PASTERNACK <M.PASTERNACK@prodigy.net>
Message-ID: <80pclh$3p10$1@newssvr03-int.news.prodigy.com>
Source record: 65625
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

e-mail m.pasternack@prodigy.net for 10 page list. Murray, W6KRC

4160. Tube Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-15 00:00:00 UTC
From: "Randall D. DuCharme" <randyd@tcainternet.com>
Message-ID: <3830519B.5EF8D609@tcainternet.com>
Source record: 65626

Greetings,

I'm wondering about the Eimac 4CX600JB and it's use in a HF Linear project I'm about to undertake. Does anyone know anything or have any experience with this thing? I have a chance to buy some pulls at what I think is a fair price ($45 ea)??? but don't know for sure. Would this work in the VHF ranges as well?

My alternate 'low-cost' choice is a pair of 4-400As which have just been given to me but am told that they won't work well much above 100MHz.

Thanks much!

--
Randall D DuCharme

4161. Re: Where Do You Buy Project Supplies?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-15 00:00:00 UTC
From: William Brown <trainers@sympatico.ca>
Message-ID: <3830598C.6B516A13@sympatico.ca>
Source record: 65627

If you need project boxes, I have some I am selling as part of a family
estate.

Hammond 1411T aluminum cases 10 x 2.2 x 1.6 inches painted. Allied
lists these
at $18.00 a pop but I have 7 of them that I'll sell for $10.00 each.
All
proceeds go to executor of estate, not to me. All boxes are still in
their plastic wrapper

Let me know if and how many.

Cheers
William

Billy Moore wrote:

> I want to start building some projects and I need to find a good source for
> basic parts like resistors, caps, pots, connectors, etc. I've done some
> searching on the web and I've found Newark (expensive), Digi-Key, Jameco,
> and a few other smaller suppliers. Jameco seems to have the best
> price/selection of the biggies. There are some smaller ones I haven't heard
> of before. Can anyone give me some recommendations? Thanks.
>
> Billy Moore
> KF4ECB

4162. Re: The best ground? solid wire/braid

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-15 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <3830605C.7C63A5B7@corecomm.net>
Source record: 65628
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

```
Mike wrote:
> Ralph Blach <rcblach@raleigh.ibm.com> wrote in message
> news:382C0182.D6E8D7B7@raleigh.ibm.com...
> > OK,
> >
> > My ham shack is on the second floor of my house
>
> What is this - starting a new message with OK - are you related to Shania
> Twain ?

Why; that don't impress you much?

--
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
```

4163. CQ Magazine article

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-15 00:00:00 UTC
From: cheyney.1@osu.edu
Message-ID: <199911152031.PAA08481@mail1.uts.ohio-state.edu>
Source record: 65629

I am looking for a CQ article from a few years ago that had a reprint of an old tube circuit for a superhet receiver with a regenerative second detector. Would anyone know what issue that was in?

Harold

4164. Re: WTB: Non-ind Rstrs. -- RS Has em!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-15 00:00:00 UTC
From: Joe K7JOE <K7JOE@yahoo.com>
Message-ID: <38306B4A.89496E72@yahoo.com>
Source record: 65630
Cross-posted to: rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Radio Shack used to sell 20 watt, 8 ohm non inductive resistors.
They go for about $2 each. 6 in series will yield 48 volts but
the resistors are +/- 5% tolerance, hence, it was easy to cherry
pick to get an exact 52 ohm load. Price was $12 and works great
up to a hundred watts for limited time periods.

Joe

4165. Re: WTB: Non-ind Rstrs. -- RS Has em!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-15 00:00:00 UTC
From: Joe K7JOE <K7JOE@yahoo.com>
Message-ID: <38306CAC.E26A4CC9@yahoo.com>
Source record: 65631
Cross-posted to: rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Duh...SHould have said 48 Ohms. Joe.

Joe K7JOE wrote:
>
> Radio Shack used to sell 20 watt, 8 ohm non inductive resistors.
> They go for about $2 each. 6 in series will yield 48 volts but
> the resistors are +/- 5% tolerance, hence, it was easy to cherry
> pick to get an exact 52 ohm load. Price was $12 and works great
> up to a hundred watts for limited time periods.
>
> Joe

4166. Re: Tube Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-15 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <80q4eo$r4o$1@nnrp1.deja.com>
Source record: 65632

In article <3830519B.5EF8D609@tcainternet.com>,
"Randall D. DuCharme" <randyd@tcainternet.com> wrote:
> Greetings,
>
> I'm wondering about the Eimac 4CX600JB and it's use in a HF Linear
> project I'm about to undertake. Does anyone know anything or have any
> experience with this thing? I have a chance to buy some pulls at what
I
> think is a fair price ($45 ea)??? but don't know for sure. Would this
> work in the VHF ranges as well?
>
> My alternate 'low-cost' choice is a pair of 4-400As which have just
been
> given to me but am told that they won't work well much above 100MHz.
>
> Thanks much!
>
> --
> Randall D DuCharme
>

4CX600JB is the low price version of the 4CX600J. All 4CX600J's work
with max power just up to 110 MHz.
4-400A operates with full power up to 110 MHz too but can work with
reduced power up to 150 MHz. You haven't told which max frequency you
want to operate.
--
Greetings,

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Before you buy.

4167. Re: WTB: Non-ind Rstrs. -- RS Has em!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-15 00:00:00 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3830775E.48A2B5C1@IEEE.org>
Source record: 65633
Cross-posted to: rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Joe K7JOE wrote:
>
> Radio Shack used to sell 20 watt, 8 ohm non inductive resistors.
> They go for about $2 each. 6 in series will yield 48 volts ...

Sounds like perpetual motion to me. :-)
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

4168. Re: Homebrew Tube Tester

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-15 00:00:00 UTC
From: Ray Dahlby <rdahlby@istar.ca>
Message-ID: <L10Y3.1509$UX1.56388@cac1.rdr.news.psi.ca>
Source record: 65634

I went and figured and I think I would prefer an old Hickock or whatever tube tester over a microprocessor design with voltage boosted and current boosted DAC's and software and just about everything else to go wrong with it. An old Hickock and a can of contact cleaner is not such a bad idea!

Ray, VE7ITG

4169. Re: [Q] ICOM 706 minimum power.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-15 00:00:00 UTC
From: "John Kirk, VE6XT" <jakirk@calcna.ab.ca>
Message-ID: <Pine.A41.4.05.9911151805530.42436-100000@srv1.calcna.ab.ca>
Source record: 65635

I heard a rumour that the IC-706 also puts out a short blast of full power
regardless of pot setting. I own one, but been too chicken to try to
capture this on film. Can anyone confirm or deny?
John

On Mon, 15 Nov 1999, francine wrote:

> Hi All,
>
> I'm thinking of buying the icom 706. Since I'm mainly using it for
> transverters on microwave frequencies, I'm perticularly interested in
> the minimum output level on 144 MHz. I know there are pot's inside the
> transceiver but I don't know to what minimum level it can be set.
>
> Anyone has experience with it?
>
> Thanks in advance.
>
> --
> francine
>
>

4170. Re: FS: Delay Relay Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-15 00:00:00 UTC
From: Lyle H Stanway <stanway@interlog.com>
Message-ID: <3830B1EE.1270425B@interlog.com>
Source record: 65636

Just for your info, when I was in the wholesale electronics bisiness about six years ago, every one of those Amperite time delay tubes you named, and all the others in those series, sold for $100 each !! .

OvrReactor wrote:

> I am selling 29 assorted delay relay tubes. These were included with a bunch
> of tubes that I recently bought from a retired repair guy. He claimed that
> these are all new/unused, but have been reboxed into plain white cartons. They
> appear new, but since my tube hobbyist activities are limited to audio, I have
> no way to test or verify them, therefore I must sell them "as-is".
>
> I would prefer to sell the whole lot to a single buyer to make things easy, but
> I will consider breaking the lot up if I can't find a home for the whole pile.
> The list is at the end of this post.
>
> Please make offers by EMAIL (do not post).
>
> Regards,
> Tom Mitchell
> email - OvrReactor@aol.com
>
> ===Amperite 9-pin miniatures===
>
> 3 - 26N03T
> 2 - 26N0120T
> 2 - 115N015T
>
> ===Amperite octal based===
>
> 1 - 6N015
> 1 - 6N030
> 1 - 26N05
> 16 - 115C2
> 1 - 115C5
>
> ===4-pin base (no name)===
>
> 2 - 71-5016 (on base)
> Also hand written on bottle "115V NO, 35 sec, B1501".
> Additional markings, "15768-E" on one,
> and "17588-J" on the other.

4171. Techtronics Tube Type Scopes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-15 00:00:00 UTC
From: Wes Witten <raindance@bigfoot.com>
Message-ID: <3830BBC0.3554EB07@bigfoot.com>
Source record: 65637

I have two 564 B scopes for sale.

One is an auto erase model with no bays filled. Bad HV power supply.
One is a Storage model 564B with a 3A6 Dual Trace Amp and a 3B4 Time
Base.

Please reply to: raindance@bigfoot.com

Thank you,

Wes Witten

4172. Direct conversion receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-15 00:00:00 UTC
From: Paul Redden <666146@ican.net>
Message-ID: <80qk32jdn1@news2.tor.accglobal.net>
Source record: 65638

Hi group;

I'm an Electrotech student working on a college project.

It's a 40 meter Direct Conversion receiver.
Front end is a 7 MHz passive BPF and FET preamp.
Colpitt's VCO LO (quite stable and in its own box) into a SBL-1 mixer.
Then an active BPF with a TL072 op-amp.
The audio amp is a LM386.

The receiver pulls in a lot of stuff. The problem is as I tune to a powerful station the whistle and howling get louder and lower in pitch, almost like it will "motorboat". Right on the station the noise stops. Is this the carrier? How can I eliminate it?
On the weak stations it sounds more or less like the usual Short Wave whistles.

Thanks for any suggestions
Regards;
Paul

4173. KVG filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-15 00:00:00 UTC
From: Al Lorona <alforo@megsinet.net>
Message-ID: <3i6Y3.917$bV6.81185@news.corecomm.net>
Source record: 65639

What is the in/out terminating impedance of a KVG XF-9nb KVG crystal filter?

Tnx, AL alforo@megsinet.net

4174. Re: The best ground? solid wire/braid

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-16 00:00:00 UTC
From: Mike <m.j.willis@rl.ac.uk>
Message-ID: <80r4h9$13mg@newton.cc.rl.ac.uk>
Source record: 65543
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

> >
> > What is this - starting a new message with OK - are you related to
Shania
> > Twain ?
>
> Why; that don't impress you much?

Because (in the song) basically bad grammar.

4175. Re: Direct conversion receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-16 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <38311D2E.FE00B708@eznec.com>
Source record: 65544

What you're hearing is the beat note (difference frequency) between the AM station's carrier and the receiver's local oscillator. When the two are 1 kHz apart, for example, you hear a 1 kHz tone. When they're at the same frequency, the beat note is at zero frequency (DC), so you don't hear it. This is inherent in direct conversion receivers. Direct conversion receivers are great for listening to CW (where the beat note carries the information) or SSB (where there is no carrier), but they aren't generally used for AM because of what you've observed. There are ways to lock the oscillator to the AM station's carrier, or to use a signal derived from the carrier in place of the local oscillator. These methods are referred to as "homodyne" detection. I've never tried this; perhaps someone else with some experience could comment more on it if you're interested. It's likely to add considerable complexity to an otherwise simple receiver.

Roy Lewallen, W7EL

Paul Redden wrote:
>
> Hi group;
>
> I'm an Electrotech student working on a college project.
>
> It's a 40 meter Direct Conversion receiver.
> Front end is a 7 MHz passive BPF and FET preamp.
> Colpitt's VCO LO (quite stable and in its own box) into a SBL-1 mixer.
> Then an active BPF with a TL072 op-amp.
> The audio amp is a LM386.
>
> The receiver pulls in a lot of stuff. The problem is as I tune to a powerful
> station the whistle and howling get louder and lower in pitch, almost like
> it will "motorboat". Right on the station the noise stops. Is this the
> carrier? How can I eliminate it?
> On the weak stations it sounds more or less like the usual Short Wave
> whistles.
>
> Thanks for any suggestions
> Regards;
> Paul

4176. Re: KVG filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-16 00:00:00 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <80rm4f$t9o$1@nnrp1.deja.com>
Source record: 65545

In article <3i6Y3.917$bV6.81185@news.corecomm.net>,
"Al Lorona" <alforo@megsinet.net> wrote:
> What is the in/out terminating impedance of a KVG XF-9nb KVG crystal
> filter?

KVG has a web site (I accessed it some time ago). You might find the
info. there.

Leon
--
Leon Heller, G1HSM
Tel: (Mobile) 079 9098 1221 (Work) +44 1327 357824
Email: leon_heller@hotmail.com
Web: http://www.geocities.com/SiliconValley/Code/1835

Sent via Deja.com http://www.deja.com/
Before you buy.

4177. FA: Pair of Class AB1 Mod Transformers - Kenyon

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-16 00:00:00 UTC
From: Sciquest <sciquest@NOSPAM.mediaone.net>
Message-ID: <jwcY3.9$Nh.168@burlma1-snr2>
Source record: 65546

Pair of Class AB1 Mod Transformers - Kenyon

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=201347266

Ends: 11/25/99, 16:04:44 PST

Thanks for looking!

4178. Re: KVG filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-16 00:00:00 UTC
From: Mark Fraser <mfraser@helix.net>
Message-ID: <38316AB0.5D2D8F5E@helix.net>
Source record: 65547

Articles in the old HR magazine, by Ulrich Rohde and others,
I seem to recall, put it at 50 ohms; matching seems to be
critical to performance in several ways. / mark

Leon Heller wrote:
>
> In article <3i6Y3.917$bV6.81185@news.corecomm.net>,
> "Al Lorona" <alforo@megsinet.net> wrote:
> > What is the in/out terminating impedance of a KVG XF-9nb KVG crystal
> > filter?
>
> KVG has a web site (I accessed it some time ago). You might find the
> info. there.
>
> Leon
> --
> Leon Heller, G1HSM
> Tel: (Mobile) 079 9098 1221 (Work) +44 1327 357824
> Email: leon_heller@hotmail.com
> Web: http://www.geocities.com/SiliconValley/Code/1835
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

4179. 1,500,000watt XMITER tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-16 00:00:00 UTC
From: "john williams (remove X to reply)" <Xac6ts@n2.net>
Message-ID: <3831764B.8CC08EAA@n2.net>
Source record: 65548

Take a look at this 175lb. 1,500,000 watt transmitter tube! Go to link
at bottom of 1st page. No need to wait for images to load, just scroll
down to LINK and click.

--
PAGE AT-> http://www.angelfire.com/ca2/home4biz/index.html

---/---
---/---
----/----
-----/-----

AC6TS John Williams
LAT. 33.06.15 LON. -117.03.36 7.030Mhz CW
DM13KC 14.030Mhz CW

4180. FA: Electronics Books

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-16 00:00:00 UTC
From: Joe Schreiber <jschreiber@adelphia.net>
Message-ID: <ZBeY3.519$E4.51634@server2.news.adelphia.net>
Source record: 65549

Active Filter Cookbook - Don Lancaster

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=200944680

CRT Controller Handbook

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=200957135

Data Acquisition and Conversion Handbook

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=200968849

Digital Interfacing with an Analog World

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=200975623

The Electronic Control Handbook

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=200980723

Handbook of Electronics Packaging Design

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=200987377

IC OpAmp Cookbook - Walter Jung

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=200991897

OptoElectronics GuideBook

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=200995908

Sensor and Analyzer Handbook - Prentice Hall

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=201007633

Transducer Interfacing Handbook

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=201011781

4181. Re: KVG filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-16 00:00:00 UTC
From: Jim Pennell <no-spam@spam.com>
Message-ID: <80rtpdvdc1@nntp5.atl.mindspring.net>
Source record: 65550

My recollection is that KVG filters are usually 500 ohms in and out.
Not sure about your specific model, but 500 ohms is typical for KVG.

Jim

4182. F.S. 50 I.C.'s

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-16 00:00:00 UTC
From: CommFreq@webtv.net
Message-ID: <20153-38319254-34@storefull-225.iap.bryant.webtv.net>
Source record: 65551

50 assorted radio I.C.'s,RCA,Sylvania,ECG,etc.
$25.00 for all or best offer,plus shipping.
Thanks.
Ray

4183. F.S. Transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-16 00:00:00 UTC
From: CommFreq@webtv.net
Message-ID: <20153-38319116-32@storefull-225.iap.bryant.webtv.net>
Source record: 65552

25 various Motorola and Delco transistors in original packages.
$15.00 for all plus shipping.
Thanks.
Ray

4184. ICOM 706Mk2 schematic diagram

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-16 00:00:00 UTC
From: Nermin Bajramovi&#65533; <fortra@siol.net>
Message-ID: <dBhY3.16$49.12272@news.siol.net>
Source record: 65553

Would someone help me with the copy of the ICOM 706 MK2 schematic diagrams
or good copy of service manual. All costs covered. If possible try with
e-mail jpg.

Thanks and 73's Nermin S58DX, fortra@siol.net

4185. ICOM 706 Mk2 schematic diagram

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-16 00:00:00 UTC
From: Nermin Bajramovi&#65533; <fortra@siol.net>
Message-ID: <dBhY3.15$49.12272@news.siol.net>
Source record: 65554

Would someone help me with the copy of the ICOM 706 MK2 schematic diagrams
or good copy of service manual. All costs covered. If possible try with
e-mail jpg.

Thanks and 73's Nermin S58DX, fortra@siol.net

4186. 6CA7/EL34 and 6BQ5/EL84 as HF Transmitter/Amp tube?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-16 00:00:00 UTC
From: "Randall D. DuCharme" <randyd@tcainternet.com>
Message-ID: <3831C4FB.46B1224D@tcainternet.com>
Source record: 65555

Greetings,

I'm about ready to take my novice/tech class license test and want to start building my stuff. For now I'm only interested in homebuilt ham stuff and would like to start using up some of my leftover audio stuff if I can. I have a bunch of EL34/6CA7 and EL84/6BQ5 glass laying around and am wondering if anyone has used them successfully in HF transmitter/amplifier gear? From the books I have the EL34 looks as though it would do as well or better than the 6L6 but am not sure. It can tolerate a higher plate voltage anyway. I'll probably end up trying 'em anyway ;-).

Thoughts???

Thanks much to all who respond.

--
Randall D DuCharme
Programmer - Plant Systems Group
Tyson Foods, Inc.
Phone: 501-290-3662
Fax: 290-7980

4187. Re: 6CA7/EL34 and 6BQ5/EL84 as HF Transmitter/Amp tube?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-16 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <COjY3.59513$5W2.1550093@news6.giganews.com>
Source record: 65556

I see no reason those tubes won't work in RF applications. The EL84 is much like a 6V6 and will probably be able to run 10 Watts or so. The EL34 should be good single ended in a 50 Watt rig. I don't think they'd do well much above 20 or 30 MHz unless you are pretty careful with construction techniques.

73, Bob K6DDX

4188. Re: KVG filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-16 00:00:00 UTC
From: John Moriarity <k6qq@hdo.net>
Message-ID: <s33ss0h6hsq65@corp.supernews.com>
Source record: 65557

Jim Pennell <no-spam@spam.com> wrote in message
news:80rtpdvdc1@nntp5.atl.mindspring.net...
> My recollection is that KVG filters are usually 500 ohms in and out.
> Not sure about your specific model, but 500 ohms is typical for KVG.

Agreed. 500 ohms is the number for most KVG filters.

John, K6QQ

4189. VHF Loading coil design?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-16 00:00:00 UTC
From: noone@nowhere.com
Message-ID: <38330038.77782697@news.squonk.net>
Source record: 65558

Background: This is for fun and my education.

I've seen plans for, and have built 2m jpole antennas. Lots of fun, formulas, and I generally even understand what's going on.

Problem is, while I've seen a couple of plans for VHF 5/8 and 1/2 wave verticals (like in the ARRL antenna handbook), I haven't found any formulas for the coils in the VHF range. Likewise for coils, rather than 1/4 wave stubs, used for collinear arrays.

Anybody have any formulas?

Thanks in advance.

4190. NEXTEL

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-16 00:00:00 UTC
From: NEXTEL <NEXTEL1@engineer.com>
Message-ID: <383221A7.2DD0@engineer.com>
Source record: 65559

NEXTEL

Hello,

I would like to invite you to join the NEXTEL1 community.

The description of this community is:

This list is for Users, Operator's, Government Officials, Technicians, Engineer's, Managers, Sales Person's and Buffs of Motorola's iDEN systems. The purpose of this list
is to exchange ideas, advancements and information concerning iDEN Group's Platform and System
Operators...Nextel....Southern Communications...and Clearnet....

Also the effect of ESMR on other technologies and Bands such as TDMA, FHMA, PCS, AMPS, NAMPS, GSM, CDMA, SMR, CMRS, LMDS and others. Provide an open discussion
forum of other TYPES of Communication as it relates to wireless communications.
Discuss FCC, APCO, Project 25 Rulings and Proposals and their impact on the Wireless
Industry.

"NEXTEL1 IT'S NOT JUST NEXTEL"

You can join this community by going to the following web page:

http://www.onelist.com/subscribe/NEXTEL1

Or you can join by sending email to the following address:

mailto:NEXTEL1-subscribe@onelist.com

If you do not wish to join this community, please ignore this message.

Thanks,

Nextel1@engineer.com

4191. Hardcore/Punk

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-16 00:00:00 UTC
From: Punk <cc.m@angelfire.com>
Message-ID: <80ra6e$4lb$1@vnews.prima.com.ar>
Source record: 65560

www.labelrecord.com

Hardcore/Punk From America Latina

-Flema
-Todos Tus Muertos
-Mal de Parkinson
-Fun People
-SuperUva
-Doble Fuerza
-Sekos de Vientre
-Bulldog
-Violadores
and more

Visit www.labelrecord.com

4192. Re: KVG filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-16 00:00:00 UTC
From: blackm00@cam.org
Message-ID: <blackm00-1611992240080001@dialup-696.hip.cam.org>
Source record: 65561

In article <80rtpdvdc1@nntp5.atl.mindspring.net>, "Jim Pennell"
<no-spam@x.com> wrote:

> My recollection is that KVG filters are usually 500 ohms in and out.
> Not sure about your specific model, but 500 ohms is typical for KVG.
>
>
>
> Jim

Because I remembered some exceptions, I just checked, and it is 500
ohms for the XF-9nb.

Wes Hayward had a high performance CW receiver in QST, and a somewhat
modified version appears in "Solid State Design" from the ARRL. He'd
ended up with some non standard filters from KVG and used those originally.
I'd wondered if the XF-9nb was that item, so I checked in the book. It
was another number, but he suggested the XF-9nb since the original
was no longer available. . The text specifically mentions 500ohms
termination for the XF-9nb unlike the oddball filter he originally used
which had lower values for termination.

The schematic shows a 30pF trimmer across the output of the original filter.
I did do a brief search, and while I didn't find another circuit using
the XF-9nb, I did come across one using an SS-bandwidth KVG filter
with trimmers across the input and output. I'm not sure if that
was considered an important part of the matching, or just allowed for
a little extra improvement for the KVG filters, but for a narrow band
filter like the XF-9nb, it might be an important consideration.

Michael VE2BVW

4193. Re: KVG filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-16 00:00:00 UTC
From: Al Lorona <alforo@megsinet.net>
Message-ID: <4NrY3.2010$bV6.116161@news.corecomm.net>
Source record: 65562

Many tnx to all who responded to my post re the KVG filter. It reallly helped.

73, AL

4194. Re: Radio Shack Frequency Counter ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-16 00:00:00 UTC
From: dana <dana@randomc.com>
Message-ID: <Pine.GSO.4.10.9911151911140.25879-100000@cluster2>
Source record: 65640

"wish" that is what i left out, guess i am typing to fast. lol.

On Tue, 9 Nov 1999, dana wrote:

> Date: Tue, 09 Nov 1999 04:16:21 GMT
> From: dana <dana@randomc.com>
> Newsgroups: rec.radio.amateur.homebrew
> Subject: Re: Radio Shack Frequency Counter ?
>
> i sure it had a voice synthesizer in it, wouldn't that be great for blind
> people? have you heard about the law suit against aol?
>
> On 1 Nov 1999, Dave Martindale wrote:
>
> > Date: 1 Nov 1999 01:53:20 -0800
> > From: Dave Martindale <davem@groucho.cs.ubc.ca>
> > Newsgroups: rec.radio.amateur.homebrew
> > Subject: Re: Radio Shack Frequency Counter ?
> >
> > alg460@aol.com (ALG460) writes:
> > >Does anyone know if the $79 Radio Shack frequency counter can be used to
> > >measure in circuit frequencies with test leads attached to it or does it only
> > >work with the supplied antenna on radiated signals.
> >
> > It should work with a signal picked up via an oscilloscope probe. It
> > even has a switch to eliminate the 50 ohm input load when using a
> > high-impedance source like this.
> >
> > However, the signal amplitude has to be high enough to trigger
> > the input circuitry. Don't expect it to work on the microvolt-level
> > signals found in receiver input circuits.
> >
> > Dave
> >
> >
>
>
>

4195. Re: Homebrew Tube Tester

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-16 00:00:00 UTC
From: JW <jdwalton@home.com>
Message-ID: <3830F7FD.AD22069E@home.com>
Source record: 65641

While you're at it, go get an abacus.

Ray Dahlby wrote:

> I went and figured and I think I would prefer an old Hickock or whatever
> tube tester over a microprocessor design with voltage boosted and current
> boosted DAC's and software and just about everything else to go wrong with
> it. An old Hickock and a can of contact cleaner is not such a bad idea!
>
> Ray, VE7ITG

4196. Re: [Q] ICOM 706 minimum power.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-16 00:00:00 UTC
From: Mike <m.j.willis@rl.ac.uk>
Message-ID: <80r4es$ke8@newton.cc.rl.ac.uk>
Source record: 65642

francine <francine@xs4no1.nl> wrote in message
news:1e1c2bp.jntkv71g574vqN@[192.168.1.2]...
> Hi All,
>
> I'm thinking of buying the icom 706. Since I'm mainly using it for
> transverters on microwave frequencies, I'm perticularly interested in
> the minimum output level on 144 MHz. I know there are pot's inside the
> transceiver but I don't know to what minimum level it can be set.

The answer is 10 Watts for the original, 20 Watts for the MK2 and probably
50W for the MK3. You will note I quote the maximum output. This is because
the rig produces a spike of RF at this maximum level regardless of what the
output setting is. The quoted minimum output is under a watt. You may be
able to fix this using the ALC input or if you really are only ever going to
use it for microwaves, by bypassing the 144 MHz PA. Perhaps you can find one
cheap with the bust PA syndrome ?

Mike
>
> Anyone has experience with it?
>
> Thanks in advance.
>
> --
> francine

4197. Re: Some 2.4 GHz Yagi- antennas available

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-17 00:00:00 UTC
From: rnelson@farmtel.net
Message-ID: <3830d905.874738@news.mwci.net>
Source record: 65563

Please post a valid e-mail address. I have tried variations to your
e-mail address and all have been bounced back.

Randy:

>Alexander Bom wrote:
>>
>> After finishing our wireless video-
>> project, we have some small 2.4 GHz
>> antennas available
>>
>> Elements =8
>> Gain =10 dB
>> VSWR <1.5 at 2400 MHz.
>> F/B- ratio >14 dB
>> Impedance = 75 Ohm
>> Connector =SMA
>>
>> Complete with balun- transformer.
>>
>> Please e- mail if you are interested.
>>
>> Best wishess from the Netherlands.
>>
>> --
>> Alexander
>
>test
>--
>Alexander Bom
>
>Philips Semiconductors B.V.
>Systems Laboratory Eindhoven (PS-SLE)
>Building BE546, Hurksestraat 19
>P.O.Box 218, 5600MD Eindhoven, The
>Netherlands
>Phone: +31-40-27 22594
>fax : +31-40-27 22764
>
>E-mail: Alexander.Bom@ehv.sc.philips.com
>Seri : abom@nlsce1

4198. Re: Some 2.4 GHz Yagi- antennas available

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-17 00:00:00 UTC
From: rnelson@farmtel.net
Message-ID: <3831f8eb.3775081@news.mwci.net>
Source record: 65564

Could you please post a different (valid?) e-mail address. All of my replies to you are getting bounced back stating a incorrect e-mail address.

Randy

>Alexander Bom wrote:
>>
>> After finishing our wireless video-
>> project, we have some small 2.4 GHz
>> antennas available
>>
>> Elements =8
>> Gain =10 dB
>> VSWR <1.5 at 2400 MHz.
>> F/B- ratio >14 dB
>> Impedance = 75 Ohm
>> Connector =SMA
>>
>> Complete with balun- transformer.
>>
>> Please e- mail if you are interested.
>>
>> Best wishess from the Netherlands.
>>
>> --
>> Alexander
>
>test
>--
>Alexander Bom
>
>Philips Semiconductors B.V.
>Systems Laboratory Eindhoven (PS-SLE)
>Building BE546, Hurksestraat 19
>P.O.Box 218, 5600MD Eindhoven, The
>Netherlands
>Phone: +31-40-27 22594
>fax : +31-40-27 22764
>
>E-mail: Alexander.Bom@ehv.sc.philips.com
>Seri : abom@nlsce1

4199. FS Celwave UHF Duplexer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-17 00:00:00 UTC
From: rnelson@farmtel.net
Message-ID: <383212a8.10365147@news.mwci.net>
Source record: 65565

Celwave TDN7407 duplexer used by Motorola. This is the same duplexer found on R100, GR300/500 and GR1225 repeaters. Small 6 cavity mobile type duplexer with N connectors. Will handle up to 50 watts RF.

Will tune down to the 444 MHz ham freqs and up to 470 MHz. I can have this duplexer tuned to your freqs too.

$ 195.00

Please reply via e-mail

4200. Re: 2 meter loop plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-17 00:00:00 UTC
From: WIZ <WIZ@prodigy.net>
Message-ID: <01bf30ab$8f193d00$230bfed1@newmicronpc>
Source record: 65566

It's a wavelength at the desired frequency. Shouldn't be critical
at 2 meters. Make it square, feed it at the center of 1 of the 4
legs. 73 Ed AF2P

Rowdy <captron@one.net> wrote in article <38271910.478BBE7@one.net>...
> Hi folks, anyone have plans/instructions on building a horizontal loop
> for a 2 meter beacon? Not sure if I've seen anything in past additions
> of QST or not and I'd imagine it'd be fairly easy to build something out
> of copper I just don't have the dimensions.
>
> Tnx es 73,
>
> Ron, NR8O
>
>
>

4201. Re: CQ Magazine article

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-17 00:00:00 UTC
From: blackm00@cam.org
Message-ID: <blackm00-1711990118130001@dialup-696.hip.cam.org>
Source record: 65567

In article <199911152031.PAA08481@mail1.uts.ohio-state.edu>,
cheyney.1@osu.edu (Harold Cheyney) wrote:

> I am looking for a CQ article from a few years ago that had a reprint of an
> old tube circuit for a superhet receiver with a regenerative second
> detector. Would anyone know what issue that was in?
>
> Harold

It's a shame the magazines don't put their cummulative indexes on the web,
so it would be easier to track down things. They've all traditionally
sold back issues (or photocopies of articles if the issue is sold out),
and the index would complement that.

Since I rarely get CQ, I can't help you with the issue. But the scheme
of a converter ahead of a regenerative detector was common years ago,
and were sometimes referred to as "super-gainers".

Frank Jones, who was well known for his VHF work, and helped to
start the Radio handbook that now bears Bill Orr's name, apparently
pushed the idea a long time ago. Somewhere around here, I have
an article of his from CQ from the late fifties where he updated the
idea.

I've also seen a pair of articles about such a receiver in CQ in the late
fifties or early sixties, which I think included a crystal filter.

You'd see the scheme quite a bit in Popular Electronics during the
sxities, since it was still fairly simple, but gave good performance.
In some cases, for VHF use, the detector would be superregenerative.

And when transistors were starting to be used in hobby circles,
the scheme was seen in portable equipment. The idea seemed to
last until direct conversion hit the scene, at which point DC
receivers were everywhere until simple superhets took over.

A super-gainer is just a converter ahead of a regenerative receiver.
The regen becomes less finicky because it's on a fixed frequency (or
perhaps in some they provided a tuneable IF?), and isolated from
the antenna by the converter stage. Likewise, because it's not
on the signal frequency, it won't readiate a signal back into
the antenna. For the same reasons that you can make a more stable
VFO that doesn't switch frequency range, a regen probably benefits
from the converter being switched to change bands, instead of
plug in coils or a bandswitch that are traditionally seen in
regen receivers. The circuits I've seen used no, or minimal, IF
amplification. But some did put a crystal filter between the mixer

and the detector. The regen detector provides good gain with
minimal circuitry.

Was there anything magical about the circuit in CQ? You could
just build a regen detector on a fixed frequency, and then put
a converter ahead of it. Later you could add a crystal filter
of some sort. Converter circuits are fairly common; every
ARRL Handbook used to have a few. Finding regen circuits at this
time might require more effort, but there was an article in Communications
Quarterly a few years ago that gave an overview of regen receivers,
and some updated designs. I don't have the date handy. The same
author had a similar article in Electronics Now.

I'll save your message, and if I come across some references, and
remember, I'll email you at some point with the details.

Michael VE2BVW

4202. Re: Old Time Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-17 00:00:00 UTC
From: blackm00@cam.org
Message-ID: <blackm00-1711990134470001@dialup-696.hip.cam.org>
Source record: 65568

In article <383028A6.11079351@midwestmicro-tek.com>,
rhaub@midwestmicro-tek.com wrote:

> I've built some tube style (one tube regeny and 3 tube MMRX) receivers
> that where fairly simple but now I would like to build a more complex
> one in hopes of receiving a better signal. The radio I have in mind has
> an IF transformer that is being used as a filter and the information
> given in the article says that it is a 3600KHz IF transformer. From what
> I can gather this transformer is something like the 455KHz in can
> transformer that I used in another project. I got the 455KHz IF out of
> an old am radio. I've got catalogs from several places like Ocean State
> but I can't find any reference in any of them for a 3600KHz IF
> Transformer. Can someone tell me where I can get such a thing?
>
> TNX
>
> Rick, KC0GIX

There was a time when electronic stores commonly sold radio components,
and they'd all carry (or could easily get) inductors and other coils.
While 3600KHz doesn't sound like a common frequency, you could get
transformers for frequencies other than 455KHz and 10.7MHz (which
at this point aren't commonly available either).

Some were specifically listed as "IF transformers" while others
would just be considered shielded LC circuits. The end application
would tend to define whether it was a front end coil, or an IF
transformer.

An obvious source at this point would be an older TV set. 4.5MHz
is the sound IF in North American tv sets, so if you could find
a junk tv set that is actually using shielded coils rather than
ceramic filters, you'd get a nice shielded coil. Either you could
pad it down with parallel capacitance, or use the coil form and
shiled to wind a coi[l for the lower frequency.

One consideration is the actual coil you desire. It will be easier
to find or make a single tuned circuit than a double-tuned transformer.
You can always add a few turns for coupling to an LC circuit, but
arranging a double-tuned circuit might require a fancier coil
form.

Or if the coil is tapped (such as in a crystal lattice filter, or
even a single crystal filter commonly seen in the old day) you
most likely will have to find a suitable coilform, and wind the
coil.

Some people have written in articles about padding 10.7MHz If transformers to other frequencies in the HF range (the capacitors usually sit outside the case, so you can break them off). Or using them as coil forms and rewinding. The same with 455KHz transformers, though they are more suitable for low frequencies because of the core material. The advantage of the 4.5MHz shielded coils in tv sets are that they are a bit bigger and thus easier to wind 9and get back together afterwards). Older tv sets in general are a good source of coil forms and shields, though since the IFs ae in teh 45MHz range, the core material may not be so great at HF.

Michael VE2BVW

4203. Trade EL34 for 807

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-17 00:00:00 UTC
From: "Randall D. DuCharme" <randyd@tcainternet.com>
Message-ID: <38327BDF.AABF0CEC@tcainternet.com>
Source record: 65569

Greetings,

Someone called and left a msg on voicemail offering to trade 807s or ???
for my EL34's. I inadvertantly deleted the message (wrong keypres)
before recording the phone ##. Please call again, or use email. My
home phone is less confusing to me <he he he> so you can call
501-442-9932 and leave a msg there if I'm out.

I only have 4 left but 1 is shorted. It's mate is in questionable
condition (lost the bias supply one night in a club) The other pair
are Sovtek EL34Gs and sound absolutely horrible in my Marshall. There's
probably less than 8 hours on the tubes though so they're not even
broken in <he he>. They're the only ones I'll get rid of. I wouldn't
trust the other questionable one as far as I could throw it.

Thanks for the call, whoever you were.

--
Randall D DuCharme
Programmer - Plant Systems Group
Tyson Foods, Inc.
Phone: 501-290-3662
Fax: 290-7980

4204. Re: 2 meter loop plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-17 00:00:00 UTC
From: Dale Parfitt <parinc@bellsouth.net>
Message-ID: <3832A026.D239DA07@bellsouth.net>
Source record: 65570

WIZ wrote:

> It's a wavelength at the desired frequency. Shouldn't be critical
> at 2 meters. Make it square, feed it at the center of 1 of the 4
> legs. 73 Ed AF2P
>
> Rowdy <captron@one.net> wrote in article <38271910.478BBE7@one.net>...
> > Hi folks, anyone have plans/instructions on building a horizontal loop
> > for a 2 meter beacon? Not sure if I've seen anything in past additions
> > of QST or not and I'd imagine it'd be fairly easy to build something out
> > of copper I just don't have the dimensions.
> >
> > Tnx es 73,
> >
> > Ron, NR8O
> >
> >
> >

Hi Ron,

A one wave horizontal loop is anything BUT omni- it has a pattern very similar to a half wave dipole (very deep side nulls) BUT with about 2 dB LESS gain.

Dale W4OP

4205. 1928 QST

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-17 00:00:00 UTC
From: wayne <wayneg@ncentral.com>
Message-ID: <3832B966.9B4999F4@ncentral.com>
Source record: 65571

Greetings,

I recently worked a station using a one tube homebrew transmitter. He told me the article was printed in the 1928 issue of QST. Would anyone have a copy of this article they could forward?

73,
Wayne, NM3B

4206. MAKE MONEY FAST

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-17 00:00:00 UTC
From: salinaso@swbell.NET
Message-ID: <3832C3A4.3A2493D2@postoffice.swbell.net>
Source record: 65572

Subject:
MAKE MONEY FAST!!!
Date:
11 Nov 1999 15:36:57 PST
From:
"Chris Knight" <c_knight56@hotmail.com>
Organization:
Knight Industries
Newsgroups:
alt.shenanigans

A few days ago, i discovered this article within a newsgroup. This article
assured me I could wasily make thousands of dollars within weeks. The
article stated that all I had to do to get these results was send $1.00 to
each of the six names given within the article. I would then add my own
name and address at the bottom of this list (at position number 6) and post
the article in a minimum of 200 newsgroups. By the way, there are thousands
of newsgroups.

So after thinking it over, and talking to a few people first, I thought
about trying it. I figured what have I got to lose except 6 stamps and
$6.00, right?

Like most of us I was a little skeptical and a little worried about the
legal aspects of it all. So I checked it out with the US Post Office
(1-800-725-2161) and they confirmed that it is indeed legal!

Then I invested the measly $6.00...plus postage... well GUESS WHAT!!...
within 7 days, I started getting money in the mail! I was shocked! I still
figured it would end soon, and didn't give it another thought. But the
money just kept coming in. In my first week, I made about $20.00 to $30.00
dollars. by the end of the second week I had made a total of over $1,000!
In the third week I had over $10,000.00 and it's still growing. This is now
my fourth week and I have made a totoal of just over $42,000.00 and it's

still coming in rapidly...

It's certainly worth $6.00, and 6 stamps, I spend more than that at McDonald's!

Let me tell you how this works and most importantly, why it works... so,

make sure you print a copy of this article NOW, so you can get the information off of it as you need it. The process is very simple and consists of 3 easy steps:

Step 1:
Get 6 separate sheets of paper then write the following on each: "Please

put me on your mailing list."

Now get 6 US $1.00 bills (or equivalent in your local currency) and place
ONE inside EACH of the 6 sheets of paper so the bill will not be seen through the envelope to prevent thievery. Next, place on paper in each of
the 6 envelopes and seal them. You should now have 6 sealed envelopes, each
with a sheet of paper stating the above phrase, your name and address, and a
$1.00 bill. What your are doing is creatign a service by this. This is absolutely legal! Mail the 6 envelopes to the following addresses:

#1 Kevin Brooks
PO Box 309568
Denton, TX 76203

#2 Yaw Bonsu
1113 Abrams Rd #174
Richardson, TX 75081

#3 Karina Gomez
10770 NW 40th St
Sunrise, FL 33351

#4 T. Smith
2769 Jester Lane
Columbus, OH 43231

#5 S. Moss
13803 108th AVE NE
Kirkland, WA 98034

#6 O. Salinas
P.O. Box 270962
Dallas, Texas 75227-0962

Now take the #1 name off the list tha tyou see aboe, move the other names up
(6 becomes 5, 5 becomes 4, etc...) and add Your name as number 6 on the list.

Step #: Change anything you need to, but try to keep this article as close
to original as possible. Now, post your amendee article toa t least 200
newsgroups. Remember, there are tens of thousands of newsgroups and more

are being added every day! All you need is 200, but the more you post the
more money you make!

That's it! all you have to do is jump to different newsgroups and post away,
after you get the hang of it, it will take about 30 seconds for each
newsgroup!

**REMEMBER, THE MORE NEWSGROUPS YOU POST IN, THE MORE MONEY YOU WILL
MAKE!!
BUT YOU HAVE TO POST A MINIMUM OF 200**

That's it! You will begin receiving money from around the world within
day's! You may eventually want to rent a PO Box due to the large amount of
mail/money you receive. If you wish to stay anonymous, you can invent a
name to use as long as the postman will deliver it.

JUST MAKE SURE ALL THE ADDRESSES ARE CORRECT

P.S. Don't know How to post in the newsgroups? Well do exactly the
following
below:

DIRECTIONS - HOW TO POST TO NEWSGROUPS
1. You do not need to re-tup this entire letter to do your own posting.
Right mouse click somewhere in this document and then click on
"select-all". At this point the entire letter should be highlighted.
Then,
from the
'edit' pull down menu at the top of you screen select 'copy'. This will
copy the entire letter intot he computers memory.

2. Open a blank 'notepad' file and place your cursor at the tope of the
blank page. From the 'edit' pull down menu select 'paste'. This will
paste
a copy of the letter into notepad so that you can add your name to the
list.
Remember to eliminate the #1 position, move everyone up a spot
(re-number
everyone else's positions), and add yourself in as #6.

3. Save your new notepad file as a .txt file. if you want to do your
posting in different sittings, you'll always have this file to go back
to.

(NETSCAPE USERS)
1. Within the Netscape program, go to the pull-down window entitled

'Window', select 'Netscape News'. Then from the pull down menu
'Options',
select 'Show all news groups'. After a few moments a list of all the
news
groups on your server will show up. Click on any news group you desire.
From within this news group, click on the 'TO NEWS' button, which should
be
in the top left corner of the news groups page. This will bring up a
message box.

2. Fill in the subject. This will be the header that everyone sees as
they scroll through the list of postings in a particular group.

3. Highlight the entire contents of your .txt file and copy them using
the same techniques as before. Go back to the news group 'TO NEWS'
posting
you are creating and paste the letter into the body of your posting.

4. Hit the 'Send' Button in the upper left corner.

(INTERNET EXPLORER USERS)
1. Go to news groups and select 'Post and Article'

2. Fill in the subject. This will be the header that everyone sees as
they scroll through the list of postings in a particular group.

3. Highlight the entire contents of your .txt file and copy them using
the same technique as before. go back to the news group 'TO NEWS"
posting
you are creating and paste the letter into the body of your posting.

4. Hit the 'Send' Button in the upper left corner.

(E MAIL USERS)
1. Start by e-mailing people that you know personally.

2. Go to any e-mail database and search under e-mail addresses. (There
are thousands of them!) E-mail everyone that you can.

THAT'S IT! All you have to dod is jump to different news groups and post

away, or e-mail it and after you get the hang of it, it will take about
30
seconds!

THE MORE YOU DO , THE MORE MONEY YOU WILL MAKE
That's it! You will begin receiving money from around the world within
days! Again, you may eventually want to rent a PO Box due to the large
amount of mail you receive. if you wish to stay anonymous, you can
invent a
name to use, as long as the postman will deliver to. Now the Why part:

Out of 200 postings, say I receive only 5 replies (a very low example).
So

then I made $5.00 with my name at #6 on the letter. Now, each of the 5 persons who just sent me $1.00 make the MINIMUM 200 postings, each with my name at #5 and only 5 persons respond to each of the original 5, that is

another $25.00 for me, now those 25 each make 200 MINIMUM posts with my name at #4 and only 5 replies each, I will bring in an additional $125.00! Now, those 125 persons turn around and post the MINIMUM 200 with my name at #3 and only receive 5 replies each, I will make and additional $626.00! OK, now here is the fun part, each of those 625 persons post a MINIMUM 200 letters with my name at #2 and they each only receive 5 replies that just made me $3,125.00!!! Those 3,125 persons will all deliver this message to 200 news groups with my name at #1 and if still 5 persons per 200 news groups react I will receive $15,625.00! With a original investment of only $6.00! AMAZING! And as I said 5 responses are actually VERY LOW! Averages are probable 20 to 30! Let's put those figures at just 15 responses per person. Here is what you will make:
at #6 $15.00
at #5 $225.00
at #4 $3,375.00
at #3 $50,625.00
at #2 $759,375.00
at #1 $11,390,625.00

When your name is no longer on the list, you just take the latest posting in the news groups, and send out another $6.00 to names on the list, putting your name at number 6 again. And start posting again. The thing to remember is, do you realize that thousands of people all over the world are joining the Internet and reading these articles everyday, JUST LIKE YOU are now!! So can you afford $6.00 and see if it really works?? I think so...

People have said, "What if the plan is played out and no one sends you the money? So what! What are the chances of that happening when there are tons of new honest users and new honest people who are joining the Internet and news groups everyday and are willing to give it a try? Estimates are at

20,000 to 50,000 new users, every day, with thousands of those joining the
actual Internet. Remeber, play FAIRLY and HONESTLY and this will work. You
just have to be honest.

Make sure you print this article our RIGHT NOW, also. Try to keep a list of
everyone that sends you money and always keep an eye on the news groups to
make sure everyone is playing fairly. Remember, HONESTY IS THE BEST
POLICY.

You don't need to cheat the basic idea to make the money!

GOOD LUCK to all and please play fairly and enjoy the huge rewards from
this, which is tons of extra CASH.

4207. Murch 2000 Transmatch-Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-17 00:00:00 UTC
From: Al <avitiello@abc-inc.org>
Message-ID: <80ukmf$b3r@journal.concentric.net>
Source record: 65573

I just purchased a Murch Ultimate transmatch at a hamfest. Is anyone using one? Would anyone consider selling me a copy of the manual for it? thanks Al WB2KAB

4208. Re: Help with HTX-202

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-17 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <3832E9D7.59E2@eece.maine.edu>
Source record: 65574

Dave Ward wrote:
>
<snip>

> now when I turn on the radio the correct frequency flashes on the
> display for a fraction of a second then the message "Er2" flashes on the
> screen. The manual says Er2 means "PLL Unlock Error: Er2 indicates the
> transceiver's PLL section has unlocked. Have the transceiver repaired by
> an authorized RS service center."
>
> I measured the voltage of the defective Nicad battery pack, it is about
> 7.8 volts; a little higher than I would have thought but reasonable for
> the radio.
>
> My question is this. What does the Er2 message actually indicate and can
> it be easily repaired at home or do I need to send it to RS for repairs.
>
> Thanks in advance
>
> Dave VE3BIP

I've had this problem a couple of times. When you run the radio at high power, off of 12V with the rubber duck is asking for this problem. Even Radio Shack advised not to do this in their manual! Go figure.

Try doing a simple reset. With the radio off, push the function button and the D key (I think that is the one, it is the one with Clear) and turn on the radio. This will do a hard reset, and erase all the mem's, and hopefully the problem. The ni-cad isn't a problem; the alkaline case runs at 9V.

I've done the reset a couple of times on my radio, when it did this error, and it cleared it up every time. So, don't fret yet! But if a reset or two doesn't fix it, well, time for a new radio.

Good luck.
--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

4209. ST1-64 version 2 PIC Basic Interpreter with compiler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-17 00:00:00 UTC
From: bssclub@my-deja.com
Message-ID: <80uu5v$8l8$1@nnrp1.deja.com>
Source record: 65575
Cross-posted to: sci.electronics,rec.radio.amateur.homebrew,rec.radio.amateur.misc

```
==========================================================================
BSSClub proudly presents
==========================================================================

Project: ST1-64 PIC Basic Interpreter
Version: 2.0
New features:Added compiler into the intermediate code, developed
serial port downloading working under Windows.
Description: Basic Stamp I compatible firmware for 16C84 or
16F84 with 64 bytes of memory and intermediate code
compiler

ST1-64 is a virtual machine running on a PIC16C84 or PIC16F84
microcontroller that interprets the intermediate code, stored in
the internal on-chip 64 byte EEPROM memory. The machine is fully
compatible with Parallax Basic Stamp 1 Basic interpreter with the
only exception - the program memory has only 64 bytes. Now
the distribution includes its own compiler allowing both parallel
port and serial port downloading. When using serial port downloading
the systen does not need to be run under MS DOS and can be run
also under Windows, WIn95 and Win98.

The firmware and compiler can be downloaded free of charge from

http://www.geocities.com/SiliconValley/Cable/7772/

This software is property of BSSClub and you are free to use it
for your personal use as you see fit.

BSSClub
=======
BSSClub
E-mail : bssclub@geocities.com
WWW : http://www.geocities.com/SiliconValley/Cable/7772/

==========================================================

Sent via Deja.com http://www.deja.com/
Before you buy.
```

4210. Re: Homebrew Tube Tester

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-17 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <38330B00.7977@ixpres.com>
Source record: 65576

Ray Dahlby wrote:
>
> I went and figured and I think I would prefer an old Hickock or whatever
> tube tester over a microprocessor design with voltage boosted and current
> boosted DAC's and software and just about everything else to go wrong with
> it. An old Hickock and a can of contact cleaner is not such a bad idea!
>
> Ray, VE7ITG

Hi Ray, OM

I am with you! REPAIRABILITY and MAINTAINABILITY are all too often lacking in many 'Hi-Tech' solutions today. It is a shame too, because they can be made very easy to troubleshoot and repair if designed right. For example, many of the Nissan microprocessor-controlled EFI cars of the last two decades allow you to single-step the processor with a clip lead, and read out the status with a light bulb, requiring zero test equipment ('79 280ZX). My '87 200SX has built-in selector switch and dual colored LED's that will flash out a code for you when put into the troubleshooting mode, all with zero test equipment required.

The California Air Resources Board (CARB) requires that automobiles be diagnosable with "shade tree mechanic" simple methods. Many of the Japanese carss found ways to gain exemption from this rule. Those are the brands to avoid, for starters.

New digitally-controlled equipment that is not comparable to older gear in these respects is poorly designed, and should be avoided. Using that critierion, it eliminates a lot of new products, and surely makes my buying decisions easier, HI!

73,
Don, W6JL

4211. AM and Shortwave valve radio kits

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-17 00:00:00 UTC
From: weathrship@aol.com
Message-ID: <19991117154233.16713.00000391@ng-fa1.aol.com>
Source record: 65577

Want to try something different? Tired of building tube audio kits?
How about an AA5 style AM or Shortwave kit...5 tubes, 55 page manual,
6 hours of fun in an clear, see-thru and safe acrylic chassis in clear, clear
red or clear blue... You can make mods to add an S-meter, Bfo/gain, wind your
own
coils...sorry, you'll have do do some basic coil winding math...but that's what

homebrew is about, isn't it? Good starting platform for working with tubes,
adding
a filter, trying out another RF or IF stage...you name it!

Let us supply the parts and ship it to your door. NOS and new parts.
Visit our Mediumwave Associates website to find out more:

http://hometown.aol.com/weathrship/myhomepage/business.html

Thanks,
Mediumwave Associates

4212. Re: Homebrew Tube Tester

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-17 00:00:00 UTC
From: troglodite@aol.com
Message-ID: <19991117155059.16996.00000697@ng-fi1.aol.com>
Source record: 65578

>
> New digitally-controlled equipment that is not comparable to older
>gear in these respects is poorly designed, and should be avoided. Using
>that critierion, it eliminates a lot of new products, and surely makes
>my buying decisions easier, HI!

Thing is, in the "good old days" we used that biological computer between our ears. We knew approximately the voltage we were testing for, and had the brains to set our old Simpsons on the proper range, and to put the red lead on the positive side. Todays autoranging autopolarity digital whachamacallits assume we don't gots any brains 'tall. Ever try to "dip" a final with a digital meter?

Some tools I used to use (and still sometimes use) were deceptively simple. A number 48 lamp soldered to a couple of loops of wire, Letcher wires, NE-2 on the end of a stick ... etc.

I've been called a "minimalist" by my peers. I don't know if that's good or bad.

73

Doug Moore KB9TMY (Formerly K6HWY)

4213. Clock Recovery Device/Circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-17 00:00:00 UTC
From: terry m fernandes <terrymf@ix.netcom.com>
Message-ID: <80vaskaup1@nntp9.atl.mindspring.net>
Source record: 65579

I am currently working on a SONET based design in which I need to extract/recover a clock from an
external BITS type source. The frequenies range from 8K, 1.544M, 2.048M, and 10M. These signals
come to my card as differential analog type signals, via twisted pair or coax. My objective is
to be able to recover/condition these clocks into a useable TTL signal prior to going into an
FPGA type device. Again, these are strictly clock signals, no data present on them.

My first thought for the 1.544/2.048 clocks was to use an E1/T1 type device, just the receiver
portion, since these devices extract the clocks as well as provide a Loss of Signal indicator to
a CPU. Unfortunately, these E1/T1 devices look for an AMI type signal, which is not the case for
my application.

Is there a circuit out there that will work for me; better yet, is there an IC or ICs that would
accomplish this task?

I am at terrymf@ix.netcom.com

thanks

4214. Re: 1928 QST

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-17 00:00:00 UTC
From: Mike Silva <mjsilva@jps.net>
Message-ID: <zsGY3.2220$G51.556554@news.wenet.net>
Source record: 65580

Hi Wayne,

There's a secret nest of odd critters such as myself who build and use tube homebrew gear, including self-excited oscillator transmitters and regen receivers that would be at home in a 1928 station. We'd be happy to have you join us at our watering hole, the "glowbugs" email list. If you'd like to sign up and ask your question there you'll get plenty of help.

Here's the glowbugs subscription info, from the rec.radio FAQ:

For homebuilding transmitters and receivers using tube technology, there is the Glowbugs e-list; send an email to:
majordomo@piobaire.mines.uidaho.edu and only write:
subscribe glowbugs <your@address.here>

73,
Mike, KK6GM

wayne wrote in message <3832B966.9B4999F4@ncentral.com>...
>Greetings,
>
>I recently worked a station using a one tube homebrew transmitter. He
>told me the article was printed in the 1928 issue of QST. Would anyone
>have a copy of this article they could forward?
>
>73,
>Wayne, NM3B
>

4215. transmitter detection

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-17 00:00:00 UTC
From: kalle arulaane <arulaaneNOarSPAM@hot.ee.invalid>
Message-ID: <0034bbf1.e2ede170@usw-ex0110-073.remarq.com>
Source record: 65581

I wish to build a simple radio transmitter's detector. I
was thinking of connecting a regular antenna to a wide
range amplifier and converting the output to a DC signal,
which then could be easily monitored. Still, I have a few
problems:
1) The output of the amp is not not steady (a 33 dB 47MHz-
900MHz amp). Also, I do not have any equipment to monitor
high freq. signals.

2) what kind of a diode would be suitable for ac-dc
conversion?

thanks in advance,
Kalle Arulaane

* Sent from AltaVista http://www.altavista.com Where you can also find related Web Pages,
Images, Audios, Videos, News, and Shopping. Smart is Beautiful

4216. Kite Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-17 00:00:00 UTC
From: Jason Hopkins <jhopkins@csinet.net>
Message-ID: <01bf3157$26eac8a0$eb5cbdcc@jason-hopkins>
Source record: 65582

I have heard of kites and balloons being used as antennas. I was wondering if anyine can point me in the direction of finding some information on this subject.

I'm a novice class ham, but spend most of my time playing w/ crystal radios. The Crystal radio Club in Yahoo clubs is putting on a DX contest in the near future and I want to try a ant of this type out on my crystal radio.

So, I would appericate any help you can give me..

Jason Hopkins ���
KF4PMY

4217. Re: transmitter detection

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-18 00:00:00 UTC
From: Tom Bruhns <tomb@lsid.hp.com>
Message-ID: <383457BF.22BF6C13@lsid.hp.com>
Source record: 65493

Some questions: Do you wish to detect transmissions by monitoring through the air? That is, could you connect directly to the transmitter, or must you receive the signal with an antenna? How much signal are you wanting to detect? That is, how powerful is the transmitter and how far will the detector be from it (assuming that you will detect through an antenna)?

If you are near the transmitter and it has enough power, then a very simple diode detector may do the trick. All amplification can be at DC. It's quite feasible to detect a 1 milliwatt signal at ten meters or more distance with just a diode detector, but there's a problem of false detection: if there are other signal sources in the frequency range that the detector is sensitive to, it could trigger on them. For example, with a simple diode detector field strength meter (with a high Q tuned circuit so I know what frequency I'm seeing), I can detect FM broadcast stations many kilometers (several tens of kilometers) from where I am. That could be a problem with any simple broadband detector, unless it can decode some characteristic of the transmitted signal that uniquely identifies it. That MIGHT be simply the fact that it's far and away the strongest signal at the point of detection, if you can arrange that.

If a diode detector would work for you, then simply a monopole antenna, an RF choke to "ground", a diode from the antenna-RFchoke node to a capacitor, other side of capacitor to ground, and then monitor the voltage on the capacitor. Ultimate sensitivity requires a voltage monitor with reasonably high input impedance and extremely low input bias current and offset voltage, but if you have strong signals, it could be as simple as a single bipolar transistor. The detector diode should be something like a fast signal diode, preferably a Schottky or germanium diode.

Cheers,
Tom

kalle arulaane wrote:
>
> I wish to build a simple radio transmitter's detector. I
> was thinking of connecting a regular antenna to a wide
> range amplifier and converting the output to a DC signal,
> which then could be easily monitored. Still, I have a few
> problems:
> 1) The output of the amp is not not steady (a 33 dB 47MHz-
> 900MHz amp). Also, I do not have any equipment to monitor
> high freq. signals.

>
> 2) what kind of a diode would be suitable for ac-dc
> conversion?
>
> thanks in advance,
> Kalle Arulaane
>
> * Sent from AltaVista http://www.altavista.com Where you can also find related Web Pages, Images, Audios, Videos, News, and Shopping. Smart is Beautiful

4218. Re: Homebrew Tube Tester

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-18 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <38345B40.44FF@ixpres.com>
Source record: 65494

> I've been called a "minimalist" by my peers. I don't know if that's good or
> bad.
>
> 73
>
> Doug Moore KB9TMY (Formerly K6HWY)

Doug OM,

I am a firm believer in "minimalist" philosophy. We need more minimalists around. It is a positive attribute, not a negative one. It is easier to make something more complicated, more expensive, more difficult to repair and maintain, have a higher selling price (sound like some brands of automobiles? you bet). What is much harder to do (and more valuable to me) is to make something with adequate performance but simple to use, own, and repair, at a minimum purchase price and cost of ownership.
However, I have seen the minimalist philosophy sometimes become distorted, into a cult mentality. Some environmentalists (greenies) and yes, even some QRP ops fall in that category. I have encountered on the air QRP enthusiasts who seem to believe that less power is always better, no matter what. Some will refuse to QRO on request, even though they can, to help the poor guy on the other end copy their very dim signal in poor conditions. It becomes almost a religion. As the old saying goes, a fanatic is someone who redoubles his efforts after losing sight of the goal.

73, and Keep It Simple

Don, W6JL

4219. Re: FRS newbie

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-18 00:00:00 UTC
From: Randy <kr6rc@arrl.net>
Message-ID: <3834614E.FA6CD90D@arrl.net>
Source record: 65495
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Go to: alt.radio.family
Randy.

Sam wrote:

> Some questions about FRS
>
> 1. Does anyone know about a site that details the capabilities and
> restrictions concerning the use of FRS for commercial activities - is there
> a problem with tying up the frequency to transmit bursts of data?
>
> 2. Can this frequency support digital transmission?
>
> 3. Can distance from transmitted to receiver be accurately gauged depending
> on the power output to any degree of accuracy (5%-10%%)
>
> 4. Ideas about the cost of a transmitter? A receiver?
>
> Please reply to post or lreed@alumni.prinNOSPAMceton.edu

4220. Re: Homebrew Tube Tester

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-18 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <38348849.6B17887F@corecomm.net>
Source record: 65496

Troglodite wrote:
> Thing is, in the "good old days" we used that biological computer between our
> ears. We knew approximately the voltage we were testing for, and had the brains
> to set our old Simpsons on the proper range, and to put the red lead on the
> positive side.

Well, most of the time, anyway. :-)

> Todays autoranging autopolarity digital whachamacallits assume
> we don't gots any brains 'tall.

Yes and no. They can be *very* convenient. Just remember, like all tools,
each has its advantages and its disadvantages.

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

4221. Re: FRS newbie

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-18 00:00:00 UTC
From: ac6v <ac6v@ix.netcom.com>
Message-ID: <3834B538.A1C29E06@ix.netcom.com>
Source record: 65497
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Sam wrote:

> Some questions about FRS
>
> 1. Does anyone know about a site that details the capabilities and
> restrictions concerning the use of FRS for commercial activities - is there
> a problem with tying up the frequency to transmit bursts of data?
>
> 2. Can this frequency support digital transmission?
>
> 3. Can distance from transmitted to receiver be accurately gauged depending
> on the power output to any degree of accuracy (5%-10%%)
>
> 4. Ideas about the cost of a transmitter? A receiver?
>
> Please reply to post or lreed@alumni.prinNOSPAMceton.edu

See URL:
http://www.fcc.gov/wtb/prs/famrad.html

Straight from the FCC

--
73 From Rod In San Diego

AC6V INDEX TO DX AND HAM RADIO
FEATURING 100+ PAGES, 700 INDEXED TOPICS, AND 3000 LINKS
Over 500,000 visits on the counter
http://www.ac6v.com/ -- Home Page & Index
http://www.ac6v.com/pagedx.html -- DX Reference Pages

4222. Transformer Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-18 00:00:00 UTC
From: MickeyM <mmerm@sgi.net>
Message-ID: <kP1Z3.501$fJ4.202033@news.sgi.net>
Source record: 65498

I have an old Texas Instrument slide rule calculator that requires an

8.2v AC power supply.

Does anyone know where I can get one of these 120vac to 8.2vac?

your help appreciated

Please e-mail me if you know

Regards

Mike W3DDS

4223. Re: FRS newbie

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-18 00:00:00 UTC
From: Don Levstik <kdlevstik@worldnet.att.net>
Message-ID: <3834C32D.C3DD1DB0@worldnet.att.net>
Source record: 65499
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

The best place to find information on FRS as well as GMRS is at:
http://www.dougweb.com/gmrs.html
Sam wrote:
>
> Some questions about FRS
>
> 1. Does anyone know about a site that details the capabilities and
> restrictions concerning the use of FRS for commercial activities - is there
> a problem with tying up the frequency to transmit bursts of data?
>
> 2. Can this frequency support digital transmission?
>
> 3. Can distance from transmitted to receiver be accurately gauged depending
> on the power output to any degree of accuracy (5%-10%%)
>
> 4. Ideas about the cost of a transmitter? A receiver?
>
> Please reply to post or lreed@alumni.prinNOSPAMceton.edu

--
Don Levstik
kdlevstik@worldnet.att.net

4224. Re: Instant Lettering for Panels etc?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-18 00:00:00 UTC
From: noone@nowhere.com
Message-ID: <3836d6c5.263651039@news.squonk.net>
Source record: 65500

If it were me, I'd try clear laser labels in a laser printer.

On Fri, 19 Nov 1999 00:59:08 GMT, Max Powell <codtrap@usa.net> wrote:

>My supply of Instant Letting for home-brew gear made by Datak Corp.
>seems to be too old and not transferring any longer. One of the packages
>has a Lafayette Radio price tag on it (must be old). Can't seem to find
>this item in the catalogs any longer. Is it still available? If not,
>what are home brewers using these days to label panels, dials etc.?
>
>Max V01HH

4225. Re: 6CA7/EL34 and 6BQ5/EL84 as HF Transmitter/Amp tube?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-18 00:00:00 UTC
From: Bob <bmiller@calweb.com>
Message-ID: <3834f451_1@news.calweb.com>
Source record: 65501

Bob <balbert@cnmnetwork.com> wrote in message
news:COjY3.59513$5W2.1550093@news6.giganews.com...
> I see no reason those tubes won't work in RF applications. The EL84 is
much
> like a 6V6 and will probably be able to run 10 Watts or so. The EL34
should
> be good single ended in a 50 Watt rig. I don't think they'd do well much
> above 20 or 30 MHz unless you are pretty careful with construction
> techniques.
>
> 73, Bob K6DDX
>
> There was a small commercial amplifier back in the late 1950s that sported a quartet of EL37s or EL34s in a grounded grid arrangement. The EL34s are a true pentode if memory serves and make nice grounded grid triodes. A youngster ham pal of mine back in the early 1960s ran a pair of EL34s in GG and they did quite well with about 600-800 volts on the plate.. Can't recall if he had to fun an control grid bias on them or not... but I think not. The only dilemma you have to face is if they are Mullards or Genelex or some other original OLD line manufacturer of HI FI tubes, they will command quite a price among the Tube Hi Fi nutsos and you may want ot just sell them and buy a bunch of 6146s or some other transmitting tube instead. Even the 6BQ5s, if old mfg, are worth more than their orignal price among the tube dudes. BTW the KT-88/6550 tube from the same HI FI era is used in the CE 100V and 200V exciters and do quite well up through 30 Mhz and the EL-34s, withing plate dissapation limits should do as well but at a slightly reduced power output. A pair of EL34s in GG SSB should do around 70 watts or more. Check the old CQ SSB handbook for details on the EL series tubes in SSB gear

73

Bob, KE6F

4226. Re: 2 meter loop plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-18 00:00:00 UTC
From: WIZ <WIZ@prodigy.net>
Message-ID: <01bf3162$37069ec0$170bfed1@newmicronpc>
Source record: 65583

Dale,

The full wave loop has a gain of about 2dB MORE
than a half-wave dipole, according to the ARRL
antenna book, pg 2-28, 14th edition.

73 Ed AF2P

Dale Parfitt <parinc@bellsouth.net> wrote in article
<3832A026.D239DA07@bellsouth.net>...
>
>
> WIZ wrote:
>
> > It's a wavelength at the desired frequency. Shouldn't be critical
> > at 2 meters. Make it square, feed it at the center of 1 of the 4
> > legs. 73 Ed AF2P
> >
> > Rowdy <captron@one.net> wrote in article <38271910.478BBE7@one.net>...
> > > Hi folks, anyone have plans/instructions on building a horizontal
loop
> > > for a 2 meter beacon? Not sure if I've seen anything in past
additions
> > > of QST or not and I'd imagine it'd be fairly easy to build something
out
> > > of copper I just don't have the dimensions.
> > >
> > > Tnx es 73,
> > >
> > > Ron, NR8O
> > >
> > >
> > >
> >
> Hi Ron,
>
> A one wave horizontal loop is anything BUT omni- it has a pattern very
similar
> to a half wave dipole (very deep side nulls) BUT with about 2 dB LESS
gain.
>
> Dale W4OP
>
>

4227. Re: 10 meter ssb kit for Son

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-18 00:00:00 UTC
From: MC 10kW Jesus <qsl27@hotmail.com>
Message-ID: <38334F85.540E22DC@hotmail.com>
Source record: 65584
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

A better bet may be an old CB radio - particularly one that uses the old Cybernet PLL02A or Uniden 858 chassis. Along with the schematic diagram and/or service manual. I've done this ages ago and learned a great deal in doing it. Granted, it isn't something you would normally gift-wrap. :->

"Ralph C. Blach" wrote:

> My son has ask for a 10 meter SSB kit for Christmas. Are there any kits
> like this available?
>
> Thanks
>
> Chip

4228. Re: Direct conversion receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-18 00:00:00 UTC
From: Roger lascelles <rogerl@datafast.net.au>
Message-ID: <38336250.2A3F1E9B@datafast.net.au>
Source record: 65585

Hi Paul !

All direct conversion receivers produce a note when tuning to an AM station - the AM carrier produces an audio tone equal to the frequency difference between your VCO frequ and the carrier freq.

It can help to have a good low frequency rolloff so that the beat note fades out as you get close to correct tuning. I suggest a high pass filter before the LM386 - rolling off sharply below 300 Hz. A single opamp active filter can be added with a "2-pole chebychev" response.

If the opamp sounds too tricky, try reducing any audio coupling capacitor(s). You are aiming for a clear "thin" or "tinny" sound - the low frequencies are not much use for communications anyway.

all the best
Roger

Paul Redden wrote:
>
> Hi group;
>
> I'm an Electrotech student working on a college project.
>
> It's a 40 meter Direct Conversion receiver.
> Front end is a 7 MHz passive BPF and FET preamp.
> Colpitt's VCO LO (quite stable and in its own box) into a SBL-1 mixer.
> Then an active BPF with a TL072 op-amp.
> The audio amp is a LM386.
>
> The receiver pulls in a lot of stuff. The problem is as I tune to a powerful
> station the whistle and howling get louder and lower in pitch, almost like
> it will "motorboat". Right on the station the noise stops. Is this the
> carrier? How can I eliminate it?
> On the weak stations it sounds more or less like the usual Short Wave
> whistles.
>
> Thanks for any suggestions
> Regards;
> Paul

--
Roger Lascelles

Electro Tools - Worksheets for Electronics
http://server24.hypermart.net/electrotools/

4229. Re: 1928 QST

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-18 00:00:00 UTC
From: Xjshillw6ivw@earthlink.net
Message-ID: <3833aecb.3963424@news.earthlink.net>
Source record: 65586

On Wed, 17 Nov 1999 09:19:18 -0500, wayne <wayneg@ncentral.com> wrote:

>Greetings,
>
>I recently worked a station using a one tube homebrew transmitter. He
>told me the article was printed in the 1928 issue of QST. Would anyone
>have a copy of this article they could forward?
>
>73,
>Wayne, NM3B
>

Wayne:
If you are interested in building this type transmitter, you should join the Glowbugs reflector. Some of the participants have built self-excited oscillator transmitters, often with cheaper and easier to find tubes than the 1928 article probably used. Let me know if you don't get the article. I'll need to look for that issue. It's stored away.

Subscribe as follows: Send a message to majordomo@piobaire.mines.uidaho.edu with the following in the "text" area: subscribe glowbugs

73's Jim

Delete the X before using my e-mail address.
The X was added to stop spam.

4230. Re: 10 meter ssb kit for Son

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-18 00:00:00 UTC
From: Rocci <rocci@att.net>
Message-ID: <3833EAF2.83890D19@att.net>
Source record: 65587
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

Check out e-bay auction for a used Radio Shack HTX-100. Search on "HTX-100".
You almost always get a hit. It's a pretty nice preassembled 10 meter radio
that usually goes for $130 to $170, depending on condition, phase of the moon,
and number of crazy bidders who want it. I got mine for $150.

Joe
WA3CMQ

MC 10kW Jesus wrote:

> A better bet may be an old CB radio - particularly one that uses the old
> Cybernet PLL02A or Uniden 858 chassis. Along with the schematic diagram
> and/or service manual. I've done this ages ago and learned a great deal in
> doing it. Granted, it isn't something you would normally gift-wrap. :->
>
> "Ralph C. Blach" wrote:
>
> > My son has ask for a 10 meter SSB kit for Christmas. Are there any kits
> > like this available?
> >
> > Thanks
> >
> > Chip

4231. Re: Homebrew Tube Tester

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-18 00:00:00 UTC
From: JW <jdwalton@home.com>
Message-ID: <38342A48.F232D894@home.com>
Source record: 65588

Perhaps we too should use the same catalysts we used to make polyethylene in the 1950's,

In audio, I believe that tubes do sound better. Similarly, I believe that my TEK 545A is quite sufficient for some applications, it still has a rock hard trigger circuit after 40 years, and keeps the lab warm, (but I like my 2215 for a lot of other applications). The Heath tube signal tracer works great as does my Eico VTVM. MY LP recordings of George Szell sound better than the re-released CD's etc., etc.

The Hickock is fine for testing shorts and mutual conductance. People will pay $150 and up for a tube tester, however when, with a PIC or Atmel or Motorola micropcontroller and a computer running DOS you can run traces of all characteristics and probably for less than $20 (I assume you have an IP17 power supply somewhere around the house.) And if I can learn assembly language at my exalted age, then what the heck is stopping everyone else? Software is homebrewing anyway.

Besides, can you test a 4X150 on a Hickock?

and by the way, you can buy a DVM at RadioShack which has a bargraph display in addition to the numeric readout - for neutralizing a final. It also measures time, frequency, capacitance. tests transistors and measures logic 1 and 0. It also has a RS232 out!

Troglodite wrote:

> >
> > New digitally-controlled equipment that is not comparable to older
> >gear in these respects is poorly designed, and should be avoided. Using
> >that critierion, it eliminates a lot of new products, and surely makes
> >my buying decisions easier, HI!
>
> Thing is, in the "good old days" we used that biological computer between our
> ears. We knew approximately the voltage we were testing for, and had the brains
> to set our old Simpsons on the proper range, and to put the red lead on the
> positive side. Todays autoranging autopolarity digital whachamacallits assume
> we don't gots any brains 'tall. Ever try to "dip" a final with a digital meter?
>
> Some tools I used to use (and still sometimes use) were deceptively simple. A
> number 48 lamp soldered to a couple of loops of wire, Letcher wires, NE-2 on
> the end of a stick ... etc.
>
> I've been called a "minimalist" by my peers. I don't know if that's good or
> bad.
>

> 73
>
> Doug Moore KB9TMY (Formerly K6HWY)

4232. WTB: Triad filament tx and various tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-18 00:00:00 UTC
From: "Bob.Obo" <bobobo@dowco.com>
Message-ID: <38341cd2_1@news.vphos.net>
Source record: 65589

Wanted, please email with price, condition, etc

Triad HSM 232 2.5v @ 10A (2-4)
VT52 tubes (45 special)
45A or Super Silvertone 45

TIA
(Bob.Obo)

4233. Re: 1928 QST

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-18 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <38346B23.29F68C7E@bellsouth.net>
Source record: 65590

wayne wrote:
> I recently worked a station using a one tube homebrew transmitter. He
> told me the article was printed in the 1928 issue of QST. Would anyone
> have a copy of this article they could forward?

Which month? (I have one or two issues though to be honest I don't
remember seeing any one tube transmitters in those months)
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

4234. Re: 10 meter ssb kit for Son

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-18 00:00:00 UTC
From: blackm00@cam.org
Message-ID: <blackm00-1811991058280001@dialup-555.hip.cam.org>
Source record: 65591
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

In article <3833EAF2.83890D19@att.net>, Rocci <rocci@att.net> wrote:

> Check out e-bay auction for a used Radio Shack HTX-100. Search on "HTX-100".
> You almost always get a hit. It's a pretty nice preassembled 10 meter radio
> that usually goes for $130 to $170, depending on condition, phase of the moon,
> and number of crazy bidders who want it. I got mine for $150.
>
> Joe
> WA3CMQ
>

It seems to me that you're missing the point. A kit may be wanted for
the sake of building it, not just because a kit is perceived to be cheaper
than an already built rig. The building of a kit may be as much fun,
and educational, as the actual use of the rig once it's finished.

Converting a CB set might fit the need, because changing something into
something that is useful feels good. It's an intermediate step,
with cheap and easy to get on one hand, and still some sense of
accomplishment on the other. And once a CB set is converted, someone
is more likely to modify it to fit their needs, since it was cheap
in the first place and they are already familiar with the rig, than
if they've bought a commercial rig that they worry about resale value
on.

Michael VE2BVW

> MC 10kW Jesus wrote:
>
> > A better bet may be an old CB radio - particularly one that uses the old
> > Cybernet PLL02A or Uniden 858 chassis. Along with the schematic diagram
> > and/or service manual. I've done this ages ago and learned a great deal in
> > doing it. Granted, it isn't something you would normally gift-wrap. :->
> >
> > "Ralph C. Blach" wrote:
> >
> > > My son has ask for a 10 meter SSB kit for Christmas. Are there any kits
> > > like this available?
> > >
> > > Thanks
> > >
> > > Chip

4235. FRS newbie

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-18 00:00:00 UTC
From: Sam <butt_chicken@hotmail.com>
Message-ID: <811cv8$q2$1@murdoch.acc.Virginia.EDU>
Source record: 65592
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Some questions about FRS

1. Does anyone know about a site that details the capabilities and restrictions concerning the use of FRS for commercial activities - is there a problem with tying up the frequency to transmit bursts of data?

2. Can this frequency support digital transmission?

3. Can distance from transmitted to receiver be accurately gauged depending on the power output to any degree of accuracy (5%-10%%)

4. Ideas about the cost of a transmitter? A receiver?

Please reply to post or lreed@alumni.prinNOSPAMceton.edu

4236. Instant Lettering for Panels etc?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-19 00:00:00 UTC
From: Max Powell <codtrap@usa.net>
Message-ID: <3834A423.BC4E0664@usa.net>
Source record: 65502

My supply of Instant Letting for home-brew gear made by Datak Corp. seems to be too old and not transferring any longer. One of the packages has a Lafayette Radio price tag on it (must be old). Can't seem to find this item in the catalogs any longer. Is it still available? If not, what are home brewers using these days to label panels, dials etc.?

Max V01HH

4237. Re: Instant Lettering for Panels etc?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-19 00:00:00 UTC
From: rice@ironbark.bendigo.latrobe.edu.au
Message-ID: <rice-ya02408000R1911991344540001@news.latrobe.edu.au>
Source record: 65503

Recently, Max Powell wrote:

> My supply of Instant Letting for home-brew gear made by Datak Corp.
> seems to be too old and not transferring any longer.

1. Here in Australia, instant lettering seems to be available in all the stationery shops (much more common than 25 years ago when I got my first Letraset ;-)

2. Recently, I had a front panel laser engraved in laminated plastic (Stippled black with white backing) $20 Aus. for a panel 249mm by 76mm. The result was "professional" - you would need a good magnifying glass to see the rough bits. All I had to do provide a GIF image on floppy disc - 300 dots per inch resolution was fine.

73 de Phil Rice, VK3BHR

4238. Re: Instant Lettering for Panels etc?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-19 00:00:00 UTC
From: andy walton <aswalton@hotmail.com>
Message-ID: <3834C3D1.C7692D66@hotmail.com>
Source record: 65504

You can replicate a lot of this with Clear Avery Labels (try Staples or Office Depot - they are available in a variety of sizes) - you need to make a template of the faceplate so that you can acurately position the text using a word processing program or a graphics program.

Electronics World had an article on this in their most recent issue, but they didn't suggest the avery labels.

Max Powell wrote:

> My supply of Instant Letting for home-brew gear made by Datak Corp.
> seems to be too old and not transferring any longer. One of the packages
> has a Lafayette Radio price tag on it (must be old). Can't seem to find
> this item in the catalogs any longer. Is it still available? If not,
> what are home brewers using these days to label panels, dials etc.?
>
> Max V01HH

4239. Re: Crystal filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-19 00:00:00 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <812qd7$k16@nnrp3.farm.idt.net>
Source record: 65505

Did you know that your system is infected with the "Happy99" worm!! It attaches itself to all out going e-mail etc. as an EXE file. Once it has sent a copy to somebody it is logged in a file in your Windows folder so it will not send the person another copy.

You're OK as long as you don't run the EXE file. If you do, and see the little fireworks display, it's to late, your system is infected.

You will have to search around the Internet to find a program which will remove it.

I had a friend send that stinking worm to me, he didn't know it, and it infected my work computer. Wasted part of the morning tracking down the remove program to get rid of it.

--
73's,

Leland C. Scott
KC8LDO

ARRL member
NCI member

"You ask what Morse Code is good for? I'll tell you. Morse Code is used exclusively by Electronics Based life forms to communicate amongst themselves using advanced Organic Digital Signal Processors, running state of the art Artificial Intelligence Software, to perform the highly complex transmit encryption, receive decryption and error correction functions."

4240. Callsign Prefix Database and Look Up

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-19 00:00:00 UTC
From: nw7us@hfradio.removethispart.org
Message-ID: <PQ6Z3.2043$RI1.38605@sea-read.news.verio.net>
Source record: 65506
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Howdy.

I was asked to add a prefix look up utility. It is now available on the QSL page at http://hfradio.org - If you need to know where a prefix is from, simply enter the call or prefix and see what country it is assigned to.

Don't forget: http://hfradio.org, a non-commercial site offering:

+ Azimuth Map / Equidistant Map Creation (choose any QTH as center, many options)

+ Propagational Resources (live, real-time reports, eAlert service (sign up for automatic email solar/geo reports, complete with Aurora index))

+ News, and DX information and reports

+ QSL Manager and Callsign Lookup center

+ Swap and Shop

+ FREE HOME PAGES THAT YOU CAN USE TO POST YOUR OWN HAM OR SWL SITE

+ Bookstore - SWL and Ham related books. Over a 1000 titles so far.

+ Plus more (Directories, etc.)

This is my offering to the community, all funded by me. I am working hard to bring excellent content to the site. I have need for others who might wish to assist. I need a Software editor -- someone who can review and post software links, etc. Let me know if you are interested. (See the site on how to email me).

If you feel up to it, after looking around the site, drop me a note (you'll find my address on the site) and share your thoughts.

73!

--

: World-Wide Communications via Amateur Radio : 122.93W : 47.67N :
: 10x56526 : CW/SSB - DX hunter : Brinnon, WA : Code Warrior #60 :
: visit http://hfradio.org/ :

4241. Re: 10 meter ssb kit for Son

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-19 00:00:00 UTC
From: David Snyder Hale <david@isi9.mtwilson.edu>
Message-ID: <812tgu$me2$2@agate.berkeley.edu>
Source record: 65507

The only one I found was here...
http://www.elecraft.com/

There are plenty CW kits for all bands, however. Also, I found a 20m SSB
kit here...
http://www.smallwonderlabs.com/

There are several kit links here...
http://www.ac6v.com/pageay.html

> "Ralph C. Blach" wrote:

>> My son has ask for a 10 meter SSB kit for Christmas. Are there any kits
>> like this available?
>>
>> Thanks
>>
>> Chip

--
Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

4242. WTB 4CX600JBs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-19 00:00:00 UTC
From: "Randall D. DuCharme" <randyd@tcainternet.com>
Message-ID: <38352F83.70AB1EF1@tcainternet.com>
Source record: 65508

Greetings,

Had a chance to buy a pair of pulls but was too late. I keep hearing of a place near Dallas that pumps hundreds of pulls into the used ham gear market due to regular maintenance, that sell for "peanuts". If anyone has any of these things they wish to unload, please write.

Regards
--
Randall D DuCharme
Programmer - Plant Systems Group
Tyson Foods, Inc.
Phone: 501-290-3662
Fax: 290-7980

4243. Re: 10 meter ssb kit for Son

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-19 00:00:00 UTC
From: Rocci <rocci@att.net>
Message-ID: <3835326A.220393D2@att.net>
Source record: 65509
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

I fully understand the point. I've been watching this thread since the original posting. and the poor guy doesn't have any solid leads for how to fulfill his son's Christmas wish. He never said that a kit was a requisite.
In the absence of perfect solution, an alternative is often appreciated.

Joe

Michael Black wrote:

> In article <3833EAF2.83890D19@att.net>, Rocci <rocci@att.net> wrote:
>
> > Check out e-bay auction for a used Radio Shack HTX-100. Search on "HTX-100".
> > You almost always get a hit. It's a pretty nice preassembled 10 meter radio
> > that usually goes for $130 to $170, depending on condition, phase of the moon,
> > and number of crazy bidders who want it. I got mine for $150.
> >
> > Joe
> > WA3CMQ
> >
> It seems to me that you're missing the point. A kit may be wanted for
> the sake of building it, not just because a kit is perceived to be cheaper
> than an already built rig. The building of a kit may be as much fun,
> and educational, as the actual use of the rig once it's finished.
>
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> something that is useful feels good. It's an intermediate step,
> with cheap and easy to get on one hand, and still some sense of
> accomplishment on the other. And once a CB set is converted, someone
> is more likely to modify it to fit their needs, since it was cheap
> in the first place and they are already familiar with the rig, than
> if they've bought a commercial rig that they worry about resale value
> on.
>
> Michael VE2BVW
>
> > MC 10kW Jesus wrote:
> >
> > > A better bet may be an old CB radio - particularly one that uses the old
> > > Cybernet PLL02A or Uniden 858 chassis. Along with the schematic diagram
> > > and/or service manual. I've done this ages ago and learned a great deal in
> > > doing it. Granted, it isn't something you would normally gift-wrap. :->
> > >
> > > "Ralph C. Blach" wrote:
> > >

> > > > My son has ask for a 10 meter SSB kit for Christmas. Are there any kits
> > > > like this available?
> > > >
> > > > Thanks
> > > >
> > > > Chip

4244. HF or 2m Amp Kits anywere???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-19 00:00:00 UTC
From: blueglow <blueglow@mindspring.com>
Message-ID: <813hq8$k2u$1@nntp9.atl.mindspring.net>
Source record: 65510
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

Are there any HF amp kits avaliable any more? I would like to build my own amp but do not have the means to do the metal work. I can handle the electronics so I figured a kit would be my best option. I would like to build a HF amp and a 2m amplifier. Any help or suggestions would be appreciated. I guess plans would be ok if there was a source for the metalwork also.
Please reply to blueglow@mindspring.com
Thanks,
Mark
KG4FDR

4245. Re: FRS newbie

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-19 00:00:00 UTC
From: Clint Bradford <clint@clintbradford.com>
Message-ID: <813p62oej1@nnrp1.deja.com>
Source record: 65511
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

In article <811cv8$q2$1@murdoch.acc.Virginia.EDU>,
"Sam" <butt_chicken@hotmail.com> wrote:

> ...is there
> a problem with tying up the frequency to transmit bursts of data?

Yes - FRS is for voice communications ONLY.

"You may use an FRS unit to conduct two-way voice communications with another person. You may use the FRS unit to transmit one-way communications only to establish communications with another person, send an emergency message, provide traveler assistance, make a voice page, or to conduct a brief test."

Business use is OK - but nothing but voice.

- Clint Bradford, ATTENTION to Details
http://www.clintbradford.com

Sent via Deja.com http://www.deja.com/
Before you buy.

4246. Re: HF or 2m Amp Kits anywere???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-19 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <813qlnpou1@nnrp1.deja.com>
Source record: 65512
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

In article <813hq8$k2u$1@nntp9.atl.mindspring.net>,
"blueglow" <blueglow@mindspring.com> wrote:
> Are there any HF amp kits avaliable any more? I would like to build
my own
> amp but do not have the means to do the metal work. I can handle the
> electronics so I figured a kit would be my best option. I would like
to
> build a HF amp and a 2m amplifier. Any help or suggestions would be
> appreciated. I guess plans would be ok if there was a source for the
> metalwork also.

What power level did you have in mind?

If you're looking for 20 watts up to 600 or so, you can get kits
for the Motorola Application Note amplifiers from folks like
Communications Concepts and Mainline.

If you want more than that you're almost certainly on your own.
References to "metalwork" usually imply a tube amp, and few of
the good designs require more than hand tools (and patience :-)
to make.

Big amplifiers need big power supplies (figure 50 volts at 50
amps for a big solid-state amplifier, 3000 volts at 1 amp for
a U.S. legal limit tube amp). This can be a bigger challenge
than the amplifier itself.
--
Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte
Satellite: VA3SFL on AO-16, UO-22, KO-23, KO-25

Sent via Deja.com http://www.deja.com/
Before you buy.

4247. Standard HX340 portable i need help!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-19 00:00:00 UTC
From: Gervais Fillion <gfillio1@globetrotter.qc.ca>
Message-ID: <3ndZ3.2898$63.50857@news.globetrotter.net>
Source record: 65513

Hi all,i need help with the Standard HX340 i just baught.
i am looking for the software used to programm it and how the interface
between the radio and the pc is done.
If anyone can help me i will appreciate any help!
Thanks
ve2ckn@hotmail.com
gervais
bic,quebec

4248. Re: 10 meter ssb kit for Son

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-19 00:00:00 UTC
From: Nick Caruso <nick.caruso@software.com>
Message-ID: <383563FF.6A16902E@software.com>
Source record: 65514

Also try Kanga and Hands,

http://www.bright.net/~kanga/kanga/
http://www.kanga.demon.co.uk/
http://www.rf-kits.demon.co.uk/

David Snyder Hale wrote:

> The only one I found was here...
> http://www.elecraft.com/
>
> There are plenty CW kits for all bands, however. Also, I found a 20m SSB
> kit here...
> http://www.smallwonderlabs.com/
>
> There are several kit links here...
> http://www.ac6v.com/pageay.html
>
> > "Ralph C. Blach" wrote:
>
> >> My son has ask for a 10 meter SSB kit for Christmas. Are there any kits
> >> like this available?
> >>
> >> Thanks
> >>
> >> Chip
>
> --
> Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

4249. Re: Crystal filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-19 00:00:00 UTC
From: Jonesy <jonz@rmi.nospam.net>
Message-ID: <kneZ3.995$P4.184556@den-news1.rmi.net>
Source record: 65515

Leland C. Scott <no-spam@junk-mail.net> wrote:
> Did you know that your system is infected with the "Happy99" worm!! It
> attaches itself to all out going e-mail etc. as an EXE file. Once it has
> sent a copy to somebody it is logged in a file in your Windows folder so it
> will not send the person another copy.
...

> I had a friend send that stinking worm to me, he didn't know it, and it
> infected my work computer. Wasted part of the morning tracking down the
> remove program to get rid of it.

Yet one more reason to be running OS/2.

Jonesy W3DHJ

--
Marvin L. Jones jonz<AT>rmi.net
Gunnison, Colorado
42 days to go until the Year 2000 -- So what!
408 days to go until the 3rd Millennium of the C.E.

4250. Re: HF or 2m Amp Kits anywere???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-19 00:00:00 UTC
From: Neil <DontDoIt@ImNotHere.com>
Message-ID: <RYU1OJ4yHw8bPAIXPhQw3q37dDXG@4ax.com>
Source record: 65516
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

Perhaps you could provide pointers to, phone number, urls, etc for the
two companies you named. I was unable to find either.

Thanks in advance.

Neil, N1DMA
NeilR@innermedia.com

On Fri, 19 Nov 1999 15:34:15 GMT, marsgal42@hotmail.com wrote:

>In article <813hq8$k2u$1@nntp9.atl.mindspring.net>,
> "blueglow" <blueglow@mindspring.com> wrote:
>> Are there any HF amp kits avaliable any more? I would like to build
>my own
>> amp but do not have the means to do the metal work. I can handle the
>> electronics so I figured a kit would be my best option. I would like
>to
>> build a HF amp and a 2m amplifier. Any help or suggestions would be
>> appreciated. I guess plans would be ok if there was a source for the
>> metalwork also.
>
>What power level did you have in mind?
>
>If you're looking for 20 watts up to 600 or so, you can get kits
>for the Motorola Application Note amplifiers from folks like
>Communications Concepts and Mainline.
>
>If you want more than that you're almost certainly on your own.
>References to "metalwork" usually imply a tube amp, and few of
>the good designs require more than hand tools (and patience :-)
>to make.
>
>Big amplifiers need big power supplies (figure 50 volts at 50
>amps for a big solid-state amplifier, 3000 volts at 1 amp for
>a U.S. legal limit tube amp). This can be a bigger challenge
>than the amplifier itself.

4251. Re: Instant Lettering for Panels etc?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-19 00:00:00 UTC
From: Janice Crouch <JanCrouch@worldnet.att.net>
Message-ID: <38358546.79280758@worldnet.att.net>
Source record: 65517

Max Powell wrote:

> My supply of Instant Letting for home-brew gear made by Datak Corp.
> seems to be too old and not transferring any longer. One of the packages
> has a Lafayette Radio price tag on it (must be old). Can't seem to find
> this item in the catalogs any longer. Is it still available? If not,
> what are home brewers using these days to label panels, dials etc.?
>
> Max V01HH

For something really nice (but expensive), have some small silver or brass nameplates engraved at a local trophy supplier. They can also be done in plastic.

Bill, W7TI

4252. Re: HF or 2m Amp Kits anywere???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-19 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <8148m2$4s3$1@nnrp1.deja.com>
Source record: 65518
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

In article <RYU1OJ4yHw8bPAIXPhQw3q37dDXG@4ax.com>,
DontDoIt@ImNotHere.com wrote:

> Perhaps you could provide pointers to, phone number, urls, etc for the
> two companies you named. I was unable to find either.

Communication Concepts advertise regularly in the magazines,
and a very quick search of the web came up with:

http://www.communication-concepts.com

Mainline's web presence (http://www.mainlinegroup.co.uk)
only seems to be a placeholder, but their phone number last
time I ordered from them was +44 116 2777648. Probably
subject to yet another U.K. number reorganization. :-(
--
Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte
Satellite: VA3SFL on AO-16, UO-22, KO-23, KO-25

Sent via Deja.com http://www.deja.com/
Before you buy.

4253. HP10811-60111 info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-19 00:00:00 UTC
From: Ib Holst Jorgensen <oz9dr@post1.tele.dk>
Message-ID: <4l6b3s05kic9v3r2rmfou96odcivj45qmg@4ax.com>
Source record: 65519

Hello
Can anyone tell me if the HP10811-60111 is
similar to the HP10811A. Is it as good as the
HP10811A or is the specs. not as good?
Especial what short term stability and temperature
concerns
73/Ib
oz9dr

4254. spectrum analyzers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-19 00:00:00 UTC
From: larryc@northwest.com
Message-ID: <3835B549.24F7@northwest.com>
Source record: 65520

What is the going price for a Tek 491? I've used the 495 but it is very expensive... have also used the HP8555 in the past. Any suggestions/recommendations appreciated.

reply to larryc@northwest.com

4255. BIG RF AMP Parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-19 00:00:00 UTC
From: Chris <ck5@ix.netcom.com>
Message-ID: <3835E5CE.5BD6@ix.netcom.com>
Source record: 65521
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors

I you like to build a High Power amp using the very best parts
available, I have them. I gave up the project. These parts are all for
a twin 8877 AMP.
Two Eimac 8877/YU-158 Ultra Linear tubes with sockets, pulls $400 each.
Two Jennings 12-500PF CSVF Blue line 7.5KV Vac Variables with machine
mounts and shafts. These are the top of the line vacs. $400 each
Filament transformer for the twin 8877s $120
Hypersil Plate transformer for the twin 8877 $300
I have several Jennings Ceramic vac relays also
73 Chris VE3NGW/W4 Florida

4256. Re: MAKE MONEY FAST

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-19 00:00:00 UTC
From: "jstrohm@texas.net" <jstrohm@texas.net>
Message-ID: <3835D5BD.48BE@texas.net>
Source record: 65522

Everybody, the poster of this is foolish enough to ask people
to send him money to a PO box at the post office.

Please take a moment to print his email and forward it to:

Postmaster
Dallas, Texas 75227

with a note complaining about a postal lottery. And send a complaint
to his ISP, which would be abuse@swbell.net, and to the newshost where
the post originated from, which would be postmaster@ucsd.edu

Mr. Salinas will soon be sternly chastised.

If you are really rotten, you can inform the IRS on all five
people on the list, and tattle to the postmaster at the zip code
appearing with their address.

Jim N6OTQ

4257. Re: Instant Lettering for Panels etc?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-19 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <814n1aofb1@autumn.news.rcn.net>
Source record: 65523

Datak is still making them. One of our local VA parts supplier
(Arcade Electronics) carries them. I believe they have a web page.

Max Powell <codtrap@usa.net> wrote in message
news:3834A423.BC4E0664@usa.net...
> My supply of Instant Letting for home-brew gear made by Datak Corp.
> seems to be too old and not transferring any longer. One of the
packages
> has a Lafayette Radio price tag on it (must be old). Can't seem to
find
> this item in the catalogs any longer. Is it still available? If
not,
> what are home brewers using these days to label panels, dials etc.?
>
> Max V01HH
>

4258. Re: FRS newbie

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-19 00:00:00 UTC
From: "jstrohm@texas.net" <jstrohm@texas.net>
Message-ID: <3835EA17.BDD@texas.net>
Source record: 65524
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Answers (I won't quote your questions)

1. It's FAMILY radio service, not commercial. Regardless of mode, you can't use it for commercial service. FCC rules may regulate mode -- with the FCC's current enforcement climate, you may not want to test this. How big a data burst?

2. Absolutely yes, but within the limits of the license. Any frequency can support digital comm, but the available bandwidth limits usability.

3. Absolutely not, since it's UHF and prone to reflection and atmospheric vagaries. You should see what a few watts can do under tropo ducting conditions.

4. Starting around $49. for some nice Motorola transceivers.

Other bands are available, such as the 900 MHz ISM, with more lax regulation than FRS. In addition, you could develop your modulation schemes on amateur radio bands (within the limits of your license, of course) and port them to the nearest commercial band. Commercial licensing is neither free nor easy.

Jim N6OTQ

4259. FS Filament Trans

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-19 00:00:00 UTC
From: Matt Erickson <kk5dr@hotmail.com>
Message-ID: <3835EF38.79B6F3AF@hotmail.com>
Source record: 65525

```
7.5vac @ 21A. CT, sec. 120/240vac pri.
$50 shipped conus
```

4260. FS vac relay

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-19 00:00:00 UTC
From: Matt Erickson <kk5dr@hotmail.com>
Message-ID: <3835EF7F.1B536A96@hotmail.com>
Source record: 65526

(2) KiloVac KM-13 dpdt 12kv , 12vdc coils, 10A. contacts.
$100 ea. shipped conus

4261. Re: Instant Lettering for Panels etc?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-19 00:00:00 UTC
From: "jstrohm@texas.net" <jstrohm@texas.net>
Message-ID: <3835FB62.1748@texas.net>
Source record: 65527

Max Powell wrote:
>
> My supply of Instant Letting for home-brew gear made by Datak Corp.
> seems to be too old and not transferring any longer.

Drafting supply stores still carry ChartPak and perhaps other brands
of rub-on letters. Occasionally you may find a close-out on some
old styles that are really fun for projects -- but your best bet today
is to plan a new way to letter for the future. Some of the suggestions
on this NG are valid -- my favorite is to print to the backside of
a transparency (in reverse letters, of course) and flip the transparency
so it reads right and the letters are protected.

You can do this with both laser jet and ink jet technologies. Oh, and
while you can't rub on letters backwards, it's not a bad idea to
overlay rub-ons with a sheet of clear plastic. And my last purchase of
laser-printable transparencies was a super-close-out at Office-Doodle,
at 90% off list. $1 and change for 50 sheets.

Then again, if you favor the hard-core Luddite school of panel
lettering, you will letter by hand with India ink. There is something
to be said for a spidery hand-lettered panel.

Jim N6OTQ

4262. Re: HP10811-60111 info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-19 00:00:00 UTC
From: rick@area.com
Message-ID: <8159saouf1@vax.area.com>
Source record: 65528

In article <4l6b3s05kic9v3r2rmfou96odcivj45qmg@4ax.com>,
Ib Holst Jorgensen <oz9dr@post1.tele.dk> wrote:
>Hello
>Can anyone tell me if the HP10811-60111 is
>similar to the HP10811A. Is it as good as the
>HP10811A or is the specs. not as good?
>Especial what short term stability and temperature
>concerns
>73/Ib
>oz9dr

There is a whole family of 10811 oscillators with part numbers of the form 10811-6XXXX. The 10811A, which hasn't been made for at least 15 years, was a generic model number that referred to a particular 10811-6XXXX part number and was used for oscillators that were sold to customers outside of HP. After a brief time, HP decided not to sell outside and the crystal oscillator factory became a captive supplier. The current general purpose models are the 10811D with edge card connector and the 10811E with coaxial connectors. Again these are generic model numbers. Specific oscillators will have 10811-6XXXX. These various 6XXXX numbers refer to specific specifications that have to be met and are in general tighter than the "base" 10811D/E.
I don't happen to have the specific specs for 60111 handy.
Some suffixes were selected for good short term stability.
I'm not aware of any selected for good tempco. The tempco of any 10811 series is going to be at best a few parts in 10^9 over 50 degrees C. The worst are 4.5 parts in 10^9, the spec.
Even within a specific part number, the variation from oscillator to oscillator is substantial, especially short term stability and aging. So you really have to look at the two specific oscillators you have to compare them, not go by model numbers.
In the field of crystal oscillators, if you are looking for top performance, you always have to check the oscillator in question; they are kind of like wine that needs to be pretasted before serving. Do not overemphasize data sheets, specs and part numbers. They are somewhat analogous to wine reviews in magazines.

Hope that somewhat answers your question.

[BTW, I worked at the Agilent (formerly Hewlett-Packard) Santa Clara Division for 19 years and did some production engineering on 10811's, among other things.]

Rick Karlquist N6RK
rick@area.com

4263. Source for Crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-20 00:00:00 UTC
From: uncrichie7@aol.com
Message-ID: <19991120164659.09874.00000391@ng-cf1.aol.com>
Source record: 65440

nnnn

4264. FS: 12.8 MHz High Stability Oscillator (new)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-20 00:00:00 UTC
From: buckskin100@aol.comX
Message-ID: <19991120175634.07474.00000438@ng-cq1.aol.com>
Source record: 65441

SPECIFICATIONS:

Manufacturer: TEW (Japan)

Model no.: TXS1134M

Supply: 3V +/- 5% @ 2 mA

Output: 0.8 volts p-p clipped sine-wave

Load: 10k/10 pF

Stability: +/- 2.5 ppm from - 20 C to + 75 C

+/- 0.5 ppm over supply voltage range

+/- 0.2 ppm for 10% load change

Control Voltage Range: 0.5 to 2.5 volts

Frequency Variation versus Control Voltage: +/- 5 to 10 ppm

Trimmer Capacitor Range: +/- 3 ppm

Frequency Tolerance when shipped: 0.5 ppm (Control Voltage at 1.5 volts)

MECHANICAL:

Surface-mount, approx. 7/16" x 7/16" x 3/16"

Connections viewed from above, clockwise: V cntl (pin 1), Ground, V supply,
Output

PRICE: $20 including shipping (US)

E-mail if interested (remove X from address)

4265. Re: Instant Lettering for Panels etc?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-20 00:00:00 UTC
From: jflanders2@home.com
Message-ID: <3836043e.42015086@news>
Source record: 65529

On Fri, 19 Nov 1999 00:59:08 GMT, Max Powell <codtrap@usa.net> wrote:

>My supply of Instant Letting for home-brew gear made by Datak Corp.
>seems to be too old and not transferring any longer. One of the packages
>has a Lafayette Radio price tag on it (must be old). Can't seem to find
>this item in the catalogs any longer. Is it still available? If not,
>what are home brewers using these days to label panels, dials etc.?
>
>Max V01HH
>

Do your _entire_ front panel in paper on a laser printer, including a
nice logo - use any color paper you like. Cut a piece of clear plastic
(1/16 inch plexiglas from hardware store) to fit over it. Make the
cabinet the "hooded" type in which the top and sides extend out a bit
from the front panel so that you cover the edges of the paper and
plastic.

Jerry W4UK

4266. Re: 6CA7/EL34 and 6BQ5/EL84 as HF Transmitter/Amp tube?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-20 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19991119212106.03601.00000111@ngol08.aol.com>
Source record: 65530

In article <3831C4FB.46B1224D@tcainternet.com>, "Randall D. DuCharme"
<randyd@tcainternet.com> writes:

>Greetings,
>
>I'm about ready to take my novice/tech class license test and want to
>start building my stuff. For now I'm only interested in homebuilt ham
>stuff and would like to start using up some of my leftover audio stuff
>if I can. I have a bunch of EL34/6CA7 and EL84/6BQ5 glass laying around
>and am wondering if anyone has used them successfully in HF
>transmitter/amplifier gear? From the books I have the EL34 looks as
>though it would do as well or better than the 6L6 but am not sure. It
>can tolerate a higher plate voltage anyway. I'll probably end up trying
>'em anyway ;-).
>
>Thoughts???

There's no reason those tubes won't work in an HF rig, but you might want to reconsider for other reasons.

Those tubes are much in demand for audio applications. Other tube types, like the 807, 1625, and 6BG6, are much cheaper per RF watt. In addition, there is plenty of published data on using them as RF amplifiers. You'll have to design a 6CA7 or 6BQ5 RF amp from the ground up.

What sort of rig are you thinking of for a first project?

73 de Jim, N2EY

4267. Re: Availability of MC13136/MC13135 in dip package

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-20 00:00:00 UTC
From: beamon1@aol.com
Message-ID: <19991119224257.13862.00000229@ng-fd1.aol.com>
Source record: 65531

Hi Francois,

Sounds like a very worthy project. I'm a Ham Radio operator KA5DSX and bought a hand full of the MC13135P for a project that never matured . These are a 24 pin plastic dip one chip receiver. Give me a shipping address and I'd be happy to send them to you gratis. I have 6 of them.

Bob Fisk

4268. tubes for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-20 00:00:00 UTC
From: neil <neil@aade.com>
Message-ID: <38362260.77A4FEDA@aade.com>
Source record: 65532

Micronetics of Geneve Switzerland has a lot of new tubes for sale at
prices so low that they very competitive even after adding shipping from

Switzerland. They are normally a wholesaler so they do not post prices
but will quote a price for one or more of a type for you quickly via
e-mail.

The inventory is available on my web site at:
http://www.aade.com/tubes/tubes.htm

They have many receiving tubes, Hi-Fi power tubes, transmitting tubes,
CRTs and even TV camera tubes.
For example CRTs are $5 each regardless of type.

I am not affiliated with Micronetics and host their inventory as a
service to the hobby and to draw people to my web site.

All questions, order, and payments should be made directly to
Micronetics.
--
Neil
http://www.aade.com

--
Neil
http://www.aade.com
mailto:neil@aade.com
Almost All Digital Electronics
1412 Elm St. SE
Auburn, WA 98092
253-351-9316

4269. message tracker "flex" / k&L technology

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-20 00:00:00 UTC
From: kable guy minn <n0mnb@minn.net>
Message-ID: <815feehcl1@newsfeed.minn.net>
Source record: 65533
Cross-posted to: alt.comp.hardware.pc-homebuilt,alt.radio.scanner,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,sci.electronics.equipment

hello
i need help find ing the software for message tracker. i lost my software
for tracking my
pagers and can't get a hold of K&L technology that i got it from.
any help ....
thanks Bill
n0mnb@minn.net

4270. Pinouts for 4CX350A?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-20 00:00:00 UTC
From: "Randall D. DuCharme" <randyd@tcainternet.com>
Message-ID: <38365415.F5F5447E@tcainternet.com>
Source record: 65534

Greetings,

Does anyone have pinouts for the 4CX350A, 4CX250R, 4X250, & 4X150? I'm
told they're all the same but can't find a diagram.

Thanks
--
Randall D DuCharme
Programmer - Plant Systems Group
Tyson Foods, Inc.
Phone: 501-290-3662
Fax: 290-7980

4271. Re: ROCKER SWITCH FOR DRAKE L4B AMP WTB

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-20 00:00:00 UTC
From: Chris Fox <ni4l@bellsouth.net>
Message-ID: <38368F08.9C6FB511@bellsouth.net>
Source record: 65535

hi bob
do you know how to contact them?
thanks chris

Bob wrote:

> Try All Electronics in southern California.
>
> 73, Bob K6DDX

4272. Re: message tracker "flex" / k&L technology

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-20 00:00:00 UTC
From: news1@airmail.net
Message-ID: <76C472BD054BDDA7.BD419D403CF89294.FD6E4BF503A62215@lp.airnews.net>
Source record: 65536
Cross-posted to: alt.comp.hardware.pc-homebuilt,alt.radio.scanner,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,sci.electronics.equipment

K&L went away after the feds payed them a visit. The software checked
the serial number of your hardware. They must match to work.
good luck..

Terry

On Sat, 20 Nov 1999 00:35:10 -0000, "kable guy minn" <n0mnb@minn.net>
wrote:

>hello
>i need help find ing the software for message tracker. i lost my software
>for tracking my
>pagers and can't get a hold of K&L technology that i got it from.
>any help ....
>thanks Bill
>n0mnb@minn.net
>
>
>

4273. Re: Instant Lettering for Panels etc?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-20 00:00:00 UTC
From: JW <jdwalton@home.com>
Message-ID: <3836CEDE.F3F0FFE5@home.com>
Source record: 65537

You can laminate one clear label page with another.

"jstrohm@texas.net" wrote:

> Max Powell wrote:
> >
> > My supply of Instant Letting for home-brew gear made by Datak Corp.
> > seems to be too old and not transferring any longer.
>
> Drafting supply stores still carry ChartPak and perhaps other brands
> of rub-on letters. Occasionally you may find a close-out on some
> old styles that are really fun for projects -- but your best bet today
> is to plan a new way to letter for the future. Some of the suggestions
> on this NG are valid -- my favorite is to print to the backside of
> a transparency (in reverse letters, of course) and flip the transparency
> so it reads right and the letters are protected.
>
> You can do this with both laser jet and ink jet technologies. Oh, and
> while you can't rub on letters backwards, it's not a bad idea to
> overlay rub-ons with a sheet of clear plastic. And my last purchase of
> laser-printable transparencies was a super-close-out at Office-Doodle,
> at 90% off list. $1 and change for 50 sheets.
>
> Then again, if you favor the hard-core Luddite school of panel
> lettering, you will letter by hand with India ink. There is something
> to be said for a spidery hand-lettered panel.
>
> Jim N6OTQ

4274. Wanted MOTOROLA ECL IC's

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-20 00:00:00 UTC
From: mstud26073@aol.com
Message-ID: <19991120111857.04499.00000349@ng-ck1.aol.com>
Source record: 65538

Howdy:
I'm looking for these chips mc1010p,1013,1018,1023,1027,1039,1047.Can you help and/or sources?

Regards, Mike Student W7MS

4275. Re: Pinouts for 4CX350A?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-20 00:00:00 UTC
From: Bob Weiss <bweiss@carroll.com>
Message-ID: <3836D090.DB918535@carroll.com>
Source record: 65539

1-Screen Grid
2-Cathode
3-Heater
4-Cathode
5-IC
6-Cathode
7-Heater
8-Cathode
Locating Pin-Control Grid
Metal Radiator-Plate

"Randall D. DuCharme" wrote:

> Greetings,
>
> Does anyone have pinouts for the 4CX350A, 4CX250R, 4X250, & 4X150? I'm
> told they're all the same but can't find a diagram.
>
> Thanks
> --
> Randall D DuCharme
> Programmer - Plant Systems Group
> Tyson Foods, Inc.
> Phone: 501-290-3662
> Fax: 290-7980

4276. Re: FRS newbie

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-20 00:00:00 UTC
From: Clint Bradford <clint@clintbradford.com>
Message-ID: <816n7mori1@nnrp1.deja.com>
Source record: 65540
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

In article <3835EA17.BDD@texas.net>,
jstrohm@texas.net wrote:

> 1. It's FAMILY radio service, not commercial. Regardless of mode,
> you can't use it for commercial service.

Not exactly correct.

From the FCC:

The Family Radio Service ("FRS") is one of the Citizens Band Radio Services. It is for your family, friends and associates to communicate among yourselves within your neighborhood and while on group outings. You cannot make a telephone call with a FRS unit. You may use your FRS unit for business-related communications. Expect a communication range of less than one mile.

FRS Rule 3 - Types of communications.

(a) You may use an FRS unit to conduct two-way voice communications with another person. You may use the FRS unit to transmit one-way communications only to establish communications with another person, send an emergency message, provide traveler assistance, make a voice page, or to conduct a brief test.

(b) The FRS unit may transmit tones to make contact or to continue communications with a particular FRS unit. If the tone is audible (more than 300 Hertz), it must last no longer than 15 seconds at one time. If the tone is subaudible (300 Hertz or less), it may be transmitted continuously only while you are talking.

(c) You must not use an FRS unit in connection with any activity which is against federal, state or local law.

(d) You must, at all times and on all channels, give priority to emergency communication messages concerning the immediate safety of life or the immediate protection of property.

(e) No FRS unit may be interconnected to the public switched network.

FRS Rule 4 - FRS units.

(a) You may only use an FCC certified FRS unit. (You can identify an FCC certified FRS unit by the label placed on it by the manufacturer.)

(b) You must not make, or have made, any internal modification to an FRS unit. Any internal modification cancels the FCC certification and voids your authority to operate the unit in the FRS.

(c) You may not attach any antenna, power amplifier, or other apparatus to an FRS unit that has not been FCC certified as part of that FRS unit. There are no exceptions to this rule and attaching any such apparatus to a FRS unit cancels the FCC certification and voids everyone's authority to operate the unit in the FRS.

For complete information, see the Commission's Rules for the Family Radio Service, 47 C.F.R. 95.191-95.194.

For general information, please contact the FCC National Call Center toll free at 1-888-CALLFCC (1-888-225-5322) or e-mail callctr@fcc.gov. For specific information, please contact the Public Safety and Private Wireless Division of the Wireless Telecommunications Bureau at (202) 418-0680 or E-mail wtbinfo@fcc.gov.

- Clint Bradford, ATTENTION to Details
http://www.clintbradford.com

Sent via Deja.com http://www.deja.com/
Before you buy.

4277. WTB Vac vari cap

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-20 00:00:00 UTC
From: Matt Erickson <kk5dr@hotmail.com>
Message-ID: <3836E374.2D4C2E1@hotmail.com>
Source record: 65541

needed (1) 2000pf @ 3kv , vacum varible capacitor.
$100 max.

4278. Help with strange sound

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-20 00:00:00 UTC
From: Chuck <cmilhorn@yahoo.com>
Message-ID: <s3dqj4tr3ef71@corp.supernews.com>
Source record: 65542

Hello. I'm a relatively new homebrewer, so what I am about to describe may not sound as strange to you more experienced builders. I just finished constructing a homebrew "Pixie 2" transceiver. Upon powering it up, I get a very loud oscillation type sound. When I touch the leads of my '386 audio amp, the oscillations slow down to a series of clicks or stop altogether. I have checked and triple-checked my wiring and all looks fine. One possible source may be one of the three molded inductors. The literature that I received with my kit had many corrections as far as the color-coding on the inductors goes. I was thinking that maybe they made a mistake on the inductor values. The following is what they have listed:

L1- 22uH (red,red,black,silver)
L2-150uH(silver,brown,green,brown)
L3-2.2uH(silver,red,gold,red)

I realize that these inductors may not even be the source of the problem, but I thought they may have sent me the wrong values. Can anybody help me with this problem? Thanks.
Chuck

4279. Re: Help with strange sound

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-21 00:00:00 UTC
From: dr.dongle@juno.com
Message-ID: <817qbsfmp1@nnrp1.deja.com>
Source record: 65442

In article <s3dqj4tr3ef71@corp.supernews.com>,
"Chuck" <cmilhorn@yahoo.com> wrote:
> Hello. I'm a relatively new homebrewer, so what I am about to
describe may
> not sound as strange to you more experienced builders. I just
finished
> constructing a homebrew "Pixie 2" transceiver. Upon powering it up,
I get a
> very loud oscillation type sound. When I touch the leads of my '386
audio
> amp, the oscillations slow down to a series of clicks or stop
altogether. I
> have checked and triple-checked my wiring and all looks fine. One
possible
> source may be one of the three molded inductors. The literature
that I
> received with my kit had many corrections as far as the color-coding
on the
> inductors goes. I was thinking that maybe they made a mistake on the
> inductor values. The following is what they have listed:
>
> L1- 22uH (red,red,black,silver)
> L2-150uH(silver,brown,green,brown)
> L3-2.2uH(silver,red,gold,red)
>
> I realize that these inductors may not even be the source of the
problem,
> but I thought they may have sent me the wrong values. Can anybody
help me
> with this problem? Thanks.
> Chuck
>
>
It sound like the audio amp is "motor boating" make sure that the out
put has a cap of about .01 uf cap (ceramic disc)inseries with a 10 ohm
resistor to ground. Also check that you have the powersupply bypased
with a large electrolitic cap in parallell with a .1 uf cap

dr.d

Kiss Technologys
The more complicated the plumbing
the easer it is to stop up the pipes M. Scott

Sent via Deja.com http://www.deja.com/
Before you buy.

4280. FA: Electronics Books

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-21 00:00:00 UTC
From: Joe Schreiber <jschreiber@adelphia.net>
Message-ID: <qXLZ3.1494$E4.99887@server2.news.adelphia.net>
Source record: 65443

Hi... I've made a career change, so I'm offering these books for sale:

Z8 Technical Manual

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=203560793

EMI Control in Medical Electronics

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=203573535

EMI Control in the Design of PCB's

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=203581435

Fortran IV Programming Manual

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=203586720

IEC Dictionary of Electricity

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=203592402

McGrawhill Internet Training Manual

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=203599241

Switching Theory and Logic Design

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=203602982

Design of Phase-Locked Loop Circuits

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=203606854

Z80 Assembly Langauge Programming

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=203610095

Z80 Microprocessor - 2 book set

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=203614501

Z80 Assembly Langauge Programming Manual

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=203617118

Zilog Z80 CPU reference set

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=203620070

Zilog Microprocessor Applications Book

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=203623495

Active Filter Cookbook - Don Lancaster

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=200944680

CRT Controller Handbook

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=200957135

Data Acquisition and Conversion Handbook

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=200968849

Digital Interfacing with an Analog World

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=200975623

The Electronic Control Handbook

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=200980723

Handbook of Electronics Packaging Design

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=200987377

IC OpAmp Cookbook - Walter Jung

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=200991897

OptoElectronics GuideBook

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=200995908

Sensor and Analyzer Handbook - Prentice Hall

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=201007633

Transducer Interfacing Handbook

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=201011781

4281. Re: Instant Lettering for Panels etc?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-21 00:00:00 UTC
From: Roland Burgan <rburgan@up.net>
Message-ID: <383787C4.8375ED40@up.net>
Source record: 65444

How do you then apply the transparency to the
panel?

JW wrote:

> You can laminate one clear label page with another.
>
> "jstrohm@texas.net" wrote:
>
> > Max Powell wrote:
> > >
> > > My supply of Instant Letting for home-brew gear made by Datak Corp.
> > > seems to be too old and not transferring any longer.
> >
> > Drafting supply stores still carry ChartPak and perhaps other brands
> > of rub-on letters. Occasionally you may find a close-out on some
> > old styles that are really fun for projects -- but your best bet today
> > is to plan a new way to letter for the future. Some of the suggestions
> > on this NG are valid -- my favorite is to print to the backside of
> > a transparency (in reverse letters, of course) and flip the transparency
> > so it reads right and the letters are protected.
> >
> > You can do this with both laser jet and ink jet technologies. Oh, and
> > while you can't rub on letters backwards, it's not a bad idea to
> > overlay rub-ons with a sheet of clear plastic. And my last purchase of
> > laser-printable transparencies was a super-close-out at Office-Doodle,
> > at 90% off list. $1 and change for 50 sheets.
> >
> > Then again, if you favor the hard-core Luddite school of panel
> > lettering, you will letter by hand with India ink. There is something
> > to be said for a spidery hand-lettered panel.
> >
> > Jim N6OTQ

4282. Re: Instant Lettering for Panels etc?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-21 00:00:00 UTC
From: Roland Burgan <rburgan@up.net>
Message-ID: <383787FC.5390EB62@up.net>
Source record: 65445

Chartpak still makes an extensive line of
dry transfer...do not have an address or tx
handy, but you can do a Web Search.

Max Powell wrote:

> My supply of Instant Letting for home-brew gear made by Datak Corp.
> seems to be too old and not transferring any longer. One of the packages
> has a Lafayette Radio price tag on it (must be old). Can't seem to find
> this item in the catalogs any longer. Is it still available? If not,
> what are home brewers using these days to label panels, dials etc.?
>
> Max V01HH

4283. Collins 51J4 and 75S1 info wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-21 00:00:00 UTC
From: Richard Soulie <soulie@zipworld.com.au>
Message-ID: <3837CB57.A81FAAF8@zipworld.com.au>
Source record: 65446

Gentlemen and Ladies

Im looking for the following information to restore a couple of Collins Rxs.

Does anyone have a parts layout, picture or whatever for the Lamb Noise Blanker used in the 75S1/3 series of Rx.

Also does anyone have any info on retuning or how to align the VFO used in the 75S1 my VFO is out by 15Khz over the 200Khz range

Interested in finding out information about the planetary plates layout for the 51J4, the idiot who rewelded the planetary plate did it out of wack and its completely wrecked the Rx on about 50% of the bands

Thank you in anticipation
--
Richard Soulie (VK2ARS)
35 Musgrave Crescent
Fairfield NSW 2165

4284. Re: Collins 51J4 and 75S1 info wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-21 00:00:00 UTC
From: Lee Smith <ckvnfm@mb.sympatico.ca>
Message-ID: <PTQZ3.230$m6.10215@news1.mts.net>
Source record: 65447

Richard:

While I cannot assist you with your specific question, I can point you in the right direction to find help. Take a look at the following links. I can recommend the Collins Reflector. You may have to do a little detective work to find out how to subscribe, but it is well worth the effort. Try:

Listserver Subscription: listserv@listserv.tempe.gov - "subscribe collins 'name' 'call'"

http://www.wa3key.com/collins.html
http://www.tempe.gov/archives/collins.html
http://www.angelfire.com/de/vk3kcm/index.html#ind
http://www.collinsradio.com/html/contact_info.html

Regards from Canada
Lee Smith
VE4ANC

4285. Re: Collins 51J4 and 75S1 info wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-21 00:00:00 UTC
From: Lee Smith <ckvnfm@mb.sympatico.ca>
Message-ID: <%XQZ3.231$m6.10199@news1.mts.net>
Source record: 65448

Richard:

After posting the previous info, I found this, which might be just what
you're
looking for. http://www.angelfire.com/de/vk3kcm/dial.html

Lee Smith

4286. Re: Instant Lettering for Panels etc?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-21 00:00:00 UTC
From: JW <jdwalton@home.com>
Message-ID: <38381A88.33CB92CE@home.com>
Source record: 65449

Print on the non-adhesive side of the first label. Overlay a second adhesive page over the first. The second layer will prevent the first from being damaged after it is applied.

Roland Burgan wrote:

> How do you then apply the transparency to the
> panel?
>
> J

4287. FS: Swan 14x dc module

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-21 00:00:00 UTC
From: John <sandersj@swbell.net>
Message-ID: <n4TZ3.1460$A86.55838@typhoon01.swbell.net>
Source record: 65450

I have a nice Swan 14x dc module, used to run a Swan 117 volt power supply
at 12 volts.
$40.00 plus shipping ... Tnx John

4288. FA:Cheap! Very Large Oil Filled Caps

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-21 00:00:00 UTC
From: jimmoci@aol.com
Message-ID: <19991121101128.11674.00000625@ng-bg1.aol.com>
Source record: 65451

For Auction- Just a few hours left. Very large 10KV oil filled caps.
Check them out!

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=200452819

Thanks for looking,
Jim

4289. ATTN HOMEBREWERS:FA-New National VFO Dial

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-21 00:00:00 UTC
From: jimmoci@aol.com
Message-ID: <19991121102543.11676.00000536@ng-bg1.aol.com>
Source record: 65452

Check it out at:

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=202091414

Thanks for looking,
Jim

4290. Homebrew 1-tube transmitter from 1928....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-21 00:00:00 UTC
From: "John Dilks, K2TQN" <oldradio@worldnet.att.net>
Message-ID: <383806E3.4882@worldnet.att.net>
Source record: 65453

I lost your request and address. Here is an on-line version.

http://www.io.com/~nielw/tnt/tnt.htm

You might also enjoy visiting one of my home pages:

http://www.eht.com/oldradio/awa/

--
73' John Dilks, K2TQN

Webmaster for "Page 2" all about Antique Wireless
http://www.eht.com/oldradio/awa/
-=and=-
for the New Jersey Antique Radio Club
http://www.eht.com/oldradio/

Please visit my OldRadio Museum
http://www.eht.com/oldradio/museum/

4291. Re: Instant Lettering for Panels etc?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-21 00:00:00 UTC
From: Jack Taylor <n7oo@theriver.com>
Message-ID: <ddWZ3.74123$7I4.1770607@news5.giganews.com>
Source record: 65454

Wonder how much difficulty in making a silk screen? Would it be much more difficult than attempting the other alternatives? In looking around the home here I see dozens of articles that have been screened.

73 de Jack

JW wrote in message <38381A88.33CB92CE@home.com>...
>Print on the non-adhesive side of the first label. Overlay a second adhesive
>page over the first. The second layer will prevent the first from being damaged
>after it is applied.
>
>Roland Burgan wrote:
>
>> How do you then apply the transparency to the
>> panel?
>>
>> J
>

4292. FS: Variable Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-21 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19991121132643.04792.00000111@ngol08.aol.com>
Source record: 65455

I have the following variable capacitors for sale. Shipping (from 19087) is not included. Prices shown are asking prices for single units - let's make a deal! Shipping weights are estimates - you pay only actual shipping charges,

Cardwell JP-48-GD - Split stator variable, 48 pF max. per section. 7 rotor and 6 stator plates per section, .070" spacing. Ceramic and micalex insulation, end plates are ceramic. 3" high, 2-1/4" wide, 6" deep, with 1/4" shaft extending 3/4" from one end. Used, good condition. Shipping weight 1 pound. Asking $5.

Cardwell 7103 - Single section variable, 150 pF max. 20 rotor and 19 stator plates, .070" spacing. Ceramic insulation, end plates are metal. 2-5/8" high, 2-1/2" wide, 6-1/2" deep, with 1/4" shaft extending 3/4" from one end. Have two identical units - one NOS in original box, one used, very good condition. Shipping weight 1 pound. Asking $9 for new one and $7 for used
one. $15 for both.

500 pF Cardwell transmitting variable - Single section variable, 500 pF max. 25
rotor and 24 stator plates, 1/32" spacing. Micalex insulation, end plates are metal. 2-1/8" high, 3" wide, 4-1/4" deep, with 1/4" shaft extending 5/8" from one end. Used, fair condition. Shipping weight 2 pounds. Asking $5

450 pF Hammarlund transmitting variable - Single section variable, 40-450 pF. 24
rotor and 23 stator plates, ,070" spacing. Ceramic insulation, end plates are metal. 3-1/4" high, 4-1/2" wide, 7" deep, with 1/4" shaft extending 1-1/2" from one end. Used, good condition. One of the four ceramic insulators that hold the stator is chipped, has no effect on operation. Shipping weight 3 pounds. Asking $12

The following 3 units are all similar in construction, but vary in details. All are high quality military surplus unit - beautiful construction, but manufacturer and source unknown.

3 gang precision receiver tuning capacitor - 3 sections, each with 7 rotor and 6 stator plates, each section approximately 10-65 pF. Rotor plates on ends of each section are slotted for tracking adjustment. Each unit is shielded from the others, and has its own independent rotor wiper and connection. Rotors are not electrically connected to frame. Rotor shaft is ceramic with metal sleeves, stator insulation is ceramic. Ball bearings, very smooth and low torque. 3" high, 2-1/4" wide, 3-1/4" deep, with 3/8" shaft extending 7/16" from one end. Shaft has metal sleeve on end. Used, very good condition. Shipping weight 2 pounds. Asking $4.

3 gang precision receiver tuning capacitor - 3 sections: Front and middle section each have 6 rotor and 5 stator plates, approximately 10-55 pF. Rear section has 7 rotor and 6 stator plates, approximately 10-65 pF. Rotor plates on ends of each section are slotted for tracking adjustment. Each unit is shielded from the others, and has its own independent rotor wiper and connection. Rotors are not electrically connected to frame. Rotor shaft is ceramic with metal sleeves, stator insulation is ceramic. Ball bearings, very smooth and low torque. Each section has integral air trimmer capacitor, 3 rotor and 3 stator plates, approximately 15 pF maximum capacity. 2-1/2" high, 2-3/4" wide, 3-1/2" deep, with 3/8" shaft extending 5/8" from one end. Shaft has metal sleeve on end, and 1-3/4" diameter brass gear (easily removed). Used, very good condition. Shipping weight 2 pounds. Asking $5.

3 gang precision receiver tuning capacitor - This unit is actually two capacitors bolted together and driven through a set of anti-backlash gears. One side has 2 sections, the other only one. All 3 sections have 9 rotor and 8 stator plates, approximately 12-90 pF. Rotor plates on ends of each section are slotted for tracking adjustment. Each unit is shielded from the others, and has its own independent rotor wiper and connection. Rotor shafts are ceramic with metal sleeves, stator insulation is ceramic. Rotors are not electrically connected to frame. Ball bearings, very smooth and low torque. Each section has NPO 3-12 pF ceramic trimmer, easily removed if not wanted. 2-1/4" high, 4-1/2" wide, 3-1/2" deep. Drive is via 3/16" idler shaft - brass gear doubles as shaft coupler. Used, very good condition. Shipping weight 2 pounds. Asking $5.

--

Big old 3 gang BC tuning capacitor - This is an ancient unit, origin unknown. Rugged heavy duty construction. Front and middle sections have 13 rotor and 12 stator plates, 20-450 pF. Rear section has 16 rotor and 15 stator plates, 20-500 pF. 2-3/4" high, 3-1/4" wide, 5" deep, with 1/4" shaft extending 1-1/2" from one end. Used, dirty and dusty, but tests good, bearings are smooth and can be cleaned up. Shipping weight 2 pounds. Asking 25 cents, or free with any order.

73 de Jim, N2EY

4293. Computer Power Supply Schematic?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-21 00:00:00 UTC
From: "John Kirk, VE6XT" <jakirk@calcna.ab.ca>
Message-ID: <Pine.A41.4.05.9911211314090.20424-100000@srv1.calcna.ab.ca>
Source record: 65456

I knew I should have bookmarked that URL!
Anybody have the website for the conversion info to ham 13.8 volt, high current application?
Alternately, a url for typical schematic for a pc power supply?
I promise to bookmark it this time!
Thanks in advance
John

4294. Re: Instant Lettering for Panels etc?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-21 00:00:00 UTC
From: jflanders2@home.com
Message-ID: <383853c4.17618099@news>
Source record: 65457

For a silk-screen kit, see:

http://www.cbridge.com/

They sell a complete photographic stencil making kit. Basic kit has
two 8x10 inch sheets of stencil material and everything needed to make
stencils as well as paints for about $30.

They are oriented toward selling to the crafts market, but the stencil
wouldn't know whether it was silk-screening a tee shirt or a radio
panel.

Jerry W4UK

On Sun, 21 Nov 1999 10:43:50 -0700, "Jack Taylor" <n7oo@theriver.com>
wrote:

>Wonder how much difficulty in making a silk screen? Would it be much more
>difficult than attempting the other alternatives? In looking around the
>home here I see dozens of articles that have been screened.
>
>73 de Jack
>

4295. Reading Electronic Schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-21 00:00:00 UTC
From: J COWIE <cowietexas@worldnet.att.net>
Message-ID: <819sck$1ip$1@bgtnsc02.worldnet.att.net>
Source record: 65458

I am attempting to build a HF double tube receiver. However, I am not that skilled in reading electronic schematics. I have managed to make an interpretation pretaining as to what the parts are and a ROUGH analysis of where a few of the parts go. What I am requesting is an individual(s) that would consider looking over the "blueprint" that I have interpreted. The drawings that I have made could be faxed or perhaps e-mailed. Any help on this matter is held in high esteem.

73
shawn
KD5HLM
horsehaar@yahoo.com

4296. Re: Instant Lettering for Panels etc?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-21 00:00:00 UTC
From: Tony Giroux <agiroux@cvn.net>
Message-ID: <3838762F.F472A4CB@cvn.net>
Source record: 65459

Go to a crafts store or hobby shop and buy some spray on cement
that dries clear.

There is a guy on the internet at Almost All Digital Electronics ,
http://www.aade.com that has a process for making panel
faces. I've used it a couple of time and it looks pretty good.

Tony -- KF3BX

Roland Burgan wrote:

> How do you then apply the transparency to the
> panel?
>
> JW wrote:
>

>>__________SNIP_____________<<

4297. dual-band antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-21 00:00:00 UTC
From: mdcx9bbg@adinet.COM.UY
Message-ID: <000301bf3481$1e64a0c0$0200000a@debenedetti.com>
Source record: 65460
Body handling: HTML body converted to readable text

```
This is a multi-part message in MIME format.

------=_NextPart_000_0019_01BF3452.091FB9E0

charset="iso-8859-1"

someone can tell me where to get information as how to build a antenna =
for dual band use(144/432 mhz)
books,etc for mobile use(in a car)
thanks
mdcx9bbg@adinet.com.uy

------=_NextPart_000_0019_01BF3452.091FB9E0

charset="iso-8859-1"

someone can tell me where to get =
information as how=20
to build a antenna for dual band use(144/432 mhz)

books,etc for mobile use(in a =
car)

thanks

mdcx9bbg@adinet.com.uy

------=_NextPart_000_0019_01BF3452.091FB9E0--
```

4298. Re: message tracker "flex" / k&L technology

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-21 00:00:00 UTC
From: John Doe <johndoe@news.com>
Message-ID: <ia2_3.35775$YI2.1748590@typ11.nn.bcandid.com>
Source record: 65461
Cross-posted to: alt.comp.hardware.pc-homebuilt,alt.radio.scanner,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,sci.electronics.equipment

I have the DOS version of Message Tracker, it won't decode the Flex
Protocol, I am looking for the Win95 version myself, I have made several of
the"hardware decoders", so the S/N doesn't have to match. For Flex try
WinFlex1.0
news1@airmail.net wrote in message
<76C472BD054BDDA7.BD419D403CF89294.FD6E4BF503A62215@lp.airnews.net>...
>K&L went away after the feds payed them a visit. The software checked
>the serial number of your hardware. They must match to work.
>good luck..
>
>Terry
>
>On Sat, 20 Nov 1999 00:35:10 -0000, "kable guy minn" <n0mnb@minn.net>
>wrote:
>
>>hello
>>i need help find ing the software for message tracker. i lost my software
>>for tracking my
>>pagers and can't get a hold of K&L technology that i got it from.
>>any help ....
>>thanks Bill
>>n0mnb@minn.net
>>
>>
>>
>

4299. Re: Techtronics Tube Type Scopes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-21 00:00:00 UTC
From: Jim Adney <jadney@vwtype3.org>
Message-ID: <r604OGf1wdIaabjysPCNEuUiAZH9@4ax.com>
Source record: 65462

Wes Witten <raindance@bigfoot.com> wrote:

>I have two 564 B scopes for sale.
>
>One is an auto erase model with no bays filled. Bad HV power supply.
>One is a Storage model 564B with a 3A6 Dual Trace Amp and a 3B4 Time
>Base.

It would help if you posted at least a price range and some idea of
location.

Jim
-

Jim Adney jadney@vwtype3.org
Madison,Wisconsin USA

4300. home brew 40meter ssb/cw kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-21 00:00:00 UTC
From: "Ralph C. Blach" <rblach@intrex.net>
Message-ID: <3838C094.E183F275@intrex.net>
Source record: 65463

Does anybody know of any 40 meter ssb/cw qrp kits becides elecraft?

Thanks

Chip

4301. Re: dual-band antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-21 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <Ty6_3.74547$7I4.1805466@news5.giganews.com>
Source record: 65464

Piece of cake. A quarter wave 2 meter antenna will work just fine at triple the frequency, right in the 70 cm band. SWR will be a bit higher but not that much.

If you want a fancier antenna, that may be a different story, depending on the details.

73, Bob K6DDX

4302. WTB: CLC520 Variable Gain RF AMP IC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-22 00:00:00 UTC
From: Norman Gillaspie <norman@pcseng.com>
Message-ID: <%fj_3.818$tk4.19863@typhoon-sf.snfc21.pbi.net>
Source record: 65393

I am looking for a few pieces of a National Semiconductor
CLC520 AGC IC.

norman@pcseng.com

4303. Re: Instant Lettering for Panels etc?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-22 00:00:00 UTC
From: jflanders2@home.com
Message-ID: <3839cd0a.10677410@news>
Source record: 65394

The exact link I posted works for me, Don. Brings up PhotoEZ Stencil
page from that company.

Jerry W4UK

On Mon, 22 Nov 1999 12:15:33 -0800, Don W6JL <W6JL@ixpres.com> wrote:

>Jerry Flanders wrote:
>>
>> For a silk-screen kit, see:
>>
>> http://www.cbridge.com/
>>
>> They sell a complete photographic stencil making kit. Basic kit has
>> two 8x10 inch sheets of stencil material and everything needed to make
>> stencils as well as paints for about $30.
>>
>> They are oriented toward selling to the crafts market, but the stencil
>> wouldn't know whether it was silk-screening a tee shirt or a radio
>> panel.
>>
>> Jerry W4UK
>
>Jerry OM,
>
> I tried that link, and it comes up not found. Are you sure it is
>www.cbridge.com?
>
> TNX and 73,
> Don, W6JL

4304. Re: Instant Lettering for Panels etc?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-22 00:00:00 UTC
From: Jack Taylor <n7oo@theriver.com>
Message-ID: <4Jk_3.56$cU2.9445@news2.giganews.com>
Source record: 65395

Thanks Jerry, the link worked fine for me as well. However the paints they sell are for fabric. I've asked them if they have a recommendation for paints for hard surfaces but no response as of yet. They do provide a kit less paint, so it looks promising once we settle the paint for hard surfaces issue :-)

73 de Jack

Don W6JL wrote in message <3839A465.DA4@ixpres.com>...
>Jerry Flanders wrote:
>>
>> For a silk-screen kit, see:
>>
>> http://www.cbridge.com/
>>
>> They sell a complete photographic stencil making kit. Basic kit has
>> two 8x10 inch sheets of stencil material and everything needed to make
>> stencils as well as paints for about $30.
>>
>> They are oriented toward selling to the crafts market, but the stencil
>> wouldn't know whether it was silk-screening a tee shirt or a radio
>> panel.
>>
>> Jerry W4UK
>
>Jerry OM,
>
> I tried that link, and it comes up not found. Are you sure it is
>www.cbridge.com?
>
> TNX and 73,
> Don, W6JL

4305. event counter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-22 00:00:00 UTC
From: Gerard Hughes <hughes.kathleen@worldnet.att.net>
Message-ID: <81d92d$4hj$1@bgtnsc01.worldnet.att.net>
Source record: 65396

Does anyone know of a shareware utility for using a sound card or pc parallel port for digital data collection? My son would like to automatically count random ttl pulses via his laptop. Thanks.
Gerry (WA2AYU/5)

4306. Re: Where to find plug-in coil forms

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-22 00:00:00 UTC
From: Kurt Arico <karico@jps.net>
Message-ID: <383a1925@news1.jps.net>
Source record: 65397

Antique Electronic Supply has them, and they are common at swap meets.
maddog@io.com wrote in message <32966472.215929914@news.io.com>...
>Remember the old days when plug-in coil forms allowed band-changes?
>Are those old forms, or something similar, available anywhere today?
>
>thanks,
>monty N5FC

4307. Radio Shack DMM w/PC interface?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-22 00:00:00 UTC
From: n2cqr@erols.com
Message-ID: <3838b710.128453097@news.erols.com>
Source record: 65465

Is anyone out there using the Radio Shack Digital Multimeter that has the computer interface? It is listed in the catalog at 59.95. The catalog says it can measure frequency and capacitance and transistor beta, but the one I looked at appeared to be only Volts, Amps and Ohms. Also, is it really autoranging?

Any reviews? Good piece of gear? Are there better alternatives? Any recommendations would be appreciated. The PC interface feature looks very useful. There is an article in the December 99 QST that describes how one guy used this feature to graph signal strength readouts over time...

73 Bill N2CQR

4308. Re: Radio Shack DMM w/PC interface?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-22 00:00:00 UTC
From: jflanders2@home.com
Message-ID: <38388ec4.32724239@news>
Source record: 65466

I have a RS multimeter with PC interface. Mine is cat nr 22-168A. It
may be an earlier model than the current one.

Mine is not autoranging, but has capacitance and freq ranges, as well
as a transistor beta range and the conventional ohms+volts+amps.

Nice to be able to hook it to something and then monitor how it
changes overnight by looking at the data next morning.

Jerry W4UK.

On Mon, 22 Nov 1999 03:27:43 GMT, n2cqr@erols.com (Bill Meara) wrote:

>Is anyone out there using the Radio Shack Digital Multimeter that has
>the computer interface? It is listed in the catalog at 59.95. The
>catalog says it can measure frequency and capacitance and transistor
>beta, but the one I looked at appeared to be only Volts, Amps and
>Ohms. Also, is it really autoranging?
>
>Any reviews? Good piece of gear? Are there better alternatives? Any
>recommendations would be appreciated. The PC interface feature looks
>very useful. There is an article in the December 99 QST that
>describes how one guy used this feature to graph signal strength
>readouts over time...
>
>73 Bill N2CQR

4309. Where can I find plans for a Homebrew 6M SSB or 2M SSB Rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-22 00:00:00 UTC
From: a1@home.com
Message-ID: <383d9bdb.32561168@news>
Source record: 65467

Hi...where can I find plans for such a rig?
Preferably one with a digital readout, but that does not matter.

Also, a special type of antenna is required for SSB, isn't it? If so,
how could I build such an antenna out of either wire or pipes?

Even better would be if you could come up with a PCB for such a
thing...one that could be downloaded and printed out...but it is not
mandatory. PCB would be nice, however, because all my wire-wrapping
attempts are very sloppy.

TNX,
Rick

KE1JA@home.com
actually...it's rick1 instead of ke1ja. But, many spam checkers pick
up on e-mails in the body...so therefore i did that.

4310. Re: Reading Electronic Schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-22 00:00:00 UTC
From: MC 10kW Jesus <qsl27@hotmail.com>
Message-ID: <3838A32E.B4261099@hotmail.com>
Source record: 65468

Hi JC

Email them to my address. Have much experience in vacuum tubes and radios. I'd be more than happy to help you with your project. I trust that you aren't expecting miracles with only two tubes. :->

MC

J COWIE wrote:

> I am attempting to build a HF double tube receiver. However, I am not that
> skilled in reading electronic schematics. I have managed to make an
> interpretation pretaining as to what the parts are and a ROUGH analysis of
> where a few of the parts go. What I am requesting is an individual(s) that
> would consider looking over the "blueprint" that I have interpreted. The
> drawings that I have made could be faxed or perhaps e-mailed. Any help on
> this matter is held in high esteem.
>
> 73
> shawn
> KD5HLM
> horsehaar@yahoo.com

4311. Re: Radio Shack DMM w/PC interface?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-22 00:00:00 UTC
From: JW <jdwalton@home.com>
Message-ID: <3838D666.592D8770@home.com>
Source record: 65469

I have the 22-168A. It is not auto-ranging either, has a nice bargraph feature, records high and low, measures all of the above. It is pretty good, perhaps not quite as acurate as my Beckman DVM which I can reference to an HP DVM, not quite as acurate as my HP counter, but for the money I think it's a very useful tool. The errors are maybe one count.

They supply you with a disk and you can pretty much program the thing in Visual Basic - the code is all there.

The only problem with the device is that it eats batteries (not a very effective sleep mode, I guess.) but I buy 9 volts at Costco so it doesn't crimp the budget.

Bill Meara wrote:

> Is anyone out there using the Radio Shack Digital Multimeter that has
> the computer interface? It is listed in the catalog at 59.95. The
> catalog says it can measure frequency and capacitance and transistor
> beta, but the one I looked at appeared to be only Volts, Amps and
> Ohms. Also, is it really autoranging?
>
> Any reviews? Good piece of gear? Are there better alternatives? Any
> recommendations would be appreciated. The PC interface feature looks
> very useful. There is an article in the December 99 QST that
> describes how one guy used this feature to graph signal strength
> readouts over time...
>
> 73 Bill N2CQR

4312. Re: Collins 51J4 and 75S1 info wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-22 00:00:00 UTC
From: Richard Soulie <soulie@zipworld.com.au>
Message-ID: <3838FF29.B123348F@zipworld.com.au>
Source record: 65470

Hi Lee
Thank you for the info and have looked up the info on the 75S1 and I think the PTO bit will certainly help again thanks.

Regards
Richard Soulie (VK2ARS)

Lee Smith wrote:

> Richard:
>
> While I cannot assist you with your specific question, I can point you in
> the right direction to find help. Take a look at the following links. I
> can recommend the Collins Reflector. You may have to do a little detective
> work to find out how to subscribe, but it is well worth the effort. Try:
>
> Listserver Subscription: listserv@listserv.tempe.gov - "subscribe collins
> 'name' 'call'"
>
> http://www.wa3key.com/collins.html
> http://www.tempe.gov/archives/collins.html
> http://www.angelfire.com/de/vk3kcm/index.html#ind
> http://www.collinsradio.com/html/contact_info.html
>
> Regards from Canada
> Lee Smith
> VE4ANC

--
Richard Soulie (VK2ARS)
35 Musgrave Crescent
Fairfield NSW 2165

4313. Re: Direct conversion receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-22 00:00:00 UTC
From: Martin <jalnz@ihug.co.nz>
Message-ID: <81b447$l2c$1@newsource.ihug.co.nz>
Source record: 65471

Could be that you are driving the LM386 too hard- this will cause the
'motorboating you describe.

Also why not use a NE602- real easy to get going. Good luck

Paul Redden <666146@ican.net> wrote in message
<80qk32jdn1@news2.tor.accglobal.net>...
>Hi group;
>
>I'm an Electrotech student working on a college project.
>
>

4314. IC IF amp & detector for AM????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-22 00:00:00 UTC
From: Martin <jalnz@ihug.co.nz>
Message-ID: <81b4fmmqj1@newsource.ihug.co.nz>
Source record: 65472

I'm building an aircraft receiver using the NE602 as the front end. This goes really well- andI can feed into my communications receiver as the front end. My question is: does anyone have a 'pet' linear IC for the IF amp and detector? I could use a ZN414 or a MC1350P I guess, but is there anything better out there for AM? (theres heaps of FM IC's but I am looking for AM)

4315. FA:National VFO dial for hombrew radios- NEW!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-22 00:00:00 UTC
From: jimmoci@aol.com
Message-ID: <19991122062035.05614.00000729@ng-cl1.aol.com>
Source record: 65473

Check it out:

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=202058157

Thanks,
Jim

4316. cw on an SSB rig

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-22 00:00:00 UTC
From: Ralph Blach <rcblach@raleigh.ibm.com>
Message-ID: <38394A56.690FA0D2@raleigh.ibm.com>
Source record: 65474

Is is possible to do Cw on an SSB rig?

If so, how?

Chip

4317. Wanted PSK31 Installation kits??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-22 00:00:00 UTC
From: Stan Sanderson <dss@ican.net>
Message-ID: <38395471.382F335@ican.net>
Source record: 65475

Can anyone point me to a source for the above for
an FT990 rig?

4318. LOCKTAL SOCKETS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-22 00:00:00 UTC
From: dialcover@webtv.net
Message-ID: <2694-3839555D-7@storefull-122.bryant.webtv.net>
Source record: 65476

I NEED SOME LOCKTAL SOCKETS, NEW OR USABLE, UP TO 25 OF THEM. CAN
ANYBODY HELP?

disregard caps, visual problem
Bill Turner WA0ABI
1117 Pike Street
Saint Charles, MO 63301
636-949-2210

4319. Re: Computer Power Supply Schematic?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-22 00:00:00 UTC
From: CAL <clongf0SPAM@hotmail.com>
Message-ID: <63e_3.95491$YB4.3466858@typ12.nn.bcandid.com>
Source record: 65477

http://antennex.com/preview/archive3/powers.htm
Try this one.....

John Kirk, VE6XT wrote in message ...
>I knew I should have bookmarked that URL!
>Anybody have the website for the conversion info to ham 13.8 volt, high
>current application?
>Alternately, a url for typical schematic for a pc power supply?
>I promise to bookmark it this time!
>Thanks in advance
>John
>
>

4320. New Product: USB opto in,relay out

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-22 00:00:00 UTC
From: "J-Works,Inc" <promo@j-works.com>
Message-ID: <38396CF7.230C1C8A@j-works.com>
Source record: 65478

```
For complete information visit:
http://www.j-works.com
```

4321. Re: cw on an SSB rig

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-22 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <7Te_3.104602$y45.1851660@news4.giganews.com>
Source record: 65479

Just key an audio oscillator into the microphone input.

73, Bob K6DDX

4322. Re: cw on an SSB rig

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-22 00:00:00 UTC
From: Dana Myers K6JQ <DMyers@Qnet.com>
Message-ID: <38397EFC.FE170A26@Qnet.com>
Source record: 65480

Bob wrote:
>
> Just key an audio oscillator into the microphone input.
>
> 73, Bob K6DDX

You should go to some length to make sure the audio oscillator is
a reasonably pure sine wave. A lot of the common audio oscillators
I've seen published are not sine wave oscillators and harmonic-rich.
Any distortion on your oscillator will show up on the transmitted
signal, limited only by the SSB transmit filter(s).

Dana K6JQ
dana@source.net

4323. Home brew radio page.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-22 00:00:00 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <rEf_3.1182$o4.909@news.indigo.ie>
Source record: 65481
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

EI9GQ home brew radio page.

http://www.qsl.net/ei9gq

73, Ed. EI9GQ.

--
EI9GQ homebrew radio page http://www.qsl.net/ei9gq

Remove 'X' to reply

4324. Re: cw on an SSB rig

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-22 00:00:00 UTC
From: blackm00@cam.org
Message-ID: <blackm00-2211991310540001@dialup-737.hip.cam.org>
Source record: 65482

In article <7Te_3.104602$y45.1851660@news4.giganews.com>, "Bob"
<balbert@cnmnetwork.com> wrote:

> Just key an audio oscillator into the microphone input.
>
> 73, Bob K6DDX

But make sure it's a nice clean sinewave. Unless it's pure, you
won't be generating CW, but something else.

If it is pure, it just gets translated through the balanced moudlator
to the IF frequency, and then up to the signal frequency through
the rest of the transmitter. Since it's a single tone, there will be
only one output frequency, and hence it's a CW signal.

Michael VE2BVW

4325. Wanted: Noise Source calibration procedure

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-22 00:00:00 UTC
From: owens@ale.atd.ucar.edu
Message-ID: <81c5faspl1@ncar.ucar.edu>
Source record: 65483

I've built a noise source and would like to calibrate it myself.
Available to me is a lab full of standard test equipment. I'm
looking for a procedure for calibrating the source especially
in the frequency range of 1 to 10MHz.

Can anyone suggest a procedure for calibrating the source using
standard lab equipment? How do the commercial labs do this? Any
help would be appreciated.

Chip, NW0O

--
Chip Owens (owens@atd.ucar.edu)

4326. Need help about MC145158-2 Motorola PLL

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-22 00:00:00 UTC
From: yu1ol@EUnet.YU
Message-ID: <38399AA9.6365833C@EUnet.yu>
Source record: 65484

HI,

I need pin assignment for MC 145158-2 (Motorola PLL) in 20 lead quad flatpack.
There is no such package in document MC145151-2D (Motorola semiconductor tehnical data).

I have few of this devices (in 20 lead quad flatpack), but without pin assignment it's useless !

TIA,

B. Miljkovic 73 de yu1ol

4327. Weekend SW receiver project

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-22 00:00:00 UTC
From: "Juan M. Perales" <novalid@novalid.com>
Message-ID: <81c5qokik1@diana.bcn.ttd.net>
Source record: 65485

Last weekend I assembled ("ugly constructed") a SW AM superhet for 5 to 16 MHz. It has a MOSFET mixer, two bipolar 455 KHz amplifiers, and audio IC amplifier, with LM386. It was a toy for my daughter, but works fine. With a 6 meter long wire, it is possible to listen to many broadcast SW stations, with good selectivity and audio.
The schematic is in my homepage:

http://personales.mundivia.es/jmperales/ea6np.htm

Juan M. Perales
Mallorca Island, Spain

4328. Re: Instant Lettering for Panels etc?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-22 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <3839A465.DA4@ixpres.com>
Source record: 65486

Jerry Flanders wrote:
>
> For a silk-screen kit, see:
>
> http://www.cbridge.com/
>
> They sell a complete photographic stencil making kit. Basic kit has
> two 8x10 inch sheets of stencil material and everything needed to make
> stencils as well as paints for about $30.
>
> They are oriented toward selling to the crafts market, but the stencil
> wouldn't know whether it was silk-screening a tee shirt or a radio
> panel.
>
> Jerry W4UK

Jerry OM,

I tried that link, and it comes up not found. Are you sure it is
www.cbridge.com?

TNX and 73,
Don, W6JL

4329. Re: Instant Lettering for Panels etc?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-22 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <3839A46D.12BE@ixpres.com>
Source record: 65487

Jerry Flanders wrote:
>
> For a silk-screen kit, see:
>
> http://www.cbridge.com/
>
> They sell a complete photographic stencil making kit. Basic kit has
> two 8x10 inch sheets of stencil material and everything needed to make
> stencils as well as paints for about $30.
>
> They are oriented toward selling to the crafts market, but the stencil
> wouldn't know whether it was silk-screening a tee shirt or a radio
> panel.
>
> Jerry W4UK
>
> On Sun, 21 Nov 1999 10:43:50 -0700, "Jack Taylor" <n7oo@theriver.com>
> wrote:
>
> >Wonder how much difficulty in making a silk screen? Would it be much more
> >difficult than attempting the other alternatives? In looking around the
> >home here I see dozens of articles that have been screened.
> >
> >73 de Jack
> >
--
ï¿½ï¿½à¡±ï¿½

4330. Re: Instant Lettering for Panels etc?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-22 00:00:00 UTC
From: Derf <ke4ros@hotmail.com>
Message-ID: <81cjcqora1@nnrp1.deja.com>
Source record: 65488

In article <3839A465.DA4@ixpres.com>,
W6JL@ixpres.com wrote:
> Jerry Flanders wrote:
> >
> > For a silk-screen kit, see:
> >
> > http://www.cbridge.com/
> >
> > They sell a complete photographic stencil making kit. Basic kit has
> > two 8x10 inch sheets of stencil material and everything needed to
make
> > stencils as well as paints for about $30.
> >
> > They are oriented toward selling to the crafts market, but the
stencil
> > wouldn't know whether it was silk-screening a tee shirt or a radio
> > panel.
> >
> > Jerry W4UK
>
> Jerry OM,
>
> I tried that link, and it comes up not found. Are you sure it is
> www.cbridge.com?
>
> TNX and 73,
> Don, W6JL
>
I just tried it and it worked fine

73
derf

Sent via Deja.com http://www.deja.com/
Before you buy.

4331. PIC 12C508 Programming

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-22 00:00:00 UTC
From: "colinlowe@jet" <colinlowe@jet.es>
Message-ID: <81cbti$5i3$1@lola.ctv.es>
Source record: 65489

I am trying to program a PIC 12C508 with a homebrew programming interface.

The software I have is PIP02.EXE

I can read pre-programmed PIC's but when I try to program a new PIC 12C508 the software gets to 98% complete and then returns an error "ERROR PROGRAMMING DEVICE".

Can you let me know what design of programmer you use and with what software etc.

73 de Colin
EB/G1IVG in Barcelona

4332. Wanted VHF communications article on DK1OF 2m Linear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-23 00:00:00 UTC
From: Martin John Hallsworth <Martin@g1gyc.demon.co.uk>
Message-ID: <943315643.16573.0.nnrp-07.9e98acde@news.demon.co.uk>
Source record: 65398
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

Hello and thanks for looking at this,

I am looking for a copy or even better a web site URL of the
construction details of the DK1OF 2m 4CX250 linear amp
I think it was published in VHF communications in the late
1970's (1977 ?)

Thanks Martin G1GYC

--
~~~~~~
Remove "NOSPAM" from email address to reply
~~~~~~

4333. Re: Ham-Homebrew Digest V99 #304

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-23 00:00:00 UTC
From: occ6@siscom.NET
Message-ID: <004001bf354c$68efdd00$8503fbd1@default>
Source record: 65399
Body handling: HTML body converted to readable text

try www.ac6v.com you will find links to almost any thing in ham radio
-----Original Message-----
From: Ham-Homebrew Mailing List and Newsgroup
To: Ham-Homebrew@ucsd.edu
Date: Monday, November 22, 1999 8:22 AM
Subject: Ham-Homebrew Digest V99 #304

>
>Ham-Homebrew Digest Mon, 22 Nov 99 Volume 99 : Issue 304
>
>Today's Topics:
> [Q] ICOM 706 minimum power.
> Direct conversion receiver
> dual-band antenna
> home brew 40meter ssb/cw kit
> Homebrew Tube Tester
> IC IF amp & detector for AM????
> Instant Lettering for Panels etc? (2 msgs)
> Radio Shack DMM w/PC interface? (3 msgs)
> Reading Electronic Schematics (2 msgs)
> Standard HX340 portable i need help!
> Where Do You Buy Project Supplies?
>
>Send Replies or notes for publication to:
>Send subscription requests to:
>Problems you can't solve otherwise to brian@ucsd.edu.
>
>Archives of past issues of the Ham-Homebrew Digest are available
>(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".
>
>We trust that readers are intelligent enough to realize that all text
>herein consists of personal comments and does not represent the official
>policies or positions of any party. Your mileage may vary. So there.
>Loop-Detect: Ham-Homebrew:99/304
>--
>
>Date: Tue, 16 Nov 1999 11:24:25 +0100
>From: francine@xs4no1.nl (francine)
>Subject: [Q] ICOM 706 minimum power.
>
>Mike wrote:
>
>> The answer is 10 Watts for the original, 20 Watts for the MK2 and

probably
>> 50W for the MK3. You will note I quote the maximum output. This is
because
>> the rig produces a spike of RF at this maximum level regardless of what
the
>> output setting is. The quoted minimum output is under a watt. You may be
>> able to fix this using the ALC input or if you really are only ever going
to
>> use it for microwaves, by bypassing the 144 MHz PA. Perhaps you can find
one
>> cheap with the bust PA syndrome ?
>
>Too bad about the spike, I think the only option would be to bypass the
>144 MHz PA. I was going to buy a new one, but I will give it a second
>thought.
>
>Thanks Mike and John for your reply.
>
>--
>francine
>.
>
>------------------------------
>
>Date: Mon, 22 Nov 1999 22:50:55 +1300
>From: "Martin"
>Subject: Direct conversion receiver
>
>Could be that you are driving the LM386 too hard- this will cause the
>'motorboating you describe.
>
>Also why not use a NE602- real easy to get going. Good luck
>
>
>
>Paul Redden <666146@ican.net> wrote in message
><80qk32jdn1@news2.tor.accglobal.net>...
>>Hi group;
>>
>>I'm an Electrotech student working on a college project.
>>
>>
>
>
>.
>
>------------------------------
>
>Date: 21 Nov 99 21:55:53 GMT
>From: mdcx9bbg@adinet.COM.UY (Mario Debenedetti)

```
>Subject: dual-band antenna
>
>This is a multi-part message in MIME format.
>
>------=_NextPart_000_0019_01BF3452.091FB9E0
>Content-Type: text/plain;
> charset="iso-8859-1"
>Content-Transfer-Encoding: quoted-printable
>
>someone can tell me where to get information as how to build a antenna =
>for dual band use(144/432 mhz)
>books,etc for mobile use(in a car)
>thanks
>mdcx9bbg@adinet.com.uy
>
>------=_NextPart_000_0019_01BF3452.091FB9E0
>Content-Type: text/html;
> charset="iso-8859-1"
>Content-Transfer-Encoding: quoted-printable
>
>
>
>
>
someone can tell me where to get =
>information as how=20
>to build a antenna for dual band use(144/432 mhz)

>
books,etc for mobile use(in a =
>car)

>
thanks

>
size=3D2>mdcx9bbg@adinet.com.uy

>
>------=_NextPart_000_0019_01BF3452.091FB9E0--
>
>.
>
>------------------------------
>
>Date: Sun, 21 Nov 1999 23:03:32 -0500
>From: "Ralph C. Blach"
>Subject: home brew 40meter ssb/cw kit
>
>Does anybody know of any 40 meter ssb/cw qrp kits becides elecraft?
>
```

>Thanks
>
>Chip
>
>.
>
>------------------------------
>
>Date: Tue, 16 Nov 1999 03:21:40 GMT
>From: JW
>Subject: Homebrew Tube Tester
>
>While you're at it, go get an abacus.
>
>Ray Dahlby wrote:
>
>> I went and figured and I think I would prefer an old Hickock or whatever
>> tube tester over a microprocessor design with voltage boosted and current
>> boosted DAC's and software and just about everything else to go wrong
with
>> it. An old Hickock and a can of contact cleaner is not such a bad idea!
>>
>> Ray, VE7ITG
>
>.
>
>------------------------------
>
>Date: Mon, 22 Nov 1999 22:57:02 +1300
>From: "Martin"
>Subject: IC IF amp & detector for AM????
>
>I'm building an aircraft receiver using the NE602 as the front end. This
>goes really well- andI can feed into my communications receiver as the
front
>end. My question is: does anyone have a 'pet' linear IC for the IF amp and
>detector? I could use a ZN414 or a MC1350P I guess, but is there anything
>better out there for AM? (theres heaps of FM IC's but I am looking for AM)
>
>
>
>
>.
>
>------------------------------
>
>Date: Sun, 21 Nov 1999 10:43:50 -0700
>From: "Jack Taylor"
>Subject: Instant Lettering for Panels etc?
>

>Wonder how much difficulty in making a silk screen? Would it be much more
>difficult than attempting the other alternatives? In looking around the
>home here I see dozens of articles that have been screened.
>
>73 de Jack
>
>JW wrote in message <38381A88.33CB92CE@home.com>...
>>Print on the non-adhesive side of the first label. Overlay a second
>adhesive
>>page over the first. The second layer will prevent the first from being
>damaged
>>after it is applied.
>>
>>Roland Burgan wrote:
>>
>>> How do you then apply the transparency to the
>>> panel?
>>>
>>> J
>>
>
>
>.
>
>------------------------------
>
>Date: Sun, 21 Nov 1999 17:46:08 -0500
>From: Tony Giroux
>Subject: Instant Lettering for Panels etc?
>
>Go to a crafts store or hobby shop and buy some spray on cement
>that dries clear.
>
>There is a guy on the internet at Almost All Digital Electronics ,
>http://www.aade.com that has a process for making panel
>faces. I've used it a couple of time and it looks pretty good.
>
>Tony -- KF3BX
>
>Roland Burgan wrote:
>
>> How do you then apply the transparency to the
>> panel?
>>
>> JW wrote:
>>
>
>>>_____SNIP_____<<
>
>

>.
>
>------------------------------
>
>Date: Mon, 22 Nov 1999 03:27:43 GMT
>From: n2cqr@erols.com (Bill Meara)
>Subject: Radio Shack DMM w/PC interface?
>
>Is anyone out there using the Radio Shack Digital Multimeter that has
>the computer interface? It is listed in the catalog at 59.95. The
>catalog says it can measure frequency and capacitance and transistor
>beta, but the one I looked at appeared to be only Volts, Amps and
>Ohms. Also, is it really autoranging?
>
>Any reviews? Good piece of gear? Are there better alternatives? Any
>recommendations would be appreciated. The PC interface feature looks
>very useful. There is an article in the December 99 QST that
>describes how one guy used this feature to graph signal strength
>readouts over time...
>
>73 Bill N2CQR
>.
>
>------------------------------
>
>Date: Mon, 22 Nov 1999 00:35:19 GMT
>From: jflanders2@home.com (Jerry Flanders)
>Subject: Radio Shack DMM w/PC interface?
>
>I have a RS multimeter with PC interface. Mine is cat nr 22-168A. It
>may be an earlier model than the current one.
>
>Mine is not autoranging, but has capacitance and freq ranges, as well
>as a transistor beta range and the conventional ohms+volts+amps.
>
>Nice to be able to hook it to something and then monitor how it
>changes overnight by looking at the data next morning.
>
>Jerry W4UK.
>
>On Mon, 22 Nov 1999 03:27:43 GMT, n2cqr@erols.com (Bill Meara) wrote:
>
>>Is anyone out there using the Radio Shack Digital Multimeter that has
>>the computer interface? It is listed in the catalog at 59.95. The
>>catalog says it can measure frequency and capacitance and transistor
>>beta, but the one I looked at appeared to be only Volts, Amps and
>>Ohms. Also, is it really autoranging?
>>
>>Any reviews? Good piece of gear? Are there better alternatives? Any
>>recommendations would be appreciated. The PC interface feature looks

>>very useful. There is an article in the December 99 QST that
>>describes how one guy used this feature to graph signal strength
>>readouts over time...
>>
>>73 Bill N2CQR
>
>.
>
>------------------------------
>
>Date: Mon, 22 Nov 1999 02:36:27 GMT
>From: JW
>Subject: Radio Shack DMM w/PC interface?
>
>I have the 22-168A. It is not auto-ranging either, has a nice bargraph
>feature, records high and low, measures all of the above. It is pretty
>good, perhaps not quite as acurate as my Beckman DVM which I can reference
>to an HP DVM, not quite as acurate as my HP counter, but for the money I
>think it's a very useful tool. The errors are maybe one count.
>
>They supply you with a disk and you can pretty much program the thing in
>Visual Basic - the code is all there.
>
>The only problem with the device is that it eats batteries (not a very
>effective sleep mode, I guess.) but I buy 9 volts at Costco so it doesn't
>crimp the budget.
>
>Bill Meara wrote:
>
>> Is anyone out there using the Radio Shack Digital Multimeter that has
>> the computer interface? It is listed in the catalog at 59.95. The
>> catalog says it can measure frequency and capacitance and transistor
>> beta, but the one I looked at appeared to be only Volts, Amps and
>> Ohms. Also, is it really autoranging?
>>
>> Any reviews? Good piece of gear? Are there better alternatives? Any
>> recommendations would be appreciated. The PC interface feature looks
>> very useful. There is an article in the December 99 QST that
>> describes how one guy used this feature to graph signal strength
>> readouts over time...
>>
>> 73 Bill N2CQR
>
>.
>
>------------------------------
>
>Date: Sun, 21 Nov 1999 16:35:19 -0600
>From: "J COWIE"
>Subject: Reading Electronic Schematics

>
>I am attempting to build a HF double tube receiver. However, I am not that
>skilled in reading electronic schematics. I have managed to make an
>interpretation pretaining as to what the parts are and a ROUGH analysis of
>where a few of the parts go. What I am requesting is an individual(s) that
>would consider looking over the "blueprint" that I have interpreted. The
>drawings that I have made could be faxed or perhaps e-mailed. Any help on
>this matter is held in high esteem.
>
>73
>shawn
>KD5HLM
>horsehaar@yahoo.com
>
>
>.
>
>------------------------------
>
>Date: Sun, 21 Nov 1999 16:26:06 -0600
>From: "J COWIE"
>Subject: Reading Electronic Schematics
>
>.
>
>------------------------------
>
>Date: Fri, 19 Nov 1999 09:39:28 -0500
>From: "Gervais Fillion"
>Subject: Standard HX340 portable i need help!
>
>Hi all,i need help with the Standard HX340 i just baught.
>i am looking for the software used to programm it and how the interface
>between the radio and the pc is done.
>If anyone can help me i will appreciate any help!
>Thanks
>ve2ckn@hotmail.com
>gervais
>bic,quebec
>
>
>.
>
>------------------------------
>
>Date: Mon, 15 Nov 1999 19:02:59 GMT
>From: William Brown
>Subject: Where Do You Buy Project Supplies?
>
>If you need project boxes, I have some I am selling as part of a family

>estate.
>
>Hammond 1411T aluminum cases 10 x 2.2 x 1.6 inches painted. Allied
>lists these
>at $18.00 a pop but I have 7 of them that I'll sell for $10.00 each.
>All
>proceeds go to executor of estate, not to me. All boxes are still in
>their plastic wrapper
>
>Let me know if and how many.
>
>Cheers
>William
>
>Billy Moore wrote:
>
>> I want to start building some projects and I need to find a good source
for
>> basic parts like resistors, caps, pots, connectors, etc. I've done some
>> searching on the web and I've found Newark (expensive), Digi-Key, Jameco,
>> and a few other smaller suppliers. Jameco seems to have the best
>> price/selection of the biggies. There are some smaller ones I haven't
heard
>> of before. Can anyone give me some recommendations? Thanks.
>>
>> Billy Moore
>> KF4ECB
>.
>
>------------------------------
>
>End of Ham-Homebrew Digest V99 #304
>******************************
>

4334. Re: Wanted VHF communications article on DK1OF 2m Linear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-23 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <3839e693.359468733@news.online.no>
Source record: 65400
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

On Tue, 23 Nov 1999 00:06:26 -0000, "Martin John Hallsworth"
<Martin@g1gyc.demon.co.uk> wrote:

>Hello and thanks for looking at this,
>
>I am looking for a copy or even better a web site URL of the
>construction details of the DK1OF 2m 4CX250 linear amp
>I think it was published in VHF communications in the late
>1970's (1977 ?)
>
>Thanks Martin G1GYC
>
>--
>~~~~~~
>Remove "NOSPAM" from email address to reply
>~~~~~~
>
>
>
>
I might have it in German language

4335. now broadcasting

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-23 00:00:00 UTC
From: dwboston@aol.com
Message-ID: <19991122205259.14022.00000902@ng-bd1.aol.com>
Source record: 65401

experiments on normalities
http://www.mp3.com/davidboston

4336. Spice and Vacuum Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-23 00:00:00 UTC
From: maddog@io.com
Message-ID: <383a00de.216032560@news.io.com>
Source record: 65402

Are SPICE models for vacuum tubes available anywhere online?

Has anybody experience with modeling tubes in SPICE?

thanks,
monty N5FC

4337. Where to find plug-in coil forms

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-23 00:00:00 UTC
From: maddog@io.com
Message-ID: <32966472.215929914@news.io.com>
Source record: 65403

Remember the old days when plug-in coil forms allowed band-changes?
Are those old forms, or something similar, available anywhere today?

thanks,
monty N5FC

4338. ## Repeat post: does anyone have access to a Mitsubishi RF catalog or similar other info source

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-23 00:00:00 UTC
From: tinkerman97@usa.net
Message-ID: <383a2594.4131954@ny.news.verio.net>
Source record: 65404
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.components

Hello Netfriends,

I'm repeating the post because although several tried to help no one
had the info and I still need the info...I'm quite sure that some RF
engineer here has a Mitsubishi RF manual around.
I need to get a data sheet for an RF synthesizer chip marked
"M64086GP". It might be discontinued, but I'm not sure.
It's the same chip used in the Radi Shack PRO-26 and Uniden BC-3000XLT
scanners.
Any info, data sheet or pointer to a web location would be great!
The Mitsubishi web site is useless. It has data on several similar
chips but not this one. They never responded to my emails.
Thank's for any help offered.

Thanks and best regards,
T-man

Note: when posting a Reply, please send me a copy
via email too so I don't miss any responses. Don't
forget to remove the "97" from my email address
inserted as an anti-spam counter measure...:-)

4339. Re: Spice and Vacuum Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-23 00:00:00 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <81d963$bcm@nnrp3.farm.idt.net>
Source record: 65405

<maddog@io.com> wrote in message news:383a00de.216032560@news.io.com...
> Are SPICE models for vacuum tubes available anywhere online?

Yes. Check out the following URL's:

http://www.duncanamps.simplenet.com/spice.html
http://www.svetlana.com/docs/products/spicemodel.html
http://www.winternet.com/%7Ebiro/articles/VTspice.html

> Has anybody experience with modeling tubes in SPICE?

Yes. I did a custom spice model for a SV-811A power tube for RF amplifier use just to see if I could do it. The other models I have seen for the 811 are for low mu audio amplifier use. In general if you want good results you have to do a custom model. The generic triode models you see are OK as long as the tube curves fit the general look of the classic triode curve shape. In the case of the 811 the curves look more like a pentode.

The general procedure to design a model is as follows.

1. Select an equation which will generate a curve like the one on the tube data sheet. This is hard to do and requires a lot of cut-and-try cycles to find a good one that works well on ALL of the curves on the tube data sheet.

2. Very carefully measure 6 or more data point pairs. Collect more data points were
the curve is changing rapidly.

3. Use a spreadsheet (I use Mathcad) to fit the equation in step 1 to the data points
in step 2. This step is not so easy. I have found that I get a good fit over most of the curve except where the curvature is high. In this case it's a judgment call if the fit is good enough.

4. Repeat steps 1 to 3 for each curve on the data sheet.

5. Using the table source in spice you can output a voltage that is the exact value of ONE parameter in the equation used in step 1 based on the voltages or current at the tube elements. You will need to do this for each parameter in the equation in step 1.

6. Use the outputs from the table sources in step 5 in a function source to design a controlled current source connected between the tube's cathode and anode. Please consult a book on tube circuit design for details on equivalent plate circuit models to understand what I am doing.

7. The same procedure is used for the grid current.

8. Add in the interelectrode capacitors to match the tube data sheet values.

9. May need things like analog switches to stop the model from doing stupid things when the tube model electrode voltages are out of range etc.

So in general it's a lot of work! I spent 2 to 3 weeks screwing around trying to get my 811 model to work. I found the Anode_Cathode vs Anode current as a function of the Cathode_Grid voltage curves easy to work with. For the tubes that have only the constant current curves I use Mathcad to convert them to the other format.

When I used the 811 model in a grounded grid amplifier I got almost the exact same results for power and so on as listed on the data sheet for typical class B operation.

Leland C. Scott
KC8LDO

4340. Re: Where to find plug-in coil forms

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-23 00:00:00 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <81dk54fve1@nnrp1.deja.com>
Source record: 65406

In article <32966472.215929914@news.io.com>,
maddog@io.com wrote:
> Remember the old days when plug-in coil forms allowed band-changes?
> Are those old forms, or something similar, available anywhere today?
>
> thanks,
> monty N5FC
>

I've seen a couple of published designs using plug-in coil formers made
from plastic pipe glued to DIN plugs.

73, Leon
--
Leon Heller, G1HSM
Tel: (Mobile) 079 9098 1221 (Work) +44 1327 357824
Email: leon_heller@hotmail.com
Web: http://www.geocities.com/SiliconValley/Code/1835

Sent via Deja.com http://www.deja.com/
Before you buy.

4341. Re: WTB: CLC520 Variable Gain RF AMP IC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-23 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <81e0cunob1@nnrp1.deja.com>
Source record: 65407

In article <%fj_3.818$tk4.19863@typhoon-sf.snfc21.pbi.net>,
"Norman Gillaspie" <pcseng@pacbell.net> wrote:
> I am looking for a few pieces of a National Semiconductor
> CLC520 AGC IC.
>
> norman@pcseng.com
>
>

Contact Pioneer-Standarsd Electronics at www.pios.com
--
Greetings,

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Before you buy.

4342. Re: Need help about MC145158-2 Motorola PLL

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-23 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <81e123$o53$1@nnrp1.deja.com>
Source record: 65408

In article <38399AA9.6365833C@EUnet.yu>,
yu1ol@EUnet.YU (Bratislav Miljkovic) wrote:
> HI,
>
> I need pin assignment for MC 145158-2 (Motorola PLL) in 20 lead quad
> flatpack.
> There is no such package in document MC145151-2D (Motorola
semiconductor
> tehnical data).
>
> I have few of this devices (in 20 lead quad flatpack), but without pin
> assignment it's useless !
>
> TIA,
>
> B. Miljkovic 73 de yu1ol
>
>

Enter
http://www.mot-sps.com/products/rf_and_if/frequency_synthesis/pll_synthe
sizers/mc145158.html#

Click on 'Documentation' and on 'MC145151-2/D'. You will get much more
than the pinout: the complete datasheet on many MOTOROLA synthesizers
IC's. But you MUST have Adobe Acroread to read the .pdf file.
--
Greetings,

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Before you buy.

4343. Re: LOCKTAL SOCKETS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-23 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <81e1qdoka1@nnrp1.deja.com>
Source record: 65409

In article <2694-3839555D-7@storefull-122.bryant.webtv.net>,
dialcover@webtv.net (Bill Turner) wrote:
> I NEED SOME LOCKTAL SOCKETS, NEW OR USABLE, UP TO 25 OF THEM. CAN
> ANYBODY HELP?
>
> disregard caps, visual problem
> Bill Turner WA0ABI
> 1117 Pike Street
> Saint Charles, MO 63301
> 636-949-2210
>
>

Well, the correct name is Loctal instead of Locktal, but if you want 8
pins type, you will find them with Ocean State Electronics at
http://www.oselectronics.com/ose_p84.htm
See them on the sockets window.
--
Greetings,

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Before you buy.

4344. Re: Weekend SW receiver project

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-23 00:00:00 UTC
From: n2cqr@erols.com
Message-ID: <383ab55d.82583692@news.erols.com>
Source record: 65410

Very FB Juan! I've been listening to SW broadcast stations on my
regen, but your web page has convinced me to follow Armstrong's lead
and go superhet!
73 N2CQR Bill
http://www.erols.com/wmeara

On Mon, 22 Nov 1999 20:33:55 +0100, "Juan M. Perales"
<novalid@novalid.com> wrote:

>
>Last weekend I assembled ("ugly constructed") a SW AM superhet for 5 to 16
>MHz. It has a MOSFET mixer, two bipolar 455 KHz amplifiers, and audio IC
>amplifier, with LM386. It was a toy for my daughter, but works fine. With a
>6 meter long wire, it is possible to listen to many broadcast SW stations,
>with good selectivity and audio.
>The schematic is in my homepage:
>
>http://personales.mundivia.es/jmperales/ea6np.htm
>
>
>Juan M. Perales
>Mallorca Island, Spain
>
>
>
>
>
>
>

4345. Re: IC IF amp & detector for AM????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-23 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <81e3me$q1n$1@nnrp1.deja.com>
Source record: 65411

In article <81b4fmmqj1@newsource.ihug.co.nz>,
"Martin" <jalnz@ihug.co.nz> wrote:
> I'm building an aircraft receiver using the NE602 as the front end.
This
> goes really well- andI can feed into my communications receiver as the
front
> end. My question is: does anyone have a 'pet' linear IC for the IF amp
and
> detector? I could use a ZN414 or a MC1350P I guess, but is there
anything
> better out there for AM? (theres heaps of FM IC's but I am looking for
AM)
>
>

There are several.
For example:
From Philips: TDA1072A, TDA1572, TEA5551 and TEA6200
From Ferranti: ZN416
--
Greetings,

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Before you buy.

4346. Re: Weekend SW receiver project

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-23 00:00:00 UTC
From: kizerian@ced.utah.edu
Message-ID: <81e6md$s85$1@nnrp1.deja.com>
Source record: 65412

Excellent! Juan

What is the value of CV1?

73

Bruce kk7zz

Sent via Deja.com http://www.deja.com/
Before you buy.

4347. Re: home brew 40meter ssb/cw kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-23 00:00:00 UTC
From: bujiaj8@aol.com
Message-ID: <19991123072904.11235.00001117@ng-ca1.aol.com>
Source record: 65413

I would suggest the Oak Hills research 100. I have 1 of these 40 meter rigs and it does me an outstanding job on a homebrew dipole. Theere is an internet site for purchase... just search it out.

bill
kd5fxt

4348. Re: Wanted VHF communications article on DK1OF 2m Linear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-23 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <81ech2$138$1@nnrp1.deja.com>
Source record: 65414
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <943315643.16573.0.nnrp-07.9e98acde@news.demon.co.uk>,
"Martin John Hallsworth" <Martin@NOSPAMg1gyc.demon.co.uk> wrote:

> I am looking for a copy or even better a web site URL of the
> construction details of the DK1OF 2m 4CX250 linear amp
> I think it was published in VHF communications in the late
> 1970's (1977 ?)

"A 400 W Power Amplifier for 145 MHz Equipped with the 4CX250"
J. Kestler DK1OF, VHF Communications, 2/1978.

The index is on line at http://www.vhfcomm.co.uk (that's how
I found the article). Mike has lots of back issues available.
--
Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte
Satellite: VA3SFL on AO-16, UO-22, KO-23, KO-25

Sent via Deja.com http://www.deja.com/
Before you buy.

4349. FS Barcoder Scanners Symbol Co.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-23 00:00:00 UTC
From: tonys2@aol.com
Message-ID: <19991123093634.08990.00000930@ng-bh1.aol.com>
Source record: 65415

Symbole model 1720-I100A
10 ea Priced for quick turnover
Tony
Alex Va

4350. Re: Instant Lettering for Panels etc?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-23 00:00:00 UTC
From: jflanders2@home.com
Message-ID: <383aae72.3357071@news>
Source record: 65416

I would think their paints would work fine for labels, but I believe
you can squeegee any paint you want, once you have prepared the
stencil. In the instructions, they talk about using other things, like
acid to etch glass, etc.

Jerry W4UK (bought their stuff for tee-shirts, but haven't used it
yet).

BTW - Steve Jackson emailed me the following URL, which shows another
label system:

http://www.mich.com/~bjlavoie/decals.html

They advertise "Affordable Custom Made Decals For Your Electronic
Projects"

On Mon, 22 Nov 1999 16:52:49 -0700, "Jack Taylor" <n7oo@theriver.com>
wrote:

>Thanks Jerry, the link worked fine for me as well. However the paints they
>sell are for fabric. I've asked them if they have a recommendation for
>paints for hard surfaces but no response as of yet. They do provide a kit
>less paint, so it looks promising once we settle the paint for hard surfaces
>issue :-)
>
>73 de Jack
>
>Don W6JL wrote in message <3839A465.DA4@ixpres.com>...
>>Jerry Flanders wrote:
>>>
>>> For a silk-screen kit, see:
>>>
>>> http://www.cbridge.com/
>>>
>>> They sell a complete photographic stencil making kit. Basic kit has
>>> two 8x10 inch sheets of stencil material and everything needed to make
>>> stencils as well as paints for about $30.
>>>
>>> They are oriented toward selling to the crafts market, but the stencil
>>> wouldn't know whether it was silk-screening a tee shirt or a radio
>>> panel.
>>>
>>> Jerry W4UK
>>
>>Jerry OM,
>>

>> I tried that link, and it comes up not found. Are you sure it is
>>www.cbridge.com?
>>
>> TNX and 73,
>> Don, W6JL
>
>

4351. Re: Spice and Vacuum Tubes: long post!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-23 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <383AC74C.794B@eece.maine.edu>
Source record: 65417

maddog@io.com wrote:
>
> Are SPICE models for vacuum tubes available anywhere online?
>
> Has anybody experience with modeling tubes in SPICE?
>
> thanks,
> monty N5FC

I have no idea if this is of any help, but I downloaded this a while
back. Good luck.

****

Intusoft Vacuum Tube Models
Date: 2/98

Copyright © Intusoft 1998
Tel (310) 833-0710
Fax (310) 833-9658
e-mail: info@intusoft.com
World Wide Web site: http://www.intusoft.com

These models are part of the ICAP/4Windows Deluxe package which
currently
includes over 10,000 models and hundreds of different part types. With
regard to the number of part types, it is the largest library available
from ANY SPICE vendor!!

****
* Tube Subcircuit Application Notes
* For more info see the Intusoft Newsletter #18 August 1990, Newsletter
#34, Feb. 1994
* and Newsletter #35 April 1994.
*
****

SPICE Simulation Models
These SPICE simulation models may be used and distributed freely,
provided they are not altered in any way, resold, or included in
any other package for resale. In addition, the Intusoft copyright
notice MUST be maintained and included with any model distribution.

As a service to our customers, we provide a free modeling service.
If you are interested in obtaining additional models, please contact
Intusoft technical support.

ICAP/4 Windows Demonstration Software
The demonstration version of ICAP/4 Windows including IsSpice4 may be
downloaded from our Web site at no charge.
Also available for download are additional models, product and
ordering information, technical articles, and Intusoft Newsletters.

SpiceMod Modeling Software
SpiceMod is a CAE program that is used to create SPICE models from
data sheet values. SPICEMOD is particularly useful in the circuit
design phase because it allows the designer to create SPICE models
based on electrical specifications before an actual device is selected.
SpiceMod may be used to create models for diodes, Zener diodes, BJTs,
power BJTs, Darlington BJTs, JFETs, MOSFETs, power MOSFETs, IGBTs,
SCRs, and TRIACS.

****
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which the model relates. Moreover, these models are
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any kind, either expressed or implied, regarding the use
thereof and Intusoft specifically disclaims all implied
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any purpose. Intusoft does not assume any liability arising
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Although the use of macromodels can be a useful tool in evaluating
device performance in various applications, they cannot
model exact device performance under all conditions, nor are
they intended to replace breadboarding for final
verification.
****
*
* Some Tube Models (TRIO1/PENT1/HEAT1) created by
* EXCEM For the Intusoft Newsletter
* 12, Chemin des Hauts de Clairefontaine
* 78580 MAULE
* FRANCE
* tel 33 (1) 34 75 13 65
* fax 33 (1) 34 75 13 66
*
* Advertising corner: EXCEM provides worldwide services in the fields
of
* Electronics R&D, with focus on RF, theoretical and practical EMC,
* electronic simulations and DSP. We also represent INTUSOFT in France.
*

```
* Among other things we manufacture a high-voltage wide-band tube
* amplifier for driving high impedance loads (e.g. short E-field
antenna).
*
********************
*SYM=TRIODE1
.SUBCKT T12AU7A 1 2 3 4 5
* Anode Grid Cathode F F'
* COPYRIGHT EXCEM, 1993
*
X1 1 2 3 10 TRIO1 {SFS=0.7 VBIG=-0.9 VBIA=-1.3 MU=17 RMU=0.5 VMU=-20
SFMU=1.6
+ K=827E-6 RK=0.08 VK=-20 SFK=1.6 SIGMAG=0.05 ALPHAG=5.2 SFG=3.5}
*
X2 4 5 10 HEAT1 {INOM=0.15 VNOM=6.3 LAMBDA=1 RCOOL=3 TCTE=10 TNOM=1150
INIT=100
+ W=2.045 ISAT=0.099}
*
C2 1 2 1.5P
C3 3 1 0.5P
C4 2 3 1.6P
C5 3 4 4P
C6 3 5 4P
*
.ENDS
********************
*SYM=TRIODE1
.SUBCKT T12AU7A2 1 2 3 4 5
* Anode Grid Cathode F F'
* COPYRIGHT EXCEM, 1993 Triode without Heater Model
*
X1 1 2 3 10 TRIO1 {SFS=0.7 VBIG=-0.9 VBIA=-1.3 MU=17 RMU=0.5 VMU=-20
SFMU=1.6
+ K=827E-6 RK=0.08 VK=-20 SFK=1.6 SIGMAG=0.05 ALPHAG=5.2 SFG=3.5}
*
RF 4 5 42
VH 10 0 99m
*
C2 1 2 1.5P
C3 3 1 0.5P
C4 2 3 1.6P
C5 3 4 4P
C6 3 5 4P
*
.ENDS
********************
*SYM=PENTODE1
.SUBCKT EL9000 1 2 3 4 5 6
* Anode Grid2 Grid1 Cathode F F'
* COPYRIGHT EXCEM, 1993
```

```
*
X1 1 2 3 4 10 PENT1 {SFS=0.7 VBIG=-0.9 VBIA=-1.3 MUG2=17 MUA=15000
RMU=0.5
+ VMU=-20 SFMU=1.6 K=5.4E-3 RK=0.08 VK=-20 SFK=1.6 SIGMA1=0.05
+ ALPHA1=5.2 SFG1=3.5 SIGMA2=0.12 ALPHA2=0.06 SFG2=2.3 VCCR=0.58
SFVC=0.33}
*
X2 5 6 10 HEAT1 {INOM=0.15 VNOM=6.3 LAMBDA=1 RCOOL=3 TCTE=10 TNOM=1150
INIT=100
+ W=2.045 ISAT=0.690}
*
C2 1 2 1.5P
C3 3 1 0.5P
C4 2 3 1.6P
C5 3 4 4P
C6 3 5 4P
*
.ENDS
********************
*SYM=PENTODE1
.SUBCKT EL9000_2 1 2 3 4 5 6
* Anode Grid2 Grid1 Cathode F F'
* COPYRIGHT EXCEM, 1993
*
X1 1 2 3 4 10 PENT1 {SFS=0.7 VBIG=-0.9 VBIA=-1.3 MUG2=17 MUA=15000
RMU=0.5
+ VMU=-20 SFMU=1.6 K=5.4E-3 RK=0.08 VK=-20 SFK=1.6 SIGMA1=0.05
+ ALPHA1=5.2 SFG1=3.5 SIGMA2=0.12 ALPHA2=0.06 SFG2=2.3 VCCR=0.58
SFVC=0.33}
*
RF 5 6 42
VH 10 0 99m
*
C2 1 2 1.5P
C3 3 1 0.5P
C4 2 3 1.6P
C5 3 4 4P
C6 3 5 4P
*
.ENDS
********************
*SYM=TRIO1
.SUBCKT TRIO1 A G C ISAT
*
* COPYRIGHT EXCEM, 1993
*
* Forward and reverse conditions are treated in this triode model
* as well as saturation.
* The model describes only the static bahaviour of the triode, and
* neglects secondary emission (that would occur at high VG and low VA).
```

```
*
* THE TRIODE'S 14 PARAMETERS ARE:
*
* SFS shape factor of the saturation law.
* VBIG contact potential of the grid
* (the voltage above which grid may current start to flow).
* VBIA contact potential of the anode.
* MU amplification factor at slighly negative grid voltage.
* RMU reduction factor for MU at very negative grid voltage.
* VMU grid voltage for mid-range MU (negative).
* SFMU shape factor for MU reduction law.
* K perveance at slightly negative grid voltage.
* RK perveance reduction factor at very negative grid voltage.
* VK grid voltage for mid-range perveance (negative).
* SFK shape factor for perveance reduction law.
* SIGMAG effective cross-section of the grid relative to the anode.
* ALPHAG grid current amplification factor.
* SFG shape factor of the grid current law.
*
B1 15 0 V = V(G) - V(C) < -1P ?
+ {K} * (1+{RK} * ((V(G) - V(C)) / {VK})^{SFK}) / (1 + ((V(G) - V(C)) /
{VK})^{SFK}) : {K}
* V(15) is the effective perveance
B2 16 0 V = V(G) - V(C) < -1P ? {MU} * (1 + {RMU} * ((V(G) - V(C)) /
{VMU})^{SFMU}) /
+ (1 + ((V(G) - V(C)) / {VMU})^{SFMU}) : {MU}
* V(16) is the effective MU
B4 9 0 V = V(G) - V(C) - {VBIG} + (V(A) - V(C) - {VBIA}) / (V(16) + 1U)
B6 10 0 V = V(9) > 0 ? V(15) * V(9)^1.5 / (V(ISAT) + 1P) : 0
B7 12 0 V = V(10) < {SFS} ? V(10) * (V(ISAT) + 1P) :
+ (V(ISAT) + 1P) * ({SFS} + (V(10) - {SFS}) * {1-SFS} / ({1 - 2 * SFS} +
V(10)))
* B7 contains an arbitrary saturation law modeled by the shape factor
SFS
* to match the available data. SFS should be between 0 and 1. The
* lower SFS the sloppier the saturation law.
*
B8 14 0 V = V(A) - V(C) > {VBIA + 0.1M} ? (V(A) - V(C) - {VBIA}) /
{ALPHAG} : 2P
B9 28 0 V = V(G) - V(C) > {VBIG + 0.1M} ? V(14) > 1P ?
+ ((V(G) - V(C) - {VBIG} + {SIGMAG^(1/SFG)} * V(14)) / (V(G) - V(C) -
{VBIG} + V(14)))^{SFG} : 0
B10 8 0 V = V(G) - V(C) < 0 ? V(28) * (({VBIG+10U} + V(C) - V(G)) /
{VBIG+10U}) : V(28)
B15 G C I = V(8) * V(12)
B17 A C I = (1 - V(8)) * V(12)
.ENDS
********************
*SYM=PENT1
.SUBCKT PENT1 A G2 G1 C ISAT
```

```
*
* COPYRIGHT EXCEM, 1993
*
* Forward and reverse conditions are treated in this model
* as well as saturation.
* The model describes only the static bahaviour of the pentode, and
* neglects secondary emission. It is assumed that G2 is always very
* positive with respect to the cathode.
*
*
* THE PENTODE'S 20 PARAMETERS ARE:
*
* SFS shape factor of the saturation law.
* VBIG contact potential of the grid G1
* (the voltage above which grid current may start to flow).
* VBIA contact potential of the anode.
* MUG2 amplification factor for G2 at slighly negative G1
voltage.
* MUA amplification factor for A at slightly negative G1
voltage.
* RMU reduction factor for MU at very negative G1 voltage.
* VMU grid voltage for mid-range MU (negative).
* SFMU shape factor for MU reduction law.
* K perveance at slightly negative G1 voltage.
* RK perveance reduction factor at very negative G1 voltage.
* VK grid voltage for mid-range perveance (negative).
* SFK shape factor for perveance reduction law.
* SIGMA1 effective cross-section of G1 relative to the anode and
G2.
* ALPHA1 grid G1 current amplification factor.
* SFG1 shape factor of the grid G1 current law.
* SIGMA2 effective cross-section of G2 relative to the anode.
* ALPHA2 grid G2 current amplification factor.
* SFG2 shape factor of the grid G2 current law.
* VCCR virtual cathode current ratio.
* SFVC shape factor of the virtual cathode current law.
*
*
B1 15 0 V = V(G1) - V(C) < -1U ? {K} * (1 + {RK} *
+ ((V(G1) - V(C)) / {VK})^{SFK}) / (1 + ((V(G1) - V(C)) / {VK})^{SFK}) :
{K}
* V(15) is the effective perveance
B2 16 0 V = V(G1) - V(C) < -1U ? (1 + {RMU} * ((V(G1) - V(C)) /
{VMU})^{SFMU}) /
+ (1 + ((V(G1) - V(C)) / {VMU})^{SFMU}) : 1
* V(16) is the factor used to establish both effective MU coefficients
E1 17 0 16 0 {MUG2}
E2 18 0 16 0 {MUA}
* V(17) is the effective MUG2 and V(18) is the effective MUA
B4 9 0 V = V(G1) - V(C) - {VBIG} + (V(A) - V(C) - {VBIA}) / (V(18) + 1U)
```

```
+
+ (V(G2) - V(C)) / (V(17) + 1U)
B6 10 0 V = V(9) > 1P ? V(15) * V(9)^1.5 / (V(ISAT) + 1P) : 0
B7 12 0 V = V(10) < {SFS} ? V(10) * (V(ISAT) + 1P) :
+ (V(ISAT) + 1P) * ({SFS} + (V(10) - {SFS}) * {1-SFS} / ({1 - 2 * SFS} +
V(10)))
* B7 contains an arbitrary saturation law modeled by the shape factor
SFS
* to match the available (?) data. SFS should be between 0 and 1. The
* lower SFS the sloppier the saturation law.
*
B8 14 0 V = V(G2) - V(C) + {MUG2 / MUA} * (V(A) - V(C)) > 0.1M ?
+ V(G2) - V(C) + {MUG2 / MUA} * (V(A) - V(C)) / {ALPHA1} : 0.2M
B9 28 0 V = V(G1) - V(C) > {VBIG + 10U} ? V(14) > 0.1M ?
+ ((V(G1) - V(C) - {VBIG} + {SIGMA1^(1/SFG1)} *
+ V(14)) / (V(G1) - V(C) - {VBIG} + V(14)))^{SFG1} : 0
*
B10 8 0 V = V(G1) - V(C) < 0 ? V(28) * (({VBIG+10U} + V(C) - V(G1)) /
{VBIG+10U}) : V(28)
*
B11 21 0 V = V(A) - V(C) > {VBIA + 0.1M} ? (V(A) - V(C) - {VBIA}) /
{ALPHA2} : 0.2M
B12 32 0 V = V(G2) - V(C) > {VBIG+10U} ? V(21) > 0.1M ?
+ ((V(G2) - V(C) -{VBIG} + {SIGMA2^(1 / SFG2)} *
+ V(21)) / (V(G2) - V(C) -{VBIG} + V(21)))^{SFG2} : 0
*
B13 22 0 V = V(G2) - V(C) < 0 ? V(32) * (({VBIG+10U} + V(C) - V(G2)) /
{VBIG+10U}) : V(32)
*
B14 23 0 V = V(22) - {SIGMA2} > 1P ? V(12) * (1-{VCCR} * (V(22) -
{SIGMA2})^{SFVC}) : V(12)
* When the virtual cathode is present, this factor describes the
* decrease in cathode current (see Terman p. 192).
*
B15 G1 C I = V(8) * V(23)
R15 G1 C 100MEG
B16 G2 C I = (1 - V(8)) * V(22) * V(23)
R16 G2 C 100MEG
B17 A C I = (1 - V(8)) * (1 - V(22)) * V(23)
R17 A C 100MEG
*
.ENDS
******************
*SYM=HEAT1
.SUBCKT HEAT1 F F' ISAT
*
* COPYRIGHT EXCEM, 1993
*
* This model for the heater gives a voltage ISAT
* that is an analog for the saturation current of the cathode.
```

```
*
*
* THE HEATER'S 9 PARAMETERS ARE:
*
* INOM the nominal heater current, at nominal voltage.
* VNOM the nominal heater voltage (causing nominal temperature)
* LAMBDA temperature coefficient of the heater resistance.
* (normalized to the nominal temperature);
* RCOOL resistance of the cold heater.
* TCTE the time constant for the heater temperature.
* TNOM the nominal heater temperature in K.
* INIT initial heater temperature in % of TNOM.
* W work function of the heater, in eV.
* ISAT the saturation current at nominal heater voltage.
*
V1 F 4 0
R1 5 4 0.01
* Above the Debye temperature, the resistivity is nearly linear
* with respect to temperature, see Ashcroft & Mermin p. 525 and p 461.
B1 5 F' V = V(7) > 0 ? I(V1) * ({VNOM / INOM - RCOOL} * (1 + {LAMBDA} *
(V(7) - 1)) + {RCOOL})
+ : I(V1) * {VNOM / INOM}
* B1 delivers the power recieved by the heater
B2 6 0 V = (V(F) - V(F')) * I(V1) > 0 ? (V(F) - V(F')) * I(V1) / {VNOM *
INOM} : 1
R2 6 7 1
C1 7 0 {TCTE} IC = {INIT/100}
* Only conductive dissipation is considered. Therfore, V(7) is a
normalized temperature.
* B4 contains the Richardson-Duschman law, with an exponential
containing
* B = W/k, the Bolzmann's constant is 0.8617e-4 eV/K
* for Tungsten (see Ashcroft & Mermin p. 364) and W = 4.5 eV. It may
* be 2.2 times lower for an oxide-coated cathode (see Terman p. 173).
* B3 delivers the saturation current.
E1 13 0 7 0 {TNOM}
B3 ISAT 0 V = V(13) > 0 ?
+ {ISAT} * V(7)^2 * EXPL(({W/0.8417E-4} * (1 / {TNOM} - 1 / (V(13) +
1))),5) : {ISAT}
* The 1 Kelvin added to V(13) avoids convergence problems.
.ENDS
******************
*SRC=12AX7A;T12AX7A;Tubes;Simple;250V 1W Triode
*SYM=TRIODE
.SUBCKT T12AX7A 1 3 4
* Grid Plate Cathode
* One Half - High Mu Twin Triode, Similar to 12AX7-A
G1 6 4 POLY(2) 1 4 3 4
+ 0 1.1041M 11.041U 79.300U 1.5860U 7.9300N
Q1 3 4 6 NPN
```

```
.MODEL NPN NPN
D1 6 4 DIODE
.MODEL DIODE D
CGP 1 3 1.7000P
CIN 1 4 1.6000P
COUT 3 4 460.00F
R2 3 4 100MEG
.ENDS
**********

--
*********************************************
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
*********************************************

Intusoft Vacuum Tube Models
Date: 2/98

Copyright © Intusoft 1998
Tel (310) 833-0710
Fax (310) 833-9658
e-mail: info@intusoft.com
World Wide Web site: http://www.intusoft.com

These models are part of the ICAP/4Windows Deluxe package which currently
includes over 10,000 models and hundreds of different part types. With
regard to the number of part types, it is the largest library available
from ANY SPICE vendor!!

*************
* Tube Subcircuit Application Notes
* For more info see the Intusoft Newsletter #18 August 1990, Newsletter #34, Feb. 1994
* and Newsletter #35 April 1994.
*
*************

SPICE Simulation Models
These SPICE simulation models may be used and distributed freely,
provided they are not altered in any way, resold, or included in
any other package for resale. In addition, the Intusoft copyright
notice MUST be maintained and included with any model distribution.

As a service to our customers, we provide a free modeling service.
If you are interested in obtaining additional models, please contact
Intusoft technical support.

ICAP/4 Windows Demonstration Software
The demonstration version of ICAP/4 Windows including IsSpice4 may be
```

downloaded from our Web site at no charge.
Also available for download are additional models, product and
ordering information, technical articles, and Intusoft Newsletters.

SpiceMod Modeling Software
SpiceMod is a CAE program that is used to create SPICE models from
data sheet values. SPICEMOD is particularly useful in the circuit
design phase because it allows the designer to create SPICE models
based on electrical specifications before an actual device is selected.
SpiceMod may be used to create models for diodes, Zener diodes, BJTs,
power BJTs, Darlington BJTs, JFETs, MOSFETs, power MOSFETs, IGBTs,
SCRs, and TRIACS.

****
Macromodels, simulation models, or other models provided by
Intusoft, directly or indirectly, are not warranted by
Intusoft as fully representing all of the specifications and
operating characteristics of the semiconductor product to
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Although the use of macromodels can be a useful tool in evaluating
device performance in various applications, they cannot
model exact device performance under all conditions, nor are
they intended to replace breadboarding for final
verification.
****
*
* Some Tube Models (TRIO1/PENT1/HEAT1) created by
* EXCEM For the Intusoft Newsletter
* 12, Chemin des Hauts de Clairefontaine
* 78580 MAULE
* FRANCE
* tel 33 (1) 34 75 13 65
* fax 33 (1) 34 75 13 66
*
* Advertising corner: EXCEM provides worldwide services in the fields of
* Electronics R&D, with focus on RF, theoretical and practical EMC,
* electronic simulations and DSP. We also represent INTUSOFT in France.
*
* Among other things we manufacture a high-voltage wide-band tube
* amplifier for driving high impedance loads (e.g. short E-field antenna).

```
*
********************
*SYM=TRIODE1
.SUBCKT T12AU7A 1 2 3 4 5
* Anode Grid Cathode F F'
* COPYRIGHT EXCEM, 1993
*
X1 1 2 3 10 TRIO1 {SFS=0.7 VBIG=-0.9 VBIA=-1.3 MU=17 RMU=0.5 VMU=-20 SFMU=1.6
+ K=827E-6 RK=0.08 VK=-20 SFK=1.6 SIGMAG=0.05 ALPHAG=5.2 SFG=3.5}
*
X2 4 5 10 HEAT1 {INOM=0.15 VNOM=6.3 LAMBDA=1 RCOOL=3 TCTE=10 TNOM=1150 INIT=100
+ W=2.045 ISAT=0.099}
*
C2 1 2 1.5P
C3 3 1 0.5P
C4 2 3 1.6P
C5 3 4 4P
C6 3 5 4P
*
.ENDS
********************
*SYM=TRIODE1
.SUBCKT T12AU7A2 1 2 3 4 5
* Anode Grid Cathode F F'
* COPYRIGHT EXCEM, 1993 Triode without Heater Model
*
X1 1 2 3 10 TRIO1 {SFS=0.7 VBIG=-0.9 VBIA=-1.3 MU=17 RMU=0.5 VMU=-20 SFMU=1.6
+ K=827E-6 RK=0.08 VK=-20 SFK=1.6 SIGMAG=0.05 ALPHAG=5.2 SFG=3.5}
*
RF 4 5 42
VH 10 0 99m
*
C2 1 2 1.5P
C3 3 1 0.5P
C4 2 3 1.6P
C5 3 4 4P
C6 3 5 4P
*
.ENDS
********************
*SYM=PENTODE1
.SUBCKT EL9000 1 2 3 4 5 6
* Anode Grid2 Grid1 Cathode F F'
* COPYRIGHT EXCEM, 1993
*
X1 1 2 3 4 10 PENT1 {SFS=0.7 VBIG=-0.9 VBIA=-1.3 MUG2=17 MUA=15000 RMU=0.5
+ VMU=-20 SFMU=1.6 K=5.4E-3 RK=0.08 VK=-20 SFK=1.6 SIGMA1=0.05
+ ALPHA1=5.2 SFG1=3.5 SIGMA2=0.12 ALPHA2=0.06 SFG2=2.3 VCCR=0.58 SFVC=0.33}
*
X2 5 6 10 HEAT1 {INOM=0.15 VNOM=6.3 LAMBDA=1 RCOOL=3 TCTE=10 TNOM=1150 INIT=100
```

```
+ W=2.045 ISAT=0.690}
*
C2 1 2 1.5P
C3 3 1 0.5P
C4 2 3 1.6P
C5 3 4 4P
C6 3 5 4P
*
.ENDS
********************
*SYM=PENTODE1
.SUBCKT EL9000_2 1 2 3 4 5 6
* Anode Grid2 Grid1 Cathode F F'
* COPYRIGHT EXCEM, 1993
*
X1 1 2 3 4 10 PENT1 {SFS=0.7 VBIG=-0.9 VBIA=-1.3 MUG2=17 MUA=15000 RMU=0.5
+ VMU=-20 SFMU=1.6 K=5.4E-3 RK=0.08 VK=-20 SFK=1.6 SIGMA1=0.05
+ ALPHA1=5.2 SFG1=3.5 SIGMA2=0.12 ALPHA2=0.06 SFG2=2.3 VCCR=0.58 SFVC=0.33}
*
RF 5 6 42
VH 10 0 99m
*
C2 1 2 1.5P
C3 3 1 0.5P
C4 2 3 1.6P
C5 3 4 4P
C6 3 5 4P
*
.ENDS
********************
*SYM=TRIO1
.SUBCKT TRIO1 A G C ISAT
*
* COPYRIGHT EXCEM, 1993
*
* Forward and reverse conditions are treated in this triode model
* as well as saturation.
* The model describes only the static bahaviour of the triode, and
* neglects secondary emission (that would occur at high VG and low VA).
*
* THE TRIODE'S 14 PARAMETERS ARE:
*
* SFS shape factor of the saturation law.
* VBIG contact potential of the grid
* (the voltage above which grid may current start to flow).
* VBIA contact potential of the anode.
* MU amplification factor at slighly negative grid voltage.
* RMU reduction factor for MU at very negative grid voltage.
* VMU grid voltage for mid-range MU (negative).
* SFMU shape factor for MU reduction law.
```

```
* K perveance at slightly negative grid voltage.
* RK perveance reduction factor at very negative grid voltage.
* VK grid voltage for mid-range perveance (negative).
* SFK shape factor for perveance reduction law.
* SIGMAG effective cross-section of the grid relative to the anode.
* ALPHAG grid current amplification factor.
* SFG shape factor of the grid current law.
*
B1 15 0 V = V(G) - V(C) < -1P ?
+ {K} * (1+{RK} * ((V(G) - V(C)) / {VK})^{SFK}) / (1 + ((V(G) - V(C)) / {VK})^{SFK}) : {K}
* V(15) is the effective perveance
B2 16 0 V = V(G) - V(C) < -1P ? {MU} * (1 + {RMU} * ((V(G) - V(C)) / {VMU})^{SFMU}) /
+ (1 + ((V(G) - V(C)) / {VMU})^{SFMU}) : {MU}
* V(16) is the effective MU
B4 9 0 V = V(G) - V(C) - {VBIG} + (V(A) - V(C) - {VBIA}) / (V(16) + 1U)
B6 10 0 V = V(9) > 0 ? V(15) * V(9)^1.5 / (V(ISAT) + 1P) : 0
B7 12 0 V = V(10) < {SFS} ? V(10) * (V(ISAT) + 1P) :
+ (V(ISAT) + 1P) * ({SFS} + (V(10) - {SFS}) * {1-SFS} / ({1 - 2 * SFS} + V(10)))
* B7 contains an arbitrary saturation law modeled by the shape factor SFS
* to match the available data. SFS should be between 0 and 1. The
* lower SFS the sloppier the saturation law.
*
B8 14 0 V = V(A) - V(C) > {VBIA + 0.1M} ? (V(A) - V(C) - {VBIA}) / {ALPHAG} : 2P
B9 28 0 V = V(G) - V(C) > {VBIG + 0.1M} ? V(14) > 1P ?
+ ((V(G) - V(C) - {VBIG} + {SIGMAG^(1/SFG)} * V(14)) / (V(G) - V(C) - {VBIG} +
V(14)))^{SFG} : 0
B10 8 0 V = V(G) - V(C) < 0 ? V(28) * (({VBIG+10U} + V(C) - V(G)) / {VBIG+10U}) : V(28)
B15 G C I = V(8) * V(12)
B17 A C I = (1 - V(8)) * V(12)
.ENDS
********************
*SYM=PENT1
.SUBCKT PENT1 A G2 G1 C ISAT
*
* COPYRIGHT EXCEM, 1993
*
* Forward and reverse conditions are treated in this model
* as well as saturation.
* The model describes only the static bahaviour of the pentode, and
* neglects secondary emission. It is assumed that G2 is always very
* positive with respect to the cathode.
*
*
* THE PENTODE'S 20 PARAMETERS ARE:
*
* SFS shape factor of the saturation law.
* VBIG contact potential of the grid G1
* (the voltage above which grid current may start to flow).
* VBIA contact potential of the anode.
* MUG2 amplification factor for G2 at slighly negative G1 voltage.
```

```
* MUA amplification factor for A at slightly negative G1 voltage.
* RMU reduction factor for MU at very negative G1 voltage.
* VMU grid voltage for mid-range MU (negative).
* SFMU shape factor for MU reduction law.
* K perveance at slightly negative G1 voltage.
* RK perveance reduction factor at very negative G1 voltage.
* VK grid voltage for mid-range perveance (negative).
* SFK shape factor for perveance reduction law.
* SIGMA1 effective cross-section of G1 relative to the anode and G2.
* ALPHA1 grid G1 current amplification factor.
* SFG1 shape factor of the grid G1 current law.
* SIGMA2 effective cross-section of G2 relative to the anode.
* ALPHA2 grid G2 current amplification factor.
* SFG2 shape factor of the grid G2 current law.
* VCCR virtual cathode current ratio.
* SFVC shape factor of the virtual cathode current law.
*
*
B1 15 0 V = V(G1) - V(C) < -1U ? {K} * (1 + {RK} *
+ ((V(G1) - V(C)) / {VK})^{SFK}) / (1 + ((V(G1) - V(C)) / {VK})^{SFK}) : {K}
* V(15) is the effective perveance
B2 16 0 V = V(G1) - V(C) < -1U ? (1 + {RMU} * ((V(G1) - V(C)) / {VMU})^{SFMU}) /
+ (1 + ((V(G1) - V(C)) / {VMU})^{SFMU}) : 1
* V(16) is the factor used to establish both effective MU coefficients
E1 17 0 16 0 {MUG2}
E2 18 0 16 0 {MUA}
* V(17) is the effective MUG2 and V(18) is the effective MUA
B4 9 0 V = V(G1) - V(C) - {VBIG} + (V(A) - V(C) - {VBIA}) / (V(18) + 1U) +
+ (V(G2) - V(C)) / (V(17) + 1U)
B6 10 0 V = V(9) > 1P ? V(15) * V(9)^1.5 / (V(ISAT) + 1P) : 0
B7 12 0 V = V(10) < {SFS} ? V(10) * (V(ISAT) + 1P) :
+ (V(ISAT) + 1P) * ({SFS} + (V(10) - {SFS}) * {1-SFS} / ({1 - 2 * SFS} + V(10)))
* B7 contains an arbitrary saturation law modeled by the shape factor SFS
* to match the available (?) data. SFS should be between 0 and 1. The
* lower SFS the sloppier the saturation law.
*
B8 14 0 V = V(G2) - V(C) + {MUG2 / MUA} * (V(A) - V(C)) > 0.1M ?
+ V(G2) - V(C) + {MUG2 / MUA} * (V(A) - V(C)) / {ALPHA1} : 0.2M
B9 28 0 V = V(G1) - V(C) > {VBIG + 10U} ? V(14) > 0.1M ?
+ ((V(G1) - V(C) - {VBIG} + {SIGMA1^(1/SFG1)} *
+ V(14)) / (V(G1) - V(C) - {VBIG} + V(14)))^{SFG1} : 0
*
B10 8 0 V = V(G1) - V(C) < 0 ? V(28) * (({VBIG+10U} + V(C) - V(G1)) / {VBIG+10U}) : V(28)
*
B11 21 0 V = V(A) - V(C) > {VBIA + 0.1M} ? (V(A) - V(C) - {VBIA}) / {ALPHA2} : 0.2M
B12 32 0 V = V(G2) - V(C) > {VBIG+10U} ? V(21) > 0.1M ?
+ ((V(G2) - V(C) -{VBIG} + {SIGMA2^(1 / SFG2)} *
+ V(21)) / (V(G2) - V(C) -{VBIG} + V(21)))^{SFG2} : 0
*
B13 22 0 V = V(G2) - V(C) < 0 ? V(32) * (({VBIG+10U} + V(C) - V(G2)) / {VBIG+10U}) : V(32)
```

```
*
B14 23 0 V = V(22) - {SIGMA2} > 1P ? V(12) * (1-{VCCR} * (V(22) - {SIGMA2})^{SFVC}) : V(12)
* When the virtual cathode is present, this factor describes the
* decrease in cathode current (see Terman p. 192).
*
B15 G1 C I = V(8) * V(23)
R15 G1 C 100MEG
B16 G2 C I = (1 - V(8)) * V(22) * V(23)
R16 G2 C 100MEG
B17 A C I = (1 - V(8)) * (1 - V(22)) * V(23)
R17 A C 100MEG
*
.ENDS
********************
*SYM=HEAT1
.SUBCKT HEAT1 F F' ISAT
*
* COPYRIGHT EXCEM, 1993
*
* This model for the heater gives a voltage ISAT
* that is an analog for the saturation current of the cathode.
*
*
* THE HEATER'S 9 PARAMETERS ARE:
*
* INOM the nominal heater current, at nominal voltage.
* VNOM the nominal heater voltage (causing nominal temperature)
* LAMBDA temperature coefficient of the heater resistance.
* (normalized to the nominal temperature);
* RCOOL resistance of the cold heater.
* TCTE the time constant for the heater temperature.
* TNOM the nominal heater temperature in K.
* INIT initial heater temperature in % of TNOM.
* W work function of the heater, in eV.
* ISAT the saturation current at nominal heater voltage.
*
V1 F 4 0
R1 5 4 0.01
* Above the Debye temperature, the resistivity is nearly linear
* with respect to temperature, see Ashcroft & Mermin p. 525 and p 461.
B1 5 F' V = V(7) > 0 ? I(V1) * ({VNOM / INOM - RCOOL} * (1 + {LAMBDA} * (V(7) - 1)) +
{RCOOL})
+ : I(V1) * {VNOM / INOM}
* B1 delivers the power recieved by the heater
B2 6 0 V = (V(F) - V(F')) * I(V1) > 0 ? (V(F) - V(F')) * I(V1) / {VNOM * INOM} : 1
R2 6 7 1
C1 7 0 {TCTE} IC = {INIT/100}
* Only conductive dissipation is considered. Therfore, V(7) is a normalized temperature.
* B4 contains the Richardson-Duschman law, with an exponential containing
* B = W/k, the Bolzmann's constant is 0.8617e-4 eV/K
```

```
* for Tungsten (see Ashcroft & Mermin p. 364) and W = 4.5 eV. It may
* be 2.2 times lower for an oxide-coated cathode (see Terman p. 173).
* B3 delivers the saturation current.
E1 13 0 7 0 {TNOM}
B3 ISAT 0 V = V(13) > 0 ?
+ {ISAT} * V(7)^2 * EXPL(({W/0.8417E-4} * (1 / {TNOM} - 1 / (V(13) + 1))),5) : {ISAT}
* The 1 Kelvin added to V(13) avoids convergence problems.
.ENDS
******************
*SRC=12AX7A;T12AX7A;Tubes;Simple;250V 1W Triode
*SYM=TRIODE
.SUBCKT T12AX7A 1 3 4
* Grid Plate Cathode
* One Half - High Mu Twin Triode, Similar to 12AX7-A
G1 6 4 POLY(2) 1 4 3 4
+ 0 1.1041M 11.041U 79.300U 1.5860U 7.9300N
Q1 3 4 6 NPN
.MODEL NPN NPN
D1 6 4 DIODE
.MODEL DIODE D
CGP 1 3 1.7000P
CIN 1 4 1.6000P
COUT 3 4 460.00F
R2 3 4 100MEG
.ENDS
**********
```

4352. FS: MMICS, RF comps. revised (long)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-23 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <383AC8C6.403D@pop.valley.net>
Source record: 65418

Hello-- Revised 11/23/99

I'm offering homebrew builders oddball, offbeat and hard-to-find NOS RF components, including...
***
Hewlett-Packard MSA-0786 MMICs ($1.00 each, $5.00 for 6, $10.00 for 15, or $25.00 for 50 pieces); DC-2 GHz. These are taped and reeled and have leads configured for surface-mounted applications. Specs are available at...
http://www.hp.com/HP-COMP/index.html
***
1N5711 Schottky diodes, full-length leads, taped and reeled, $1.00 for 10
pieces
***
1N5821 Schottky rectifiers, full-length leads, bulk packed, $1.00 for 8 pieces
***
PIN diodes, no other specs available; full-length axial-leaded packages; individually serialized in sealed-foil envelopes. $1.00 each.
***
JAN 1N748A Zener diodes: individually sealed in mil-spec foil packets for your protection<g> in 1983.
$1.00 for 6 pieces.
***
Minicircuits T4-1 (4:1 ratio) broadband RF transformers-- $1.00 for 3; DIP-packaged. Visit www.minicircuits.com for full specs via their catalog.
***
Minicircuits PSCQ-2-400 90-degree, 2-way power divider, 0.9 dB insertion loss, 225-400 MHz; $1.00 each
***
Fair-Rite cores (both type 43 mix):

2643023002 (a long-cored toroid) $1.00 for 10 pieces
2843002402 (binocular (balun) core) $1.00 for 20 pieces
***
Coilcraft p/n 142-07J08 single-winding adjustable inductors.
330 nH min./ 378 nH nom. /427 nH max.; 307 nH with tuning slug removed. Q is 112 min. at 40 MHz; 7.5 turn winding on 10 mm molded form.

$1.00 for 5 pieces; $5.00 for 35 pieces.
***
SD-201 Signetics DC-2 GHz DMOS single-gate FETs four-lead TO-72 can

(like TO-18 w/shield lead). A conductive-rubber antistatic "O" ring
encircles
all four leads. Specs (available on request and with purchase) include
S parameter plots. $1.00 each, $3.00 for 6, $5.00 for 12 pieces.
***
TN-2219A National Semiconductor NPN general-purpose NPN transistor:
100 < hFE < 300 at Ic= 150 mA; BVcbo = 75 V min.; BVceo = 40 V min.;
Icbo = 10 nA max. at Vcb= 60 V; Cob = 8 pf max.; Ft = 60 MHz min.
at Ic = 20 mA. NF 4 dB (max.)
In TO-237 metal-tabbed plastic package (similar to TO-92); this package
reduces thermal resistance from 125 C per watt for a TO-92 to 50 C per
watt for the TO-237.
Ideal for building a QRP rig around a single device!
$1.00 for 20 pieces; $5.00 for 120 pieces
***
SAW-stabilized oscillators; intended for ECL circuits, but also
reportedly usable as LOs. All are packaged in metal DIP cans.
$4.00 each, or three assorted for $10.00

Frequencies available are:
222.222 MHz (RF Monolithics HC1279; proprietary p/n marking)
350.000 MHZ (RF Monolithics HC1301)
366.667 MHz
400.000 MHz ($2.00 ea. but not NOS; removed from PC boards)
733.333 MHz
***
Also, I have Teflon- and diallyl-pthalate insulated single-point turret
lugs at $12.00 per 100 (many styles available-- e-mail a request for
information and a jpg image showing various types).
***
Feedthrough capacitors: Spectrum Control 100 pf nominal (threaded
bushing mount, hardware included). Attenuation is specified as
-10 dB at 300 MHz, and -20 dB at 1 GHz.
$.50 each, $1.00 for 3 pieces.
***
Trimmer capacitors(USED and ABUSED): Johanson upright PC mount, 2-15 pf
multiturn piston capacitor. A drop of brown Glyptal varnish secures each
capacitor's adjustment screw. A dab of Zip-Strip (a methylene chloride-
based paint remover available in hardware stores) softens the Glyptal,
allowing readjustment. Some solder residue is present on terminals,
and on some trimmers a through-hole solder tab may be missing. Price:
$1.00 for 10 pieces; $2.00 for 25 pieces
***
Air-variable capacitors manufactured by Cardwell (their part no.
PL6348).
NOS surplus, m'fd. sometime in the 1950s.
--Configuration: consists of two plates separated by 0.1";
--Estimated capacitance range: 1-5 pf.
The adjustment shaft is 0.25" dia. by 0.5 inches long; bushing or
isolated mounting; easily disassembled for capacitance vs. frequency

modification, etc. A more-detailed description is available on request.

Price: $3.00 each, $10.00 for 5 pieces, $20.00 for 12 pieces.
***
Caddock MS281N NONINDUCTIVE resistors:

10 ohm +/- 5 per cent tolerance, 8 watt noninductive power film resistors
Tinned axial leads (0.75 inches long) are formed for PC-board insertion on 1.2-inch centers. These are NOS, bulk-packed parts.
Note: these measure well within tolerance at +/- 0.2 ohms typical. Full specs are available in PDF format on Caddock's web site (www.caddock.com)
but highlights are:
--Temperature coefficient of resistance: 50 ppm;
--Power rating: 8 watts at 25 C, derating to 4 watts at 150 C and 0 watts at 275 C;
--Noninductive design: serpentine film layout cancels magnetic field-equivalent inductance of a straight piece of wire of the resistor's body plus lead length.

Applications include:
--Current sampling;
--Cathode bias;
--Dummy loads for audio and RF applications.

Price: $1.00 each ($10.00 for 12 pieces); only 70 pieces available
****
Six-lug terminal strips, like Keystone p/n 825: six isolated, tinned steel lugs mounted on a brown phenolic insulating strip, arranged in groups of three on either side of a central mounting bracket. There's no center grounding lug, but you can add a jumper to an adjacent lug or two as required. Tie-point strips work well for breadboarding if you use unetched-copper PC board laminate as a ground plane.

The lugs are spaced on 0.375-inch centers; mounting bracket has a 0.140-inch hole (use a 6-32 screw for chassis mounting).

I've sold thousands of these, but my supply is running low. Buy a batch now before they all go to good homes<g>. ***DEFINITELY THE LAST CALL! ONLY A FEW HUNDRED REMAIN***

Prices: $.15 each, or $6.00 per 50 pieces, $10.00 per 100 pieces.

****
* NOS Warranty policy *
****
Scanned images or digital photos of components are available on request.

If you purchase NOS tubes or components and find them unsatisfactory upon your inspection, notify me within seven days and return items in as-received condition for a full refund or replacement (if available).

This material is subject to prior sale and is supplied as-is, as
new-old-stock (NOS) merchandise, with all responsibility for safe and
successful application residing solely with the purchaser.

If you're searching for oddball components of any vintage, don't
hesitate to inquire about availability.

****
* Shipping per order: *
****
Postage:

Add $3.20 for priority-mail shipment (U.S. only).
Foreign purchasers: please inquire for shipping charges.

Please contact me to confirm availability and reserve components before
sending payments.

I accept payment via personal or cashier's check or money order drawn in
U.S. dollars and made payable to "Brad Thompson".

**************************Available from:**********************
Brad Thompson, AA1IP
P.O. Box 307, 202 Whitaker Rd.
Meriden, NH 03770-0307
Voice:(603) 469-3351
Fax: (603) 469-3917
E-mail: brad.thompson@valley.net

4353. FS:Lowe HF-225 Rx.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-23 00:00:00 UTC
From: John <john@mm1dsp.freeserve.co.uk>
Message-ID: <81enkv$bh0$2@news7.svr.pol.co.uk>
Source record: 65419

Hello Everyone,

I'm selling my Lowe HF-225 fitted with the following options,

D-225 FM detector/ AM sync board.
W-225 Antenna pre-amp and telescopic whip antenna.
K-225 Remote data entry keypad.
B-225 Internal NiCad battery pack.

Complete with power supply and handbook, all in mint condition.
£225 to include UK delivery.

Please reply direct to john@mm1dsp.freeserve.co.uk

Many thanks and all the very best.
John.

4354. emtech output transistor.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-23 00:00:00 UTC
From: Ralph Blach <rcblach@raleigh.ibm.com>
Message-ID: <383AE729.6CC9F042@raleigh.ibm.com>
Source record: 65420

Hi,

I have a version of the emtech nw40. The output transistor has blown
and I have
lost the schematic. Does anybody out there have a schematic of this
rig and can they give me the part number of the output transistor.

This would be a big help

Please post the reply to this forum or send it to
rblach@intrex.net

Chip

4355. Re: Instant Lettering for Panels etc?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-23 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <383AF046.6224@ixpres.com>
Source record: 65421

Jerry Flanders wrote:
>
> The exact link I posted works for me, Don. Brings up PhotoEZ Stencil
> page from that company.
>
> Jerry W4UK
>
Jerry OM,

TNX, it works today, but not yesterday, go figure..

73,
Don

4356. Yaesu FT-207R Replacement Speaker wanted.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-23 00:00:00 UTC
From: "Randy E. Randall" <randy_randall@hotmail.com>
Message-ID: <s3lu8jj3rrp57@corp.supernews.com>
Source record: 65422
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

Hi. I am searching for a replacement speaker for my 207. It is 2" (5cm) in diameter and has a VERY flat magnet structure on the back of the speaker basket and is 8 ohm .5 watt. Do you know where I can get one or do you have one? I would like to get a nos or new equiv. as most of the used ones out there will be damaged or overdriven. Help!

Thanks,
Randy KB8ASO

4357. Re: Wanted VHF communications article on DK1OF 2m Linear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-23 00:00:00 UTC
From: Baz <baz@g4iat.demon.co.uk>
Message-ID: <ant232118b49nGS$@g4iat.demon.co.uk>
Source record: 65423
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

In article <943315643.16573.0.nnrp-07.9e98acde@news.demon.co.uk>,
Martin John Hallsworth <URL:mailto:Martin@g1gyc.demon.co.uk> wrote:
> Hello and thanks for looking at this,
>
> I am looking for a copy or even better a web site URL of the
> construction details of the DK1OF 2m 4CX250 linear amp
> I think it was published in VHF communications in the late
> 1970's (1977 ?)

Issue 2 1978. I have a copy infront of me now (in English)

Looking at the diagrams and photos, I hope you've got good
engineering facilities :-)

I would guess that it is out of print by now and the publishers
would not object to me making a copy.

14 A5 sides = 7 A4 copies.

(I've checked later issues for any errors/corrections/modifications
to the article, but there don't seem to be any)

Email me if you would like me to copy it for you.

Regards

Barry
--

4358. Re: IC IF amp & detector for AM????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-23 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <383aede8.426891379@news.online.no>
Source record: 65424

On Tue, 23 Nov 1999 13:09:37 GMT, PY1LL@my-deja.com wrote:

>In article "Martin" <jalnz@ihug.co.NZ> wrote:

>> I'm building an aircraft receiver using the NE602 as the front end.
>>This goes really well- andI can feed into my communications receiver as the
>>front-end. My question is: does anyone have a 'pet' linear IC for the IF amp
>>and detector? I could use a ZN414 or a MC1350P I guess, but is there
>>anything better out there for AM? (theres heaps of FM IC's but I am looking for AM)
>>

>There are several.
>For example:
>From Philips: TDA1072A, TDA1572, TEA5551 and TEA6200
>From Ferranti: ZN416
-
with NE604/614 (MC1351P, SN76660N or similar) as AM detector you only
need few millivolts IF output, might save 40-50dB IF gain and have
much improved audio quality, even for faded signals

73 Jan-Martin LA8AK

4359. Re: KVG filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-23 00:00:00 UTC
From: mnewman@clear.net.nz
Message-ID: <383b1cf8.11596638@news.clear.net.nz>
Source record: 65425

On Mon, 15 Nov 1999 21:54:13 -0800, "Al Lorona" <alforo@megsinet.net>
wrote:

>What is the in/out terminating impedance of a KVG XF-9nb KVG crystal
>filter?
>
>Tnx, AL alforo@megsinet.net
>
>
KVG's advertisement in VHF Communications 2/1983 gives the following
info on the XF-9NB

6db BW 500 Hz
8 crystals
Shape factor 60db:6db 2.2
Termination 500ohms || 30pF

Mike zl1bnb

4360. Re: IC IF amp & detector for AM????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-23 00:00:00 UTC
From: NANCY GIANAKOPOULOS <n.gianakopoulos@worldnet.att.net>
Message-ID: <81fdc0$873$1@bgtnsc02.worldnet.att.net>
Source record: 65426

The Signetics TDA-1072 or the TDA-1572 are great chips. These devices have on board AGC and demodulation. I use only the IF and demod portions of these chips; there is no problem using them with a '602. You can run the 602 directly into a ceramic filter such as a Murata CFWS-455H, and them into the IF input of the Signetics chips. I have used these devices in my latest radio designs, and they are good performers. The main difference between the TDA-1072 and the TDA-1572 is that the 1572 has a buffered 50 ohm IF output, suitable for driving a product detector. If you use an NE-602 as a product detector, a series R of 24K is about right. If anybody has any questions about these chips, feel free to give me a shout.

Pete Gianakopoulos
Cedar Rapids, Iowa

Martin <jalnz@ihug.co.nz> wrote in message
news:81b4fmmqj1@newsource.ihug.co.nz...
> I'm building an aircraft receiver using the NE602 as the front end. This
> goes really well- andI can feed into my communications receiver as the
front
> end. My question is: does anyone have a 'pet' linear IC for the IF amp and
> detector? I could use a ZN414 or a MC1350P I guess, but is there anything
> better out there for AM? (theres heaps of FM IC's but I am looking for AM)
>
>
>
>

4361. Tubes FA on Ebay by ATSI tubeman.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-23 00:00:00 UTC
From: KEN CHAIT <atsi@herald.infi.net>
Message-ID: <383B4BFC.439D7060@herald.infi.net>
Source record: 65427
Cross-posted to: rec.audio.marketplace,rec.audio.tubes,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap, alt.radio,rec.antiques.radio+phono,rec.audio.pro

http://cgi3.ebay.com/aw-cgi/eBayISAPI.dll?Viewhttp://cgi3.ebay.com/aw-cgi/eBayISAPI.dll?ViewListedItems&userid=atsitubeman&completed=0&sort=0&since=-1

4362. RE: Weekend SW receiver project

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-23 00:00:00 UTC
From: "Juan M. Perales" <novalid@novalid.com>
Message-ID: <81em0hspg1@diana.bcn.ttd.net>
Source record: 65428

Bruce:

CV1 is a two sections surplus variable capacitor for AM receivers. I think is about 400 or 450 pF max.

73

Juan, EA6NP

4363. Re: 1N295 Substitutes?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-24 00:00:00 UTC
From: jimvalin@aol.com
Message-ID: <19991124173758.08144.00000036@ng-fl1.aol.com>
Source record: 65343

>If that's germanium, use a 1N34 or a 1N270.
>

Thanks Bob...

My Allied and DigiKey catalogs don't list those either. Can you suggest a bulk source (I've got other components to buy and would just add those to the list).

73s de K4ZDZ

4364. Re: 1N295 Substitutes?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-24 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <383C61EE.541@pop.removethistomailme.net>
Source record: 65344

Jim Valin wrote:
>
> >1N295
> >Ger.
> >Signal Diode
> >40 PRV
> >
>
> Thanks Tom...
>
> Neither my Allied or Digi-Key catalogs list this. I'd like to buy about a dozen
> or so. Who carries them in bulk?
>
> 73s de K4ZDZ

Radio Shack used to sell 1N34 germanium diodes in a "10-for-$1.98"
blister pack. You might have a look in their catalog or web site.

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

4365. Re: Wanted VHF communications article on DK1OF 2m Linear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-24 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <383c6702.523444023@news.online.no>
Source record: 65345
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

On Wed, 24 Nov 1999 08:19:25 +0000, Simon Lewis
<slewis@pacsat.demon.co.uk> wrote:

>In article <943315643.16573.0.nnrp-07.9e98acde@news.demon.co.uk>, Martin
>John Hallsworth <Martin@g1gyc.demon.co.uk> writes
>>Hello and thanks for looking at this,
>>
>>I am looking for a copy or even better a web site URL of the
>>construction details of the DK1OF 2m 4CX250 linear amp
>>I think it was published in VHF communications in the late
>>1970's (1977 ?)
>
>If you're looking to build a linear - may I suggest the W1SL in the
>VHF/UHF DX Book. A good design, reproducible and very stable.
>
>73 Simon GM4PLM

My VHF/UHF dx books shows K2RIW amplifier, believe the main difference
to other designs for DK1OF type is the coupling capacitor at anode
side, perhaps some difficulties in obtaining this capacitor? Please
advice me if I am wrong.

73 jan-martin LA8AK

4366. FS: Books, Tubes & misc. stuff, low prices

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-24 00:00:00 UTC
From: MURRAY PASTERNACK <M.PASTERNACK@prodigy.net>
Message-ID: <81hvkh$4rgk$1@newssvr03-int.news.prodigy.com>
Source record: 65346
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Please e-mail to w6krc@arrl.net to receive my 10 page list. Murray

4367. Re: Instant Lettering for Panels etc?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-24 00:00:00 UTC
From: sparksw4eas@mindspring.com
Message-ID: <81i0k9$1jg$1@nntp9.atl.mindspring.net>
Source record: 65347

It IS Leroy... :-)

Clifton T. Sharp Jr. wrote in message <383C4F11.7D680B26@corecomm.net>...
>Donald R Montgomery wrote:
>> How many of you know what the Leroy lettering system was? Am I
>> dating myself? You old engineers and draftspeople can check out:
>> http://www.cadinfo.net/editorial/grow_old.htm
>
>Without looking, do you mean LeCroy?
>
>--
>+-+
-+-+
>| Cliff Sharp | "light jazz" is to jazz as "rubber band" is to
orchestra. |
>| WA9PDM |
|
>+-+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

4368. FS filament trans

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-24 00:00:00 UTC
From: Matt Erickson <kk5dr@hotmail.com>
Message-ID: <383C92A7.7DA730BD@hotmail.com>
Source record: 65348

```
7.5vac @ 21A. with CT, 2500v Hi pot test, 120/240vac pri.
$50 shipped
```

4369. FS vac relays

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-24 00:00:00 UTC
From: Matt Erickson <kk5dr@hotmail.com>
Message-ID: <383C9300.98E631F1@hotmail.com>
Source record: 65349

(2) Kilovac KM-14/S8 dpdt, 12kv peak, 5.5kv wvdc, 10A. contacts
12vdc coils.
As new $100 ea. shipped

4370. WTB vac vari cap

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-24 00:00:00 UTC
From: Matt Erickson <kk5dr@hotmail.com>
Message-ID: <383C932C.DC6A6770@hotmail.com>
Source record: 65350

needed 2000pf @ 3kv , screw type drive.

4371. CK722

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-24 00:00:00 UTC
From: Darrell Lang <loqutis@swbell.net>
Message-ID: <383CB6EF.84B4AC73@swbell.net>
Source record: 65351

HELP! I need to find a Raytheon CK722 (black) for my dad for
Christmas. This is all he has requested, and has wanted it for years.
It does not need to be functioning, just intact. If you can help,
PLEASE DO!
Thank You,
Selena

4372. FS: Resistance decade unit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-24 00:00:00 UTC
From: Roger Leone <arleone@inreach.com>
Message-ID: <d_3%3.97$lK1.5041@news.inreach.com>
Source record: 65352

For sale:

Resistance decade unit, model RDS-100-RT...made by General Resistance, Inc.
This is part of a larger unit...it is only the "tens" part of a decade box.
It has an 11 position rotary switch for 0 - 100 ohms in 10 ohm steps. 250
ma
current max. Manufacturer claims .04% accuracy. My meter is not that
accurate,
but agrees with this unit.

It is mounted in a cylindrical aluminum enclosure, which can be opened by
removing
2 screws. It is about 3" in diameter and 3" long. The switch has a standard
1/4"
shaft coming out the front. Includes knob, mounting hardware, dial plate
and
instruction sheet for mounting. The instruction sheet has a line drawing of
the unit...I can e-mail it if you would like to see it.

This unit is new, sealed in foil lined envelope. Manufactured in 1988.

Original cost to us (U.S.) was $365.00 each. I have 30 of them for sale for
$5.00 each. Shipping extra--estimate about $3.00 for one. Discounts
available
for quantity purchases. Let me know if you would like more than one and I
will
quote a price.

Please respond to my e-mail address: arleone@inreach.com

Thanks

Roger K6XQ

4373. Re: Collins 51J4 and 75S1 info wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-24 00:00:00 UTC
From: Lee Smith <ckvnfm@mb.sympatico.ca>
Message-ID: <khM_3.100$hp2.1156@news1.mts.net>
Source record: 65429

Richard:

Glad I was able to be of some assistance.

73 de
Lee
VE4ANC

4374. Re: Wanted VHF communications article on DK1OF 2m Linear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-24 00:00:00 UTC
From: Steve Thompson <steve@txrx.demon.co.uk>
Message-ID: <943428238.29986.0.nnrp-04.c1ed78b9@news.demon.co.uk>
Source record: 65430
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

Martin John Hallsworth wrote in message
<943315643.16573.0.nnrp-07.9e98acde@news.demo
n.co.uk>...
>Hello and thanks for looking at this,
>
>I am looking for a copy or even better a web
site URL of the
>construction details of the DK1OF 2m 4CX250
linear amp
>I think it was published in VHF
communications in the late
>1970's (1977 ?)
>
>Thanks Martin G1GYC
>
You can find most details and pictures of a
version built by G4XZL in the latest
RadioCommunication Handbook.

Steve

4375. Re: spectrum analyzers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-24 00:00:00 UTC
From: Pietro Canevarolo <picaneva@tin.it>
Message-ID: <383BA02C.16B15ACD@tin.it>
Source record: 65431

larryc@northwest.com ha scritto:
>
> What is the going price for a Tek 491? I've used the 495 but it is very
> expensive... have also used the HP8555 in the past. Any
> suggestions/recommendations appreciated.
>
> reply to larryc@northwest.com

I got my 491 last year for 800 $ + shipping.
Not easy to use, either

73 de IK3OIJ, Pietro Canevarolo

4376. Re: Wanted VHF communications article on DK1OF 2m Linear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-24 00:00:00 UTC
From: Simon Lewis <slewis@pacsat.demon.co.uk>
Message-ID: <5Due8DAN+5O4Ew+S@pacsat.demon.co.uk>
Source record: 65432
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

In article <943315643.16573.0.nnrp-07.9e98acde@news.demon.co.uk>, Martin John Hallsworth <Martin@g1gyc.demon.co.uk> writes
>Hello and thanks for looking at this,
>
>I am looking for a copy or even better a web site URL of the
>construction details of the DK1OF 2m 4CX250 linear amp
>I think it was published in VHF communications in the late
>1970's (1977 ?)

If you're looking to build a linear - may I suggest the W1SL in the VHF/UHF DX Book. A good design, reproducible and very stable.

73 Simon GM4PLM
The contents of this message represent the personal opinion of the author and are not representative of the RSGB unless otherwise stated.
+--+
| Simon Lewis GM4PLM Editor - European Microwave News |
| Radio Society of Great Britain Microwave Column Editor |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.emn.org.uk Email gm4plm@emn.org.uk |
| Microwave Column Homepage - www.emn.org.uk/mwcol.htm |
| MW Column Email uwave.radcom@rsgb.org.uk |
+--+

4377. 1N295 Substitutes?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-24 00:00:00 UTC
From: jimvalin@aol.com
Message-ID: <19991124115706.01854.00001494@ng-cd1.aol.com>
Source record: 65433

A very simple question I know, but....

I've got a Heath HM-102 SWR Meter which does not function. In testing various components, I find that two of the 1N295 diodes on the board are fully conductive in both directions (not a good sign for a diode).

My question is, what is available to substitute for this obsolete diode (I don't have a substitution reference and the 1N295 is not listed in any of my catalogs). I presume the replacement costs all of 3-5 cents but, I need to know what to order.

73s de K4ZDZ

(Licensed back when converting ARC-5s and ART-13s was the thing to do. Unfortunately, I've been away from actually repairing equipment for about 35 years).

4378. Re: Instant Lettering for Panels etc?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-24 00:00:00 UTC
From: Donald R Montgomery <donrm@sr.hp.com>
Message-ID: <81h935$k4n$1@nirvana.sr.hp.com>
Source record: 65434

jstrohm@texas.net <jstrohm@texas.net> wrote:
[non related stuff deleted]
> Then again, if you favor the hard-core Luddite school of panel
> lettering, you will letter by hand with India ink. There is something
> to be said for a spidery hand-lettered panel.
> Jim N6OTQ

I had a homebrew fanatic lab teacher in EE school that used to make
his panels from a Formica-like laminate and lettered them with a
Leroy set, then protected the ink with clear Krylon. Looked great.

How many of you know what the Leroy lettering system was? Am I
dating myself? You old engineers and draftspeople can check out:
http://www.cadinfo.net/editorial/grow_old.htm

Don K6LTS
donrm@sr.hp.com

4379. Re: 1N295 Substitutes?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-24 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <s0W_3.807$zQ4.62448@news2.giganews.com>
Source record: 65435

If that's germanium, use a 1N34 or a 1N270.

73, Bob K6DDX

4380. Sticky On Letters Suplyer Needed In U.K.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-24 00:00:00 UTC
From: merryprankster <merryprankster@cwcon.net>
Message-ID: <R4W_3.266$wV3.12989@news1-hme0>
Source record: 65436

Hello Bob here,
Does anyone know where to buy
little sticky on letters and numbers.
In the N/West U.K.
I need some to finish of my projects.
Thanks From Bob.

4381. Re: 1N295 Substitutes?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-24 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <81htrn$k0e$1@nnrp1.deja.com>
Source record: 65437

In article <19991124115706.01854.00001494@ng-cd1.aol.com>,
jimvalin@aol.com (Jim Valin) wrote:
> A very simple question I know, but....
>
> I've got a Heath HM-102 SWR Meter which does not function. In testing
various
> components, I find that two of the 1N295 diodes on the board are fully
> conductive in both directions (not a good sign for a diode).
>
> My question is, what is available to substitute for this obsolete
diode (I
> don't have a substitution reference and the 1N295 is not listed in any
of my
> catalogs). I presume the replacement costs all of 3-5 cents but, I
need to know
> what to order.
>
> 73s de K4ZDZ
>
> (Licensed back when converting ARC-5s and ART-13s was the thing to do.
> Unfortunately, I've been away from actually repairing equipment for
about 35
> years).
>

Why do not use the exact original diode?
Try Kenselectronics at http://www.kenselectronics.com/lists/orig.htm
or Derf Electronics at http://www.derf-intl.com/electronics/32.html
They have it in stock.
--
Greetings,

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Before you buy.

4382. Re: Sticky On Letters Suplyer Needed In U.K.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-24 00:00:00 UTC
From: greenking8@aol.com
Message-ID: <19991124151956.07907.00000075@ng-cs1.aol.com>
Source record: 65438

bob , if you go to W H SMITHS , they have
lettra set type letters in all shapes and sizes these are not sticky but rub
on , sort of a transfer any good??
regards jerry

4383. Re: Instant Lettering for Panels etc?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-24 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <383C4F11.7D680B26@corecomm.net>
Source record: 65439

Donald R Montgomery wrote:
> How many of you know what the Leroy lettering system was? Am I
> dating myself? You old engineers and draftspeople can check out:
> http://www.cadinfo.net/editorial/grow_old.htm

Without looking, do you mean LeCroy?

--
+-+
| Cliff Sharp | "light jazz" is to jazz as "rubber band" is to orchestra. |
| WA9PDM | |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+

4384. Re: 1N295 Substitutes?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-24 00:00:00 UTC
From: "Thomas C. Sefranek" <tcs@cmcorp.com>
Message-ID: <383C42D0.935798E3@cmcorp.com>
Source record: 65490

Jim Valin wrote:

> A very simple question I know, but....
>
> I've got a Heath HM-102 SWR Meter which does not function. In testing various
> components, I find that two of the 1N295 diodes on the board are fully
> conductive in both directions (not a good sign for a diode).
>
> My question is, what is available to substitute for this obsolete diode (I
> don't have a substitution reference and the 1N295 is not listed in any of my
> catalogs). I presume the replacement costs all of 3-5 cents but, I need to know
> what to order.

>
> 73s de K4ZDZ
>
> (Licensed back when converting ARC-5s and ART-13s was the thing to do.
> Unfortunately, I've been away from actually repairing equipment for about 35
> years).

1N295
Ger.
Signal Diode
40 PRV

--
Thomas C. Sefranek WA1RHP
ARRL Instructor, Technical Specialist, VE Contact.
http://www.harvardrepeater.org
http://hamradio.cmcorp.com/inventory/Inventory.html

4385. Re: Sticky On Letters Suplyer Needed In U.K.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-24 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <f9r4aDBumEP4EwhA@ifwtech.demon.co.uk>
Source record: 65491

merryprankster wrote:
>Hello Bob here,
>Does anyone know where to buy
>little sticky on letters and numbers.
>In the N/West U.K.
>I need some to finish of my projects.
>Thanks From Bob.
>
>
Any good stationery shop will have a wide range of styles.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

4386. Re: 1N295 Substitutes?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-24 00:00:00 UTC
From: jimvalin@aol.com
Message-ID: <19991124173548.08144.00000034@ng-fl1.aol.com>
Source record: 65492

>1N295
>Ger.
>Signal Diode
>40 PRV
>

Thanks Tom...

Neither my Allied or Digi-Key catalogs list this. I'd like to buy about a dozen or so. Who carries them in bulk?

73s de K4ZDZ

4387. Re: 1N295 Substitutes?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-25 00:00:00 UTC
From: jimvalin@aol.com
Message-ID: <19991124191925.21772.00000112@ng-fy1.aol.com>
Source record: 65353

>Why do not use the exact original diode?

Thanks for the links Luiz!!!!

Jim

4388. Need Tektronix 2235 Service manual

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-25 00:00:00 UTC
From: cavisco@aol.com
Message-ID: <19991124201312.03954.00000242@ng-fi1.aol.com>
Source record: 65354

Need service manual for a Tektronix 2235 oscilloscope. Thanks in advance.

Scott McAuley
Cayce Vintage Sound Company
Your Complete Source for LEATHERETTE
117 Sandy Lane
Cayce, S.C. 29033
(803) 791-0733

4389. stick on letters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-25 00:00:00 UTC
From: jeixray@aol.com
Message-ID: <19991124212447.07463.00000132@ng-co1.aol.com>
Source record: 65355

Don't know where to get them in the U.K. but try any good mechanical drafting supply store. they always have letters for the making of "original" blue prints. Good luck.

jim
wa2njv

4390. integrated circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-25 00:00:00 UTC
From: jeixray@aol.com
Message-ID: <19991124213354.07463.00000134@ng-co1.aol.com>
Source record: 65356

contact Tom Clemens at 570 595 0647 (canadensis PA.) he has over 500,000 assorted transistors and i.c.'s. He will sell onesies, twosies etc. I buy all of my solid state parts from him. sorry i do not have an e mail for him.

good luck
jim
wa2njv

4391. peltier device

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-25 00:00:00 UTC
From: gestyr <gestyr@epix.net>
Message-ID: <0L2%3.35$7n.8449@news1.epix.net>
Source record: 65357

Does anyone know a good source for a peltier device (also known as a thermoelectric cooling heat pump). Thanx for any help you can give me.

4392. Re: FS: Books, Tubes & misc. stuff, low prices

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-25 00:00:00 UTC
From: Christopher Chong <christopherchong@post1.com>
Message-ID: <383CBC51.1016EE13@post1.com>
Source record: 65358
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Hi!

Can I have a list?
Thanx.

Regards,
Chris

MURRAY PASTERNACK wrote:

> Please e-mail to w6krc@arrl.net to receive my 10 page list. Murray

4393. Re: Wanted VHF communications article on DK1OF 2m Linear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-25 00:00:00 UTC
From: Simon Lewis <slewis@pacsat.demon.co.uk>
Message-ID: <LFHytBAuMPP4EwRF@pacsat.demon.co.uk>
Source record: 65359
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

In article <383c6702.523444023@news.online.no>, J M Noeding
<LA8AK@online.no> writes
>
>My VHF/UHF dx books shows K2RIW amplifier, believe the main difference
>to other designs for DK1OF type is the coupling capacitor at anode
>side, perhaps some difficulties in obtaining this capacitor? Please
>advice me if I am wrong.
>
>73 jan-martin LA8AK

No the difference is in the anode tuning capacitor (maybe you mean
that?) - In the W1SL its a flapper arrangement - the VHF/UHF DX book has
the updated design with altered dimensions. Its from the house of GW4FRX
so its pretty safe. The PSU details in the book are also very useful and
very pertinent, plenty of good tips on choosing transformers, capacitors
etc.

73 Simon GM4PLM
The contents of this message represent the personal opinion of the
author and are not representative of the RSGB unless otherwise stated.
+--+
| Simon Lewis GM4PLM Editor - European Microwave News |
| Radio Society of Great Britain Microwave Column Editor |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.emn.org.uk Email gm4plm@emn.org.uk |
| Microwave Column Homepage - www.emn.org.uk/mwcol.htm |
| MW Column Email uwave.radcom@rsgb.org.uk |
+--+

4394. Mini Din plugs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-25 00:00:00 UTC
From: jwodell@ameritech.net
Message-ID: <38402838.1472044@news.detroit.mi.ameritech.net>
Source record: 65360

Anyone know how to solder to MINI DIN plugs?

Confounded things are plastic that melts at about 120
degrees, with solder cups. Think they make a crimp
version, which is the way to go, I think.

Also, I wasted about a week, cause someone told me
the were the same series as a PS/2 connector. Nope.

73 jerry w8gnd

4395. Re: Wanted VHF communications article on DK1OF 2m Linear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-25 00:00:00 UTC
From: Mike <m.j.willis@rl.ac.uk>
Message-ID: <81j99u$16k6@newton.cc.rl.ac.uk>
Source record: 65361
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

>
> If you're looking to build a linear - may I suggest the W1SL in the
> VHF/UHF DX Book. A good design, reproducible and very stable.

Or even better - the W2GN. Kits available for the metalwork via DownEast
Microwave. The chassis also works well on 4m.

4396. Re: peltier device

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-25 00:00:00 UTC
From: Charles Reichert <kd9jq@rsg.org>
Message-ID: <383D556C.B3376092@rsg.org>
Source record: 65362

For a start look at the bottom of page;

http://www.computernerd.com/coolsp01.html

Or do a search of Peltier on the internet.

Chuck KD9JQ

gestyr wrote:
>
> Does anyone know a good source for a peltier device (also known as a
> thermoelectric cooling heat pump). Thanx for any help you can give me.

4397. Re: peltier device

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-25 00:00:00 UTC
From: Charles Reichert <kd9jq@rsg.org>
Message-ID: <383D669E.9F50394E@rsg.org>
Source record: 65363

Another site with a list of sources is;

http://www.dlbeck.com/peltier_links.html

Chuck KD9JQ

http://www.mbn.net/kd9jq/hamradio/index.html

gestyr wrote:
>
> Does anyone know a good source for a peltier device (also known as a
> thermoelectric cooling heat pump). Thanx for any help you can give me.

4398. Re: Wanted VHF communications article on DK1OF 2m Linear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-25 00:00:00 UTC
From: geoff@nospam.demon.co.uk
Message-ID: <FLqzB4.K8r@nospam.demon.co.uk>
Source record: 65364
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

J M Noeding (LA8AK@online.no) wrote:
: On Wed, 24 Nov 1999 08:19:25 +0000, Simon Lewis
: <slewis@pacsat.demon.co.uk> wrote:

: >In article <943315643.16573.0.nnrp-07.9e98acde@news.demon.co.uk>, Martin
: >John Hallsworth <Martin@g1gyc.demon.co.uk> writes
: >>Hello and thanks for looking at this,
: >>
: >>I am looking for a copy or even better a web site URL of the
: >>construction details of the DK1OF 2m 4CX250 linear amp
: >>I think it was published in VHF communications in the late
: >>1970's (1977 ?)
: >
: >If you're looking to build a linear - may I suggest the W1SL in the
: >VHF/UHF DX Book. A good design, reproducible and very stable.
: >
: >73 Simon GM4PLM

: My VHF/UHF dx books shows K2RIW amplifier, believe the main difference
: to other designs for DK1OF type is the coupling capacitor at anode
: side, perhaps some difficulties in obtaining this capacitor? Please
: advice me if I am wrong.

Was the K2RIW not for 70cms - the one I built certainly was.

Geoff
--
Geoff Blake geoff (at) palaemon . demon . co . uk linux 2.0.36
Chelmsford g8gnz @ g8gnz . ampr . org sparc - i586
Please, only use the .ampr.org address if you know what you are doing
Intel create faster processors - Microsoft create slower processes

4399. Re: FS: 12.8 MHz High Stability Oscillator (new)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-25 00:00:00 UTC
From: g3kew@aol.com
Message-ID: <19991125122504.07479.00000234@ng-co1.aol.com>
Source record: 65365

Adding a simple buffer amp followed by an 8-stage binary divider would produce accurate 50 KHz markers for a QRP (or other rig). Picking off the output of the 5th, 6th and 7th stages would provide markers of 400, 200, and 100 KHz spacing respectively.

4400. Re: Sticky On Letters Suplyer Needed In U.K.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-25 00:00:00 UTC
From: "McNair, Ken [CAR:9F24:EXCH]" <mcnair@americasm01.nt.com>
Message-ID: <383D77A9.B1BDFD9A@americasm01.nt.com>
Source record: 65366

GreenKing8 wrote:
>
> bob , if you go to W H SMITHS , they have
> lettra set type letters in all shapes and sizes these are not sticky but rub
> on , sort of a transfer any good??
> regards jerry

Cover the lettering or the entire panel with
lacquer afterwards or the Letraset will rub off

4401. Re: peltier device

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-25 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.991125095507.5745C-100000@oso.slonet.org>
Source record: 65367

There is a good buy in the surplus market by ALL ELECTRONICS, in Los Angeles 1-800-826-5432 On page two of the catalog two 127 junction devices are listed, one just the Peltier junction for $17 and the other the same device mounted on a heat sink for $26. Both operated from 12 VDC at six amps. These maybe more than you need as they seem to be removed from portable cooler boxes. 73 Cliff K7RR

On Thu, 25 Nov 1999, gestyr wrote:

> Does anyone know a good source for a peltier device (also known as a
> thermoelectric cooling heat pump). Thanx for any help you can give me.
>
>
>
>

4402. Re: peltier device

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-25 00:00:00 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <0We%3.1826$o4.1148@news.indigo.ie>
Source record: 65368

gestyr <gestyr@epix.net> wrote in message
news:0L2%3.35$7n.8449@news1.epix.net...
> Does anyone know a good source for a peltier device (also known as a
> thermoelectric cooling heat pump). Thanx for any help you can give me.
>

Try your local computer parts supplier. Some CPU
heatsinks have a Peltier effect cooler. My Apple
8100/110 has one.

73, Ed. EI9GQ.

--
EI9GQ homebrew radio page http://www.qsl.net/ei9gq

Remove 'X' to reply

4403. Plate transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-25 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <Vhf%3.2200$zQ4.174193@news2.giganews.com>
Source record: 65369

I have a nice hermetically sealed military plate transformer for sale.

Primary 115 VAC 60 Hz.
Secondary 3100 VCT 500 mA DC.

This unit should run cool at continuous full load, probably will put out
more current than rated if duty cycle is low.

This one is heavy, pickup only in Los Angeles.

73, Bob K6DDX (licensed since 1949)

4404. Where can I find plans for a Homebrew 6M SSB or 2M SSB Rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-25 00:00:00 UTC
From: a1@home.com
Message-ID: <384383d1.71795462@news>
Source record: 65370

Hi...where can I find plans for such a rig?
Preferably one with a digital readout, but that does not matter.

Also, a special type of antenna is required for SSB, isn't it? If so,
how could I build such an antenna out of either wire or pipes?

Even better would be if you could come up with a PCB for such a
thing...one that could be downloaded and printed out...but it is not
mandatory. PCB would be nice, however, because all my wire-wrapping
attempts are very sloppy.

TNX,
Rick

KE1JA@home.com
actually...it's rick1 instead of ke1ja. But, many spam checkers pick
up on e-mails in the body...so therefore i did that.

4405. WTB: transmitting cap 50pF at 10KV+

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-25 00:00:00 UTC
From: John Strupat <john.strupat@sympatico.ca>
Message-ID: <Cdg%3.6922$sy5.9708@news20.bellglobal.com>
Source record: 65371

Hi,

Looking for good 50 pF ceramic or vacuum cap, the higher the voltage rating the better.

I have a Jennings 250 PF 10KV vacuum cap with hardware to swap if interested.

John VE3PCN

4406. Re: Mini Din plugs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-25 00:00:00 UTC
From: blackm00@cam.org
Message-ID: <blackm00-2511991510300001@dialup-651.hip.cam.org>
Source record: 65372

In article <38402838.1472044@news.detroit.mi.ameritech.net>,
jwodell@ameritech.net (Jerry W. O'Dell) wrote:

> Anyone know how to solder to MINI DIN plugs?
>
> Confounded things are plastic that melts at about 120
> degrees, with solder cups. Think they make a crimp
> version, which is the way to go, I think.
>
> Also, I wasted about a week, cause someone told me
> the were the same series as a PS/2 connector. Nope.
>
> 73 jerry w8gnd

But just as there are DIN plugs with different numbers of pins, there are Mini-Din plugs with different numbers of pins. It was my impression that the PS/2 used them on mouse connectors, and perhaps something else. They are also used for the serial ports on Macs (maybe not the recent ones, but definitely on not the most recent Macs); these have 8 pins. The Mac's ADB bus for keyboards and mouses, use Mini-Din with 4 pins. I've seen cables using other types of Mini-Din plugs at the local surplus store; I don't know what they are used for, though perhaps they are the same as used in the PS/2. These are some I know of, and I have to assume there are others.

I did solder to one of those plugs from the surplus store. I don't recall any problem, though I can't remember the specifics.

But the trick is probably to find a match for whatever connector you need, and buy a cable for it. Cut off whatever is at the other end, and you have a moulded plug with a cable attached. Off hand, I wouldn't know where to buy Mini-Din plugs, so that's why I'd choose that route. Of course, sometimes not all the pins have wire connected to them, which might be a problem in some cases.

Michael VE2BVW

4407. Re: 1N295 Substitutes?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-25 00:00:00 UTC
From: blackm00@cam.org
Message-ID: <blackm00-2511991527150001@dialup-651.hip.cam.org>
Source record: 65373

In article <19991124115706.01854.00001494@ng-cd1.aol.com>,
jimvalin@aol.com (Jim Valin) wrote:

> A very simple question I know, but....
>
> I've got a Heath HM-102 SWR Meter which does not function. In testing various
> components, I find that two of the 1N295 diodes on the board are fully
> conductive in both directions (not a good sign for a diode).
>
> My question is, what is available to substitute for this obsolete diode (I
> don't have a substitution reference and the 1N295 is not listed in any of my
> catalogs). I presume the replacement costs all of 3-5 cents but, I need
to know
> what to order.
>
> 73s de K4ZDZ
>
> (Licensed back when converting ARC-5s and ART-13s was the thing to do.
> Unfortunately, I've been away from actually repairing equipment for about 35
> years).

The ECG replacement guide says it crosses to the ECG 110A, which is a
germanium general purpose diode, 40V max PRV, Average rectified forward
current (Io Max) of 50mA, and Forward current repetitive peak (Ifrm) of
150mA.

The 1N34, which of course tends to be used to describe a general purpose
small signal germanium diode, crosses to the ECG 109, which has 100V PRV
and 200 mA for theIo Max, with no figure given for the Ifrm.

An old Motorola databook says about the same thing for the 1N295.
I think it shows the 1N34 isn't quite as good as the 1N295, though
the chart isn't quite the same for each device.

I'mnot sure the problem will be finding a replacement, but finding
a germanium diode. I'd say that's one of the key things to look for,
with current rating being important once you find some germanium diodes.
What's available will be limited. The Motorola book has plenty of
germanium diodes listed (of course, the book is about 25 years old),
but there's no sense listing them if they aren't available.

Look for older equipment, and search for germanium diodes. They have
a lower voltage drop. I certainly can tell them apart from silicon
with my DMM.

If you can find some germaniums, then you can loiok them up.

Michael VE2BVW

4408. Annoying ham operator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-25 00:00:00 UTC
From: Scott Wolfe <shantoa@wolfenet.com>
Message-ID: <81k4mcqkr1@sparky.wolfe.net>
Source record: 65374

Down the street from me (about 4 houses) there is a ham operator and every time he is on I can hear garbage on my TV, Cordless phones, Radio's. etc.

Is there any kind of filter I can buy to stop the interference? I know the guy has put a lot of money and time into his equipment but so did I.

What can I do? It's frustrating.

Thanks,
-Scott

4409. Re: Annoying ham operator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-25 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <383DA057.5A8F037D@corecomm.net>
Source record: 65375

Scott Wolfe wrote:
> Down the street from me (about 4 houses) there is a ham operator and every
> time he is on I can hear garbage on my TV, Cordless phones, Radio's. etc.
>
> Is there any kind of filter I can buy to stop the interference? I know the
> guy has put a lot of money and time into his equipment but so did I.
>
> What can I do? It's frustrating.

The most frustrating thing about it is that consumer gear of all types is
made to be cheap and not complete. For example, look at the FCC statement
for your cordless phones and you'll see an FCC requirement that "This
device must accept any interference received, including interference that
may cause undesired operation."

Are you sure this is a *ham* operator? Please post his callsign.

Provided his equipment is working properly and within its legal limits,
and if this is a ham there's a better-than-even chance of that, about
all you can do is chase the problems individually, doing whatever it
takes to make each device reject the interference the way it should have
been (but wasn't) designed to do.

--
+-+
| Cliff Sharp | "light jazz" is to jazz as "rubber band" is to orchestra. |
| WA9PDM | |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

4410. Re: Annoying ham operator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-25 00:00:00 UTC
From: "Al, N2NKB"
Message-ID: <81k91a$1v7$1@bgtnsc03.worldnet.att.net>
Source record: 65376

Talk to the ham. He can either place low pass filters in his transmit
path, or give you highpass filters for your equipment.
If the guy is a legitimate ham, as opposed to an illegal CB operator, he
should be responsive to your problem. But if he is doing everything
legal, I agree with another poster that states consumer equipment is
susceptible to this interference due to poor design.

As a side note, I have a friend 2 doors down who is also a ham, and he
constantly complains to the cable company that his transmissions and my
transmissions interfere with his tv reception.
Al

Scott Wolfe wrote in message <81k4mcqkr1@sparky.wolfe.net>...
>Down the street from me (about 4 houses) there is a ham operator and every
>time he is on I can hear garbage on my TV, Cordless phones, Radio's. etc.
>
>Is there any kind of filter I can buy to stop the interference? I know the
>guy has put a lot of money and time into his equipment but so did I.
>
>What can I do? It's frustrating.
>
>Thanks,
>-Scott
>
>
>

4411. Re: Annoying ham operator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-25 00:00:00 UTC
From: "colinlowe@jet" <colinlowe@jet.es>
Message-ID: <81kbo2$et8$1@lola.ctv.es>
Source record: 65377

Quote "as opposed to an illegal CB operator"

Not all CB operators are illegal.

Just knock on the guys door explain the problem and together I'm sure you will cure the problem.

73 de Colin
Yes a Legal HAM and a Legal CB operator.

4412. Re: Sticky On Letters Suplyer Needed In U.K.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-25 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <$xgwpNADVYP4EwFx@ifwtech.demon.co.uk>
Source record: 65378

McNair, Ken [CAR:9F24:EXCH] wrote:
>GreenKing8 wrote:
>>
>> bob , if you go to W H SMITHS , they have
>> lettra set type letters in all shapes and sizes these are not sticky but rub
>> on , sort of a transfer any good??
>> regards jerry
>
>Cover the lettering or the entire panel with
>lacquer afterwards or the Letraset will rub off

Good point... but first check whether the lacquer dissolves the
lettering on a piece of scrap metal.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

4413. Re: Annoying ham operator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-25 00:00:00 UTC
From: "Al, N2NKB"
Message-ID: <81kg8e$o9p$1@bgtnsc03.worldnet.att.net>
Source record: 65379

colinlowe@jet wrote in message <81kbo2$et8$1@lola.ctv.es>...
>Quote "as opposed to an illegal CB operator"
>
>Not all CB operators are illegal.
>
>Just knock on the guys door explain the problem and together I'm sure you
>will cure the problem.
>
>73 de Colin
>Yes a Legal HAM and a Legal CB operator.

Colin,
I apologize to you for assuming that this person could have been an
illegal CB operator. My thought process went that way because
I believe that the transmit level is much lower with CB stations, and should
not interfere with neighbor's equipment.
Perhaps you can describe if you have had any local EMI problems
with your neighbors regarding CB vs. HF transmissions.
Even though I have cable tv, my CW overloads the tv sets in my house.
So just like a smoker, I do it on the prowl, when the family is asleep.
Al

4414. Luis Yanes-- important!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-25 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <383DE612.7216@pop.valley.net>
Source record: 65380

Hello, Luis--

Please accept my apologies for the public posting, but I'm encountering "permanent fatal errors" when I reply to your e-mail address. I can receive your e-mail, but my repeated attempts to reply all fail.

Your first package left on November 17 via small-packet air mail.

Please advise whether you'd like a second shipment containing the Coil-Craft inductors.

73,
Brad AA1IP

4415. Re: peltier device

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-25 00:00:00 UTC
From: Andre Paul <paul01@videotron.ca>
Message-ID: <84m%3.401$O4.7905@wagner.videotron.net>
Source record: 65381

Try this site and look for thermoelectronic modules.

http://www.melcor.com/teccover.htm

Andre
gestyr <gestyr@epix.net> a crit dans le message :
0L2%3.35$7n.8449@news1.epix.net...
> Does anyone know a good source for a peltier device (also known as a
> thermoelectric cooling heat pump). Thanx for any help you can give me.
>
>

4416. Re: other than 60, 50 & 400 Hz transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-26 00:00:00 UTC
From: "Thomas C. Sefranek" <tcs@cmcorp.com>
Message-ID: <383EC7E6.89BD30F4@cmcorp.com>
Source record: 65293

jhoyos@hoth.gcn.ou.EDU wrote:

> Hi List:
>
> I have heard about 25 Hz transformers, what were they used for?
>
> There were other frequencies than 50 and 60 for power distribution
> in recent times?
>
> Thanks in advance.
>
> Jorge Hoyos.

Telephone ringers?

--
Thomas C. Sefranek WA1RHP
ARRL Instructor, Technical Specialist, VE Contact.
http://www.harvardrepeater.org
http://hamradio.cmcorp.com/inventory/Inventory.html

4417. Circuit Diagram FT290 and Mutek Board

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-26 00:00:00 UTC
From: "Dr. Rainer Meergans" <dr.r.meergans@bigfoot.de>
Message-ID: <943643547.365188872@saturn.heiden.de>
Source record: 65294

I`ve bought a used FT290 with the Mutek Frontend build in. I have the original handbook with the alignement procedure for the FT290, but no circuit diagram and nothing about the Mutek board.

It would be nice if someone could scan the circuits and send them per mail attachment.....

73, Rainer

(dg2dbm@t-online.de)

4418. Re: other than 60, 50 & 400 Hz transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-26 00:00:00 UTC
From: davem@groucho.cs.ubc.ca
Message-ID: <81mp3d$ifq@groucho.cs.ubc.ca>
Source record: 65295

jhoyos@hoth.gcn.ou.edu writes:

>I have heard about 25 Hz transformers, what were they used for?

>There were other frequencies than 50 and 60 for power distribution
>in recent times?

The first hydroelectric generating stations at Niagara Falls operated at 25 Hz. I don't know why that speed was chosen - possibly because it allowed the alternators to be wound with fewer poles or to rotate more slowly.

Unfortunately, 25 Hz transformers require a great deal of iron in their core for their size. Lighting operated from 25 Hz power flickers at 50 Hz, which is visible. At some point, most of the generating capacity there was changed from 25 to 60 Hz.

My parents lived near Niagara Falls all their life, and my father remembers a point at which the change happened. Transformers didn't need changing; a transformer built for 25 Hz operation is simply over-built for 60 Hz. Resistive loads (including incandescent lamps) were fine. But any appliance using an induction or synchronous motor was brought in to the local electrical authority for modification or replacement.

I believe that there were some heavy industries near the falls that never changed over , and one generating station continued to operate at 25 Hz for decades afterwards, perhaps right up to the present.

Dave

4419. Re: other than 60, 50 & 400 Hz transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-26 00:00:00 UTC
From: jfd43@csc.albany.edu
Message-ID: <81mqo6$pn6@mary.csc.albany.edu>
Source record: 65296

In article <383EC7E6.89BD30F4@cmcorp.com>,
Thomas C. Sefranek <tcs@cmcorp.com> wrote:
>
>
>jhoyos@hoth.gcn.ou.EDU wrote:
>
>> Hi List:
>>
>> I have heard about 25 Hz transformers, what were they used for?
>>
>> There were other frequencies than 50 and 60 for power distribution
>> in recent times?
>>
>> Thanks in advance.
>>
>> Jorge Hoyos.
>
>Telephone ringers?
>
>--
>Thomas C. Sefranek WA1RHP
>ARRL Instructor, Technical Specialist, VE Contact.
>http://www.harvardrepeater.org
>http://hamradio.cmcorp.com/inventory/Inventory.html
>
>
In the earlier days of pwr. distrn., 25 Hz (cps) was used in some
smaller systems; as I recall primarily in the SW portion of the
US, and also in some parts of Asia. FWIW, DC was also used for
local distrn. very early on.. See Ref. Data for Radio Engineers,
2nd (?) Ed. , for some tables.
Regards
Jack Dugan, W2IAX
email jfd43@cnsunix.albany.edu
(Now a retread fac. member (HI))
.
>

4420. Wanted: Prop pitch rotor....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-26 00:00:00 UTC
From: frohro@wwc.edu
Message-ID: <frohro-2611991359190001@frohro2.wwc>
Source record: 65297
Cross-posted to:
rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hi,

I'm looking for an old prop pitch unit. If you've got one sitting around
that you'll never get around to using, send me a note. To see my rotor
eating antenna, look at:
http://www.wwc.edu/~frohro/Quad_installation.jpg

73,

Rob, KL7NA/W7

--
Rob Frohne, Ph.D., P.E.
Walla Walla College
frohro@wwc.edu
http://www.wwc.edu/~frohro

4421. looking for MV1401 varicap diode

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-26 00:00:00 UTC
From: crdonmax1@aol.com
Message-ID: <19991126171624.19331.00000512@ng-cm1.aol.com>
Source record: 65298

Hi:
I'm looking for a handfull of MV1401 varactor diodes for a VCO project. I've tried the usual source catalogs and have not been able to find this particular diode. I also didnt see a cross reference listed for it.
If anyone knows of a source for these, I would appreciate it.
Thanks,
Craig

4422. Re: looking for MV1401 varicap diode

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-26 00:00:00 UTC
From: Jonesy <jonz@rmi.nospam.net>
Message-ID: <G9E%3.1988$P4.373646@den-news1.rmi.net>
Source record: 65299

CRDONMAX1 <crdonmax1@aol.com> wrote:
> I'm looking for a handfull of MV1401 varactor diodes for a VCO project. I've
> tried the usual source catalogs and have not been able to find this particular
> diode. I also didnt see a cross reference listed for it.
> If anyone knows of a source for these, I would appreciate it.

Try Dan's Small Parts -- don't have the URL handy - sorry.
73
Jonesy W3DHJ

--
Marvin L. Jones jonz-AT-rmi.net
Gunnison, Colorado
35 days to go until the Year 2000 -- So what!
401 days to go until the 3rd Millennium of the C.E.

4423. Re: Wanted: Prop pitch rotor....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-26 00:00:00 UTC
From: Jack Taylor <n7oo@theriver.com>
Message-ID: <WDE%3.3765$zQ4.293283@news2.giganews.com>
Source record: 65300
Cross-posted to:
rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc

An impressive quad! Prop pitch motors come in small, medium, and large
sizes with the large being about 12 inches or so across. Sizing will be a
factor when mounting on/in a tower.

Jack

Rob Frohne wrote in message ...
>Hi,
>
>I'm looking for an old prop pitch unit. If you've got one sitting around
>that you'll never get around to using, send me a note. To see my rotor
>eating antenna, look at:
>http://www.wwc.edu/~frohro/Quad_installation.jpg
>
>73,
>
>Rob, KL7NA/W7
>
>--
>Rob Frohne, Ph.D., P.E.
>Walla Walla College
>frohro@wwc.edu
>http://www.wwc.edu/~frohro

4424. Re: CK722 - Raytheon Book Found!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-26 00:00:00 UTC
From: "John Dilks, K2TQN" <oldradio@worldnet.att.net>
Message-ID: <383EDE31.1C70@worldnet.att.net>
Source record: 65301

to all CK-722'ers,

I just found my book:

"Raytheon Transistor Applications - More the 50 Practical Circuits
using Raytheon CK722 Transistors. Complete How-To-Do-It Instructions."
Some of these projects are ham radio related. 120 pages including
the covers, 11" x 8-1/2". The receipt with it shows it was purchased on
Feb 20, 1956. My guess is - 1955 printing. I do not see any copyrights
in it.

If there is sufficent interest, I'll find out how much Kinko's will
charge to reproduce it (if they will.)

--
73' John Dilks, K2TQN

Webmaster for...

"Page 2" all about Antique Wireless & Early Ham Radio
http://www.eht.com/oldradio/awa/
-=and=-
for the New Jersey Antique Radio Club
http://www.eht.com/oldradio/

Please visit my OldRadio Museum
http://www.eht.com/oldradio/museum/

4425. Re: Where to find plug-in coil forms

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-26 00:00:00 UTC
From: "Michael St. Angelo" <mstangelo@worldnet.att.net>
Message-ID: <81n10v$98u$1@bgtnsc02.worldnet.att.net>
Source record: 65302

Monty,

I have used the phenolic bases from defunct vacumn tubes. I carefully crush the glass
and remove the innards...watch out for broken glass. I unsolder the leads from
the base pins and have an 8 pin coil form ready to go.

Make sure you don't perfrom this operation on tubes which contain radioactive
elements such as voltage regulators, or mercury vapor rectifiers.

The height of the form is about 1 inch. If you need a taller form insert a plastic
pill bottle into the base.

Old tubes and the sockets are available at flea markets for a fair price.
Usually, I find them in a bix of junk that the buyrt does not want to drag home.

I like this method because it is in the spirit of homebrewing...you
roll your own and the price is right.

Regards,

Mike St. Angelo N2MS

<maddog@io.com> wrote in message news:32966472.215929914@news.io.com...
> Remember the old days when plug-in coil forms allowed band-changes?
> Are those old forms, or something similar, available anywhere today?
>
> thanks,
> monty N5FC

4426. Homebrew Dummy Load

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-26 00:00:00 UTC
From: Gregg Schwabauer <griggy@cyberhighway.net>
Message-ID: <383F5F54.41A7EFAD@cyberhighway.net>
Source record: 65303

Where can I find suitable high watt, low reactance, 50 ohm resistors
used to make hf dummy loads?

I need something in the 100 watt range for now, 1000 watt later.

GAS
KB7WWD

4427. Coil Forms FA & FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-26 00:00:00 UTC
From: KQ6UV <kq6uv@hamsnet.net>
Message-ID: <rWM%3.1547$LK3.59406@nuq-read.news.verio.net>
Source record: 65304
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.homebrew,rec.radio.swap

I've got some in the auction as well as lots more for sale.

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=205530631
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=205544384
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=205547781
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=205550288
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=205538577
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=205541702

Jim

4428. Re: Mini Din plugs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-26 00:00:00 UTC
From: rice@ironbark.bendigo.latrobe.edu.au
Message-ID: <rice-ya02408000R2611991127440001@news.latrobe.edu.au>
Source record: 65382

Recently Jerry W. O'Dell wrote:

"Anyone know how to solder to MINI DIN plugs?
Confounded things are plastic that melts at about 120
degrees"

How about:

Find a matching socket. Put the plug (minus the backshell halves) into it - to provide support. Pre tin the wires & the plug (quickly). Solder quickly. Don't be tempted to fix it if it looks a bit rough.

If the finished job isn't to your liking, cut it off & try again with a new plug ;-)

4429. Re: Mini Din plugs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-26 00:00:00 UTC
From: rudder_NoCannedOffal@gulfcoast.net
Message-ID: <8E89D0141zzz@209.26.110.197>
Source record: 65383

rice@ironbark.bendigo.latrobe.edu.au (Phil Rice) wrote in <rice-ya02408000R2611991127440001@news.latrobe.edu.au>:

>Recently Jerry W. O'Dell wrote:
>
>"Anyone know how to solder to MINI DIN plugs?
> Confounded things are plastic that melts at about 120
> degrees"
>
>How about:
>
>Find a matching socket. Put the plug (minus the backshell halves) into it -
>to provide support. Pre tin the wires & the plug (quickly). Solder quickly.
>Don't be tempted to fix it if it looks a bit rough.
>
>If the finished job isn't to your liking, cut it off & try again with a new
>plug ;-)
>

Yes that works well. Also, a very low wattage iron with a tiny tip helps. I use a 15W pencil iron.

--
Regards,
Malcolm
WX4YZ

(To reply via email, remove all between rudder and @)

4430. Re: Where to find plug-in coil forms

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-26 00:00:00 UTC
From: jrobmills@aol.comremove
Message-ID: <19991125223304.08624.00000482@ng-cl1.aol.com>
Source record: 65384

Ocean State Electronics (1-800-866-6626) has them for 4, 5 or 6 pin tube sockets. They measure 1 1/4 dia X 2 1/4 high. Not cheap @ 6.90 ea.

Rob Mills

4431. FA: Complete Antique Xmtr Setup

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-26 00:00:00 UTC
From: misteradio@aol.com
Message-ID: <19991126012212.08284.00000791@ng-cg1.aol.com>
Source record: 65385

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=208046966

4432. Re: Annoying ham operator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-26 00:00:00 UTC
From: Dan K Nelson <w6dkn@qsl.net>
Message-ID: <s3sfptmsa4r57@corp.supernews.com>
Source record: 65386

Try http://www.fcc.gov/cib/Publications/tvibook.html .

73 de W6DKN

Scott Wolfe <shantoa@wolfenet.com> wrote in message
news:81k4mcqkr1@sparky.wolfe.net...
> Down the street from me (about 4 houses) there is a ham operator and every
> time he is on I can hear garbage on my TV, Cordless phones, Radio's. etc.
>
> Is there any kind of filter I can buy to stop the interference? I know the
> guy has put a lot of money and time into his equipment but so did I.
>
> What can I do? It's frustrating.
>
> Thanks,
> -Scott
>
>
>

4433. Re: Where can I find plans for a Homebrew 6M SSB or 2M SSB Rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-26 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <81mbt3hgh1@nnrp1.deja.com>
Source record: 65387

In article <384383d1.71795462@news>,
a1@home.com (Rick) wrote:
> Hi...where can I find plans for such a rig?
> Preferably one with a digital readout, but that does not matter.
>
> Also, a special type of antenna is required for SSB, isn't it? If so,
> how could I build such an antenna out of either wire or pipes?
>
> Even better would be if you could come up with a PCB for such a
> thing...one that could be downloaded and printed out...but it is not
> mandatory. PCB would be nice, however, because all my wire-wrapping
> attempts are very sloppy.

You can't, because people rarely build such things in the way you
describe. And it doesn't matter how many times you ask.

A nice building block approach would build on work published
by KK7B in QST and reprinted in QRP Power, with kits available
through Kanga US. But it's not a turn-key approach, by any
means. You will actually (gasp!) have to do some work.

Wire-wrap? For RF circuits?
--
Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte
Satellite: VA3SFL on AO-16, UO-22, KO-23, KO-25

Sent via Deja.com http://www.deja.com/
Before you buy.

4434. Re: Annoying ham operator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-26 00:00:00 UTC
From: Harry SM0VPO <harryvpo@hotmail.com>
Message-ID: <81m4bu$kft@newstoo.ericsson.se>
Source record: 65388

Some of the other replies seemed to me to indicate that the ham radio operator WILL help you to fix the problem. I just want to make it clear that he is under no obligation to do so. Most ham operators will help in the interests of peace and goodwill to all neighbours, but I have been in the situation where there was no indication of a complaint from a neighbour, just a sudden threat of eviction by estate owners! I called in the telecomminication authorities and a lawyer. It went quiet after that, and the neighbour was charged with connecting an unauthorised telephone to the network.

BR Harry

Scott Wolfe wrote in message <81k4mcqkr1@sparky.wolfe.net>...
>Down the street from me (about 4 houses) there is a ham operator and every
>time he is on I can hear garbage on my TV, Cordless phones, Radio's. etc.
>
>Is there any kind of filter I can buy to stop the interference? I know the
>guy has put a lot of money and time into his equipment but so did I.
>
>What can I do? It's frustrating.
>
>Thanks,
>-Scott
>
>
>

4435. Kenwood TM-231A

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-26 00:00:00 UTC
From: Lloyd <lluby@nf.sympatico.ca>
Message-ID: <383EA7FC.B52D8DB7@nf.sympatico.ca>
Source record: 65389
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hi all,
I'm looking for some info on the radio mentioned in the subject line. It seems that the second of the two front panel illumination lights has expired and I need replacements. Can anyone tell me where to find a couple of these critters? I'm not sure of the type (LEDS?) or voltage etc. because I also have no service manual. 8^)
Any help appreciated.

Lloyd
VO1SE

4436. Re: How does R/C network act as filter? (Audio Amp. question)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-26 00:00:00 UTC
From: Allan Henry Kaplan <w1ael@mindspring.com>
Message-ID: <383EAF7D.62721CB6@mindspring.com>
Source record: 65390

The voltage divider formed by the 220K and 10K resistors divides the high voltage down by a factor of 22 with a source resistance equal to the parallel combination of the resistors, about 9.5K. This Thevenin-equivalent resistor acts with the capacitor to form a low-pass RC filter. The formula 1/(2*pi*R*C) gives a 3 dB corner frequency of 16.6 KHz (IF I did the arithmetic properly). I hope this helps. 73 de Allan, W1AEL

4437. Re: CK722

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-26 00:00:00 UTC
From: Grif <kgriffit@wolfenet.com>
Message-ID: <383EC3FE.774C@wolfenet.com>
Source record: 65391

Got to know,,, He must be 50-60 yrs old,,, I bet his first project was
the rfd 100 transmitter for the lower end of the broadcast band?

Darrell Lang wrote:
>
> HELP! I need to find a Raytheon CK722 (black) for my dad for
> Christmas.

4438. other than 60, 50 & 400 Hz transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-26 00:00:00 UTC
From: jhoyos@hoth.gcn.ou.EDU
Message-ID: <19991126125822796.AAA210.168@DEP_FISICA.ucaldas.edu.co>
Source record: 65392

Hi List:

I have heard about 25 Hz transformers, what were they used for?

There were other frequencies than 50 and 60 for power distribution
in recent times?

Thanks in advance.

Jorge Hoyos.

4439. Re: looking for MV1401 varicap diode

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-27 00:00:00 UTC
From: crdonmax1@aol.com
Message-ID: <19991126200821.19331.00000557@ng-cm1.aol.com>
Source record: 65305

Thanks, I checked Dans website (http://www.fix.net/dans.html), but didnt find this particular diode listed.
Craig

4440. Re: Sticky On Letters Suplyer Needed In U.K.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-27 00:00:00 UTC
From: merryprankster <merryprankster@cwcon.net>
Message-ID: <qoH%3.726$wV3.38842@news1-hme0>
Source record: 65306

Thanks all I have found letra set at the stationary suppliers in town dead easy.
Having never done any thing like this,
I didn't have a clue about rub on lettering it is every where I feel a bit daft for asking.
It's a bugger to line up though, any tips on getting it straight.
Thanks chaps from Bob

4441. General Radio Megaohm Resistor Decade Unit FA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-27 00:00:00 UTC
From: KQ6UV <kq6uv@hamsnet.net>
Message-ID: <tWM%3.1550$LK3.59406@nuq-read.news.verio.net>
Source record: 65307
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.homebrew,rec.radio.swap

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=205558832

Jim

4442. (10) Solid State Relays Grayhill 7052-04-B-04-F FA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-27 00:00:00 UTC
From: KQ6UV <kq6uv@hamsnet.net>
Message-ID: <yWM%3.1556$LK3.59406@nuq-read.news.verio.net>
Source record: 65308
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.homebrew,rec.radio.swap

Rated for 120 volt, 10 amps. with 3-30 VDC coil.

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=208007267

Jim

4443. 32uF, 4500 Volt Oil Filled Cap FA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-27 00:00:00 UTC
From: KQ6UV <kq6uv@hamsnet.net>
Message-ID: <xWM%3.1555$LK3.59406@nuq-read.news.verio.net>
Source record: 65309
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.homebrew,rec.radio.swap

New, never used. No PCBs.

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=208001879

Jim

4444. HV Diodes FA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-27 00:00:00 UTC
From: KQ6UV <kq6uv@hamsnet.net>
Message-ID: <uWM%3.1552$LK3.59406@nuq-read.news.verio.net>
Source record: 65310
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.homebrew,rec.radio.swap

They are rated 12kV, 350-500mA.

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=205568409

Jim

4445. A man or a place?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-27 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <SpUjhAA4T8P4EwAE@falstaf.demon.co.uk>
Source record: 65311
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Something has always intrigued me, I'm sad that way. A wien bridge
oscillator, is it named after a Mr/Mrs Wien or Vienna?

Cheers

Robin

--
Robin Birch robin@falstaf.demon.co.uk

M1ASU/2E0ARJ/M5ABD Old computers and radios always welcome

4446. EXAR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-27 00:00:00 UTC
From: Harold Johnson <w4zcb@earthlink.net>
Message-ID: <81ohup$n4s$1@birch.prod.itd.earthlink.net>
Source record: 65312

Surely someone out there has one or more Exar 2206 voltage controlled
oscillators that they'd rather have some money for.

W4ZCB
PLEASE? I'm trading my SPAM anonymity for this!

4447. Re: Wanted VHF communications article on DK1OF 2m Linear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-27 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <383f2356.86601027@news.online.no>
Source record: 65313
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

On Thu, 25 Nov 1999 08:28:30 +0000, Simon Lewis
<slewis@pacsat.demon.co.uk> wrote:

>In article <383c6702.523444023@news.online.no>, J M Noeding
><LA8AK@online.no> writes
>>
>>My VHF/UHF dx books shows K2RIW amplifier, believe the main difference
>>to other designs for DK1OF type is the coupling capacitor at anode
>>side, perhaps some difficulties in obtaining this capacitor? Please
>>advice me if I am wrong.
>>
>>73 jan-martin LA8AK
>
>No the difference is in the anode tuning capacitor (maybe you mean
>that?) -

well, I certainly know the difference between coupling capacitor and
tuning capacitor

4448. Re: Wanted VHF communications article on DK1OF 2m Linear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-27 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <383f23c4.86711404@news.online.no>
Source record: 65314
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

On Thu, 25 Nov 1999 12:15:56 -0000, "Mike" <m.j.willis @rl.ac.uk>
wrote:

>
>>
>> If you're looking to build a linear - may I suggest the W1SL in the
>> VHF/UHF DX Book. A good design, reproducible and very stable.
>
>Or even better - the W2GN. Kits available for the metalwork via DownEast
>Microwave. The chassis also works well on 4m.
>
what is so good with W2GN design? 45% efficiency due to too low bypass
capacitor in the anode circuit?

73 jan-martin LA8AK

4449. WTB vac vari cap

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-27 00:00:00 UTC
From: Matt Erickson <kk5dr@hotmail.com>
Message-ID: <383FEC18.11F551F9@hotmail.com>
Source record: 65315

I'm still looking for a "reasonably" priced Vacuum variable capacitor
2000pf @ 3kv, screw type drive (no motorized)

4450. Substitute Pin Diode in Ten_Tec Transverter kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-27 00:00:00 UTC
From: peter@xkeys.demon.co.uk
Message-ID: <383fc66f.3637766@news.demon.co.uk>
Source record: 65316

I need to replace a pin diode - KS4522 or M1308 from a Ten_Tec
transverter kit. However, I cannot find the specified diode in the UK.
Does anyone know of a suitable replacement?

The pin diode is part of the receive pre amp stage, protecting the pre
amp from the transverter output. During transmit the diode is biased
on and shorts the input of the pre amp to ground.

Any help would be greatly appreciated.

Peter GW7MYD

4451. Re: EXAR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-27 00:00:00 UTC
From: Don Cunningham <wb5hak@texhoma.net>
Message-ID: <81p0hl$1in$1@ionews.ionet.net>
Source record: 65317

Harold, and others,
Jameco Electronics (www.jameco.com) has EXAR chips in stock still. The
XR2206 is their part number 34972 and is $3.25 for quantity 1 - 10. Toll
free order number is 1-800-831-4242. Didn't note minimum orders, etc.
Usual disclaimers apply. No connection with Jameco, just been ordering from
there for years and satisfied.
73,
Don, WB5HAK
Harold Johnson wrote in message
<81ohup$n4s$1@birch.prod.itd.earthlink.net>...
>Surely someone out there has one or more Exar 2206 voltage controlled
>oscillators that they'd rather have some money for.
>
>W4ZCB
>PLEASE? I'm trading my SPAM anonymity for this!
>
>
>

4452. antenna RESTRICTION help HERE

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-27 00:00:00 UTC
From: "john williams (remove X to reply)" <Xac6ts@n2.net>
Message-ID: <384009D7.50F7E09A@n2.net>
Source record: 65318

Antenna restriction solutions, DESIGNS, and IDEAS that WORK! See how
others do it.
Go to page below and click ANTENNA RESTRICTIONS link. No need to wait
for images to load, just scroll down to link right away. Bookmark it for

future referance...changes daily.
--
PAGE AT-> http://www.angelfire.com/ca2/home4biz/index.html

---/---
---/---
----/----
-----/-----

AC6TS John Williams
LAT. 33.06.15 LON. -117.03.36 7.030Mhz CW
DM13KC 14.030Mhz CW

4453. Re: Homebrew Dummy Load

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-27 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <VAU%3.4587$zQ4.366842@news2.giganews.com>
Source record: 65319

Try a 100 Watt light bulb. Works great as dummy load in the 50 Watt range. For higher powers, put a couple in series or parallel. Important that the bulb not light brightly, since a brightly lit 100 Watt lamp (120 Volt variety) is 161 Ohms or so.

For more precise values, adjust the supply to the lamp and measure the current. When you find the resistance you like, match the brightness and you will have the right value. They are not inductive, cheap, and work up into the VHF range.

If that isn't your cup of tea, I suggest a bank of two-Watt carbon resistors. Fifty of them in parallel, 2.7k Ohms will give you 54 Ohms and will handle 100 Watts for long periods if you don't pack them too closely. Works into VHF range. For better high frequency performance, use two banks in series of 25 resistors in parallel, each resistor 620 Ohms. That should give 51.2 Ohms.

You can use wide tolerance resistors; in general, the typical bell shaped tolerance curve of so many resistors will average out to an amazingly accurate result.

I have used a series string of five two watt resistors, 10 Ohms each, as a dummy load for many years without problem. It would handle around 10 Watts continuously but I've put a lot more into them for short periods. No sign of overheating, and I can monitor them easily with a fingertip.

73, Bob K6DDX

4454. Re: Wanted VHF communications article on DK1OF 2m Linear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-27 00:00:00 UTC
From: tgold@microvest.demon.co.uk
Message-ID: <19991127.1541.9905090snz@microvest.demon.co.uk>
Source record: 65320
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

On Saturday, in article <383f2356.86601027@news.online.no>
LA8AK@Online.NO "J M Noeding" wrote:

> well, I certainly know the difference between coupling capacitor and
> tuning capacitor

The tuning capacitor does not affect the coupling as much as the
coupling capacitor affects the tuning :-)

Regards,
--
Tony - G3SKR / W2TG email: tgold@panix.com

4455. Re: Wanted VHF communications article on DK1OF 2m Linear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-27 00:00:00 UTC
From: tgold@microvest.demon.co.uk
Message-ID: <19991127.1546.9905091snz@microvest.demon.co.uk>
Source record: 65321
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

On Saturday, in article <383f23c4.86711404@news.online.no>
LA8AK@Online.NO "J M Noeding" wrote:

> what is so good with W2GN design? 45% efficiency due to too low bypass
> capacitor in the anode circuit?

I remember caring about efficiency back in the dawn of time when
dinosaurs roamed the planet and my licence restricted input power.

Thanks for the nostalgia, but now back to amateur radio :-)

Regards,
--
Tony - G3SKR / W2TG email: tgold@panix.com

4456. Re: A man or a place?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-27 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <gyU%3.4586$zQ4.367638@news2.giganews.com>
Source record: 65322
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"The credit for the definite change from d-c to a-c belongs to Max Wien, who in 1891 laid down the basic principles and published a collection of bridge networks."

From Basic Electrical Measurements, Melville B. Stout, 1950, page 179.

73, Bob K6DDX

4457. Re: Homebrew Dummy Load

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-27 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <383fd61d.132375686@news.online.no>
Source record: 65323

On Fri, 26 Nov 1999 20:34:28 -0800, Gregg Schwabauer
<griggy@cyberhighway.net> wrote:

>Where can I find suitable high watt, low reactance, 50 ohm resistors
>used to make hf dummy loads?
>
>I need something in the 100 watt range for now, 1000 watt later.
>
>GAS
>KB7WWD
>
If you only want to use it below 30MHz you do not need to look for low reactance resistors, you can paralell many lower wattage carbon resistors. If you wish to build it for higher than 30MHz the problem with parallelling resistors is inductance in the connections between the resistors, this has a physical extension for good cooling, and also some capacitive effect.

I used some non-inductive 200 ohm resistors (50W) from RCA TV transmitter on 200MHz, resistor size 2" diameter tubular, 4" long, they were good alone, but connected in parallell capacitance and inductance of the leads is a problem, so it is still not much good on 50MHz-up. For a single-band VHF operation a far better approach is a single resistor with impedance transformer, but still - the physical length of resistor has some inductance.

In a dummy load you can probably use resistors rated for the sum of 250W on 1kW if you do not intend to tune for minutes. Problem is that coax cable may melt before resistors are damaged. With a simple fan this is very much improved.

For lower power levels it is easy to use 6 standard 2W 300 ohm resistors in paralell to build a dummy with as much as 12dB reflection loss on 1296MHz., and better on the lower bands.

73 jan-martin LA8AK

4458. Re: other than 60, 50 & 400 Hz transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-27 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <383FCBCF.822587C9@bellsouth.net>
Source record: 65324

jhoyos@hoth.gcn.ou.EDU wrote:
> There were other frequencies than 50 and 60 for power distribution
> in recent times?

My mother told the tale of once burning out a movie projector at a
nursing school in Milwaukee - she hadn't been told the school had DC
electricity. This was in the mid-1950s...
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

4459. Re: other than 60, 50 & 400 Hz transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-27 00:00:00 UTC
From: William Janssen <billj@calweb.com>
Message-ID: <38402873.284D5421@calweb.com>
Source record: 65325

Electric railroads used DC and/or 25 Hz. In some locations
the first user of electricity was the railroad. People living
in those locations could sometimes get power from the railroad
system. Also industry used these DC or 25 Hz systems. DC or low
frequency has lower trasmission losses if I remember correctly.
Today there are DC transmission lines. An example is a line from
Oregon to Southern California.

Bill K7NOM

jhoyos@hoth.gcn.ou.EDU wrote:
>
> Hi List:
>
> I have heard about 25 Hz transformers, what were they used for?
>
> There were other frequencies than 50 and 60 for power distribution
> in recent times?
>
> Thanks in advance.
>
> Jorge Hoyos.

4460. Tektronix 491 Mod spectrum analyzer request.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-27 00:00:00 UTC
From: Sotiris Antoniou <samant@ath.forthnet.gr>
Message-ID: <81paa2ijl1@medousa.forthnet.gr>
Source record: 65326
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.misc

Hi,
Someone is selling me a Tektronix 491 Mod spectrum analyzer. He told me that the only
problem it has, is the power switch. I don't know the price yet . He wants me to see it first .
Can someone please give me any information for it?
Is it worth buying it? Thank you.

Sotiris Antoniou .
samant@ath.forthnet.gr

4461. Re: other than 60, 50 & 400 Hz transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-27 00:00:00 UTC
From: Jim Adney <jadney@vwtype3.org>
Message-ID: <CiNAOPp30QteXpHU3px+L=Be5=ph@4ax.com>
Source record: 65327

davem@groucho.cs.ubc.ca (Dave Martindale) wrote:

>Lighting operated from 25 Hz power
>flickers at 50 Hz, which is visible.

A flicker rate of 50 Hz is commonly spoken of as being annoying, but it is well above that of modern theater projectors, which I believe run at 16 frames/sec, projecting each frame twice for a flicker rate of 32/sec. I haven't run into anyone yet who is annoyed by the flicker rate of a modern movie.

In addition, incandescent bulbs have enough thermal mass that they really don't cool down that much each cycle, so there really isn't much flicker to them.

Of course, neon and fluorescent lamps DO flicker at twice the line frequency.

I suspect that the move to higher line frequencies was motivated by the reduction in iron (and consequently weight and size) in generators and transformers.

Jim
-

Jim Adney jadney@vwtype3.org
Madison,Wisconsin USA

4462. Re: Where can I find plans for a Homebrew 6M SSB or 2M SSB Rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-27 00:00:00 UTC
From: "Laszlo I. Morocz" <kf4pv@SPAMMENOTlmorocz.com>
Message-ID: <0ZW%3.254$Jh3.4016@jump.innerx.net>
Source record: 65328

Good news - There is no difference in the antennas. RF is RF, regardless of how it's modulated.
Bad news - no schematics or plans for a complete integrated rig, sorry. But, if you're willing to do some research and design work, the RSGB VHF/UHF manual, as well as the ARRL handbook both have plans for all the building blocks to build what you're looking for. "All" you have to do is to integrate them.

Actually, the first thing is for you to figure out exactly what you want. Does it have to be a complete, integrated transceiver, or would separate transmitters and receivers be good enough? Do you want to build the whole thing from scratch, or could you pick up a good used HF rig (even an old tube-type boat anchor) and build just a transverter for it? There are definitely plans for those in the Handbook. For the receiver, how about picking off the signal from a handheld just after the mixer and running it into a full coverage HF receiver? You get CW, USB, LSB, FM and maybe AM in one setup that way. The HF rig would be left on the IF and all tuning done with the handheld, so you could use an old BA with an analogue dial and still have digital readout from the handheld. And, no wire-wrapping needed at all.

And speaking of wire-wrapping, probably not such a good idea for analogue VHF. You can get away with it for digital, especially CMOS, and I know a professional RF engineer who even uses wire-wrap wire and those white plug-in proto boards to breadboard circuits for up to 1 GHz. But he knows what to expect and how to compensate for it. We mere mortals should not tempt Murphy by doing that kind of silliness.

For more info, check out the 2 books I mentioned. Other sources for building blocks are the Satellite Experimenter's Handbook by Martin Davidoff, K2UBC (that's where I got the handheld idea from), pretty much anything by Doug Demaw, W1FB (his Solid State Design for the Radio Amateur - co-written with Wes Hayward, W7ZOI - actually has a DSB 2 & 6 meter transmitter, as well as a universal SSB exciter that can be one of your building blocks and construction techniques much more appropriate than wire-wrap) and for on-line info about building blocks (as well as a 2-meter crystal set), Harry's Homebrew Page (Harry being SM0VPO) at http://sm0vpo.8m.com/ . Good luck.

73 de KF4PV/3, Laszlo

--
To reply, remove the text SPAMMENOT from the e-mail address.

Rick wrote in message <384383d1.71795462@news>...
>Hi...where can I find plans for such a rig?

>Preferably one with a digital readout, but that does not matter.
>
>Also, a special type of antenna is required for SSB, isn't it? If so,
>how could I build such an antenna out of either wire or pipes?
>
>Even better would be if you could come up with a PCB for such a
>thing...one that could be downloaded and printed out...but it is not
>mandatory. PCB would be nice, however, because all my wire-wrapping
>attempts are very sloppy.
>
>
>TNX,
>Rick
>
>KE1JA@home.com
>actually...it's rick1 instead of ke1ja. But, many spam checkers pick
>up on e-mails in the body...so therefore i did that.

4463. Re: looking for MV1401 varicap diode

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-27 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <81pjv1$l46$1@nnrp1.deja.com>
Source record: 65329

In article <19991126200821.19331.00000557@ng-cm1.aol.com>,
crdonmax1@aol.com (CRDONMAX1) wrote:
> Thanks, I checked Dans website (http://www.fix.net/dans.html), but
didnt find
> this particular diode listed.
> Craig
>

Try Dial Electronics at http://www.dialelectronics.co.uk/m25.htm
or Richardson Electronics http://www.rell.com/rell/gen_search.asp or, if
you want greater quantities, try Partminer at www.partminerclient.com
--
Greetings,

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Before you buy.

4464. Re: other than 60, 50 & 400 Hz transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-27 00:00:00 UTC
From: davem@groucho.cs.ubc.ca
Message-ID: <81ph0c$jlo@groucho.cs.ubc.ca>
Source record: 65330

Jim Adney <jadney@vwtype3.org> writes:

>>Lighting operated from 25 Hz power
>>flickers at 50 Hz, which is visible.

>A flicker rate of 50 Hz is commonly spoken of as being annoying, but
>it is well above that of modern theater projectors, which I believe
>run at 16 frames/sec, projecting each frame twice for a flicker rate
>of 32/sec. I haven't run into anyone yet who is annoyed by the flicker
>rate of a modern movie.

16 and 18 FPS were used for movies in the silent period, but sound
movies run at a standardized 24 FPS. With the usual double-flash
projector, this results in a 48 Hz on-screen flash rate. The eye's
sensitivity to flicker depends on lighting levels, and at the relatively
low light levels in movie theatres within the image areas, 48 Hz flicker
is *usually* not visible.

However, the eye is more sensitive to flicker in its peripheral vision
than it is in the central area (fovea), and movies sometimes have
large areas. that are significantly brighter than the
average image level. When all of these factors combine, for example
if there are bright clouds in the sky but you're looking at something in
the foreground, audiences sometimes *do* see flicker in standard movies.

To avoid this, triple-flash movie projectors have been built; the 72 Hz
flash rate *is* invisible regardless of scene content.

Computer displays are much brighter than movie screens, so they
have to be operated at higher frequencies to avoid flicker - as high
as 72 Hz in some cases. 48 Hz flicker on a CRT is definitely visible
at normal room light levels.

Now, light bulbs are even brighter than CRT displays, and are also
more often in the peripheral vision, so this is probably the worst
possible case for seeing flicker.

>In addition, incandescent bulbs have enough thermal mass that they
>really don't cool down that much each cycle, so there really isn't
>much flicker to them.

Have you ever seen a light bulb driven by 25 Hz? I haven't myself,
but I have heard of the flicker.

In addition, I've measured the flicker produced by a 200 W 12 V halogen
lamp running from 60 Hz. This is a nice heavy tungsten filament, and
the ripple in the light output is still a few percent - not enough to

see flicker, but enough to screw up a CCD scanner. So I'll readily believe that a thin 120V filament running at 25 Hz would have much more ripple in light output, enough to see.

>I suspect that the move to higher line frequencies was motivated by
>the reduction in iron (and consequently weight and size) in generators
>and transformers.

I'll agree with you there. It may have also come about because better transformer steel became available. Plain iron has losses that increase dramatically with higher frequency, so perhaps using higher than 25 Hz would have resulted in inefficient transformers. Then silicon steel was developed for transformer cores, allowing 60 Hz operation while keeping losses low. But I'm too young to have been around at the time, so this is speculation.

Dave

4465. Re: Substitute Pin Diode in Ten_Tec Transverter kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-27 00:00:00 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <38404A08.71CD4D52@dialpoint.net>
Source record: 65331

YOu may be able to subsitute a 1N4007 diode for it. TT has recommended
using that diode for a replacement in their 6 meter transverter. The
1N4007 diode from the 4000 to 4007 series is suspose to be the only one
that uses the pin method.
Youy should be able to find that diode as it is a common one rated for
about 1000 piv at 1 amp if I remember the ratings correctly.

peter@xkeys.demon.co.uk wrote:
>
> I need to replace a pin diode - KS4522 or M1308 from a Ten_Tec
> transverter kit. However, I cannot find the specified diode in the UK.
> Does anyone know of a suitable replacement?
>
> The pin diode is part of the receive pre amp stage, protecting the pre
> amp from the transverter output. During transmit the diode is biased
> on and shorts the input of the pre amp to ground.
>
> Any help would be greatly appreciated.
>
> Peter GW7MYD

4466. Re: Wanted VHF communications article on DK1OF 2m Linear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-27 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <38402582.152703392@news.online.no>
Source record: 65332
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

On Sat, 27 Nov 1999 15:41:27 +0000 (GMT), tgold@microvest.demon.co.uk
("Anthony R. Gold") wrote:

>On Saturday, in article <383f2356.86601027@news.online.no>
> LA8AK@Online.NO "J M Noeding" wrote:
>
>> well, I certainly know the difference between coupling capacitor and
>> tuning capacitor
>
>The tuning capacitor does not affect the coupling as much as the
>coupling capacitor affects the tuning :-)
>
yes, one reason to avoid W2GN construction

4467. Re: Homebrew Dummy Load

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-27 00:00:00 UTC
From: William Janssen <billj@calweb.com>
Message-ID: <3840663A.A41B74B1@calweb.com>
Source record: 65333

Good advice below but you can make it even better if you get a couple
hundred feet of RG58 and put the dummy load at the end of it.

Bill K7NOM

Bob wrote:
>
> Try a 100 Watt light bulb. Works great as dummy load in the 50 Watt range.
> For higher powers, put a couple in series or parallel. Important that the
> bulb not light brightly, since a brightly lit 100 Watt lamp (120 Volt
> variety) is 161 Ohms or so.
>
> For more precise values, adjust the supply to the lamp and measure the
> current. When you find the resistance you like, match the brightness and
> you will have the right value. They are not inductive, cheap, and work up
> into the VHF range.
>
> If that isn't your cup of tea, I suggest a bank of two-Watt carbon
> resistors. Fifty of them in parallel, 2.7k Ohms will give you 54 Ohms and
> will handle 100 Watts for long periods if you don't pack them too closely.
> Works into VHF range. For better high frequency performance, use two banks
> in series of 25 resistors in parallel, each resistor 620 Ohms. That should
> give 51.2 Ohms.
>
> You can use wide tolerance resistors; in general, the typical bell shaped
> tolerance curve of so many resistors will average out to an amazingly
> accurate result.
>
> I have used a series string of five two watt resistors, 10 Ohms each, as a
> dummy load for many years without problem. It would handle around 10 Watts
> continuously but I've put a lot more into them for short periods. No sign
> of overheating, and I can monitor them easily with a fingertip.
>
> 73, Bob K6DDX

4468. Re: other than 60, 50 & 400 Hz transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-27 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <81prapor1@uranium.btinternet.com>
Source record: 65334

The frequency, from DC to several KHz, single-phase or multi-phase,
for power transmission is invariably selected to provide least energy
loss for the greatest amount of energy transmitted during the expected
life of the transmission system, including transformation and
mainenance costs.

Ultimately, calculations reduce to maximising the profit returned to
the shareholders and minimising charges made to energy consumers.
When energy generating and transmitting companies are nationalised the
consumers ARE the shareholders.

Reg.

4469. Re: other than 60, 50 & 400 Hz transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-27 00:00:00 UTC
From: John Moriarity <k6qq@hdo.net>
Message-ID: <s415q5haa4r37@corp.supernews.com>
Source record: 65335

Jim Adney <jadney@vwtype3.org> wrote in message
news:CiNAOPp30QteXpHU3px+L=Be5=ph@4ax.com...
>
> In addition, incandescent bulbs have enough thermal mass that they
> really don't cool down that much each cycle, so there really isn't
> much flicker to them.

As a kid in the 1940s I remember seeing flickering incandescent
lights on a 25 Hz supply. It was in a small town somewhere in
Arizona or New Mexico; I can't remember just where.

They DID flicker noticeably and when I asked my Dad why, he
explained that it was the 25 "cycle" power.

73,

John

4470. RF Amp Builders Parts for sale;

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-27 00:00:00 UTC
From: RB <wa9eka@worldnet.att.net>
Message-ID: <81q5cs$q1r$1@bgtnsc02.worldnet.att.net>
Source record: 65336

```
I have the following RF Amplifier parts to sell;
================================================
4-1000 Tube with finned Aluminum Plate Cap $100
------------------------------------------------
Oil Filled Capacitors;
[QTY 1] 53 MFD @ 3.5 KV $30
[QTY 2] 8 MFD @ 4 KV $15 ea.
[QTY 3] 2 MFD @ 3 KV $10 ea. (NEW!)
[QTY 2] 24 MFD @ 1 KV $10 ea. (NEW!)
[QTY 1] 4 MFD @ 600 V $5 (NEW!)
[qty 2] 2 MFD @ 600 V $5 ea. (NEW!)
*Take all the above for $100
------------------------------------------------
Brand New Peter Dahl 30AMP Filament Choke $25
------------------------------------------------
Sangamo Type GLB Ceramic Mica DC Blocking Caps;
(Big Commercial type with cast aluminum flanges)
(they have 20AMP RF rating at 1000KC)
Have (3) .01 @ 4 KV, .016 @ 3 KV, & .02 @ 3 KV.
$20 ea. or take all 3 for $50 and I'll ship (48)
------------------------------------------------
National Neutralizing Capacitor (1 7/8" dia.)
(~1/16-1" adj.) has venier drive with lock. $20
------------------------------------------------
Blower 115VAC - 2960RPM - 3" ID round air inlet.
2 1/2" Sq. Outlet w/3"BoltCtr flange mount. $30
------------------------------------------------
19" Rack Panel Cabinet has 35 1/8" total front
Panel opening space. Cabinet is overall 23" Wide,
44" High, 24" Deep, has front and rear mtg rails,
Removable rear door by just lifting up when open,
Custom made bolt-on White Formica Top, Nice cond.
Removable wheels and level adjusters. $100
------------------------------------------------
0-120 VAC, 2 AMP Variac w/Dial & Knob $10

0-140 VAC, 5 AMP Variac w/Dial & Knob $15

0-120 VAC, 10 AMP Variac w/Dial & Knob $25

0-280 VAC, 15 AMP Variac w/Dial & Steering Wheel
type Knob with 3/4" diameter shaft. $50
------------------------------------------------
5" square panel meter 0-300 Volts A.C. $6ea 2/$10
3" round panel meter 0-5000 Volts D.C. Simpson $10
```

3" round panel meter 0-150 Volts A.C. $6ea 2/$10
(take all 5 meters for $25.00)

ALL ITEMS PLUS SHIPPING (at cost) K9RB@arrl.net
Roger Borowski-K9RB (near Jacksonville, Florida)
==========

4471. Re: Homebrew Dummy Load

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-27 00:00:00 UTC
From: "Al, N2NKB"
Message-ID: <81q8de$qo8$1@bgtnsc01.worldnet.att.net>
Source record: 65337

The technique of putting lossy cable before a dummy load is commonly
used in verifying the performance of a duplexer, for instance. The return
loss of the cable diminishes the effects of the dummy load's
generated Intermodulation distortion, which can desensitize the receiver.
I think that there is no problem if the RG58 is used in low kW applications,
if it is a 50 ohm system. I have done this for years.
Al

J M Noeding wrote in message <38409caa.183211860@news.online.no>...
>On Sat, 27 Nov 1999 15:16:10 -0800, William Janssen <billj@calweb.com>
>wrote:
>
>>Good advice below but you can make it even better if you get a couple
>>hundred feet of RG58 and put the dummy load at the end of it.
>>
>>Bill K7NOM
>>
>perhaps not so good advice considering the max power level for this
>sort of cable.....
>
>Quote:
>Fm : DL8ABO
>
>BID (MID) : M27DB0EIN003
>
>Tittel : Technische Daten Koaxialkabel:
>Path:
>!LA1G!SM6DLD!SK6SA!SK6LK!SK6BA!SK6YW!SK6FV!SK7OA!OZ3BOS!OZ4BOX!OZ4BBS!
> !OZ4PAC!OZ5BBS!DB0OQ!DB0HES!DF0HMB!DB0FC!DB0NHM!DB0EIN!
>From: DL8ABO @ DB0EIN.#NDS.DEU.EU (Mirko-AB0DL)
>.....
>Maximale Leistung in Watt bei:
>----------
>
>Typ f/MHz: 10 30 50 100 145 200 400 435 500 1296 2320 3000
>5000
>----------

>
>RG-55 Belastbarkeit wie RG-223 U
>RG-58 CU 550 240 125 100 90 49 31 30
>20
>
>RG-174 U 200 95 57 42 30 18 13

>RG-188 AU 550 380 260 130 90
>75
>RG-196 AU 85 57 18
>
>RG-223 U 950 300 200 100 68
>40
>
>--
>.....
>Quellenangaben: Rothammel, Suhner, Radiall...
>---------------
>
> ..73 de Mirko
>
> +++ AB 0 DL / DL 8 ABO +++ aus Kreiensen am Harz - JO41XU
> +++ U S A / GERMANY +++
>
>
>
>
>--- Slutt p melding nr. 340102 til TECHNI fra DL8ABO ---
>
>(2) LA9K BBS>
>

4472. Re: Tektronix 491 Mod spectrum analyzer request.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-27 00:00:00 UTC
From: maxwell <max_spitzNOmaSPAM@hotmail.com.invalid>
Message-ID: <347210dc.39c54630@usw-ex0107-050.remarq.com>
Source record: 65338
Cross-posted to: sci.electronics.misc,alt.ham-radio.vhf-uhf,rec.radio.amateur.homebrew,sci.electronics.equipment

pay him half as a deposit while you fix it
if its cheap enough,buy it!

* Sent from RemarQ http://www.remarq.com The Internet's Discussion Network *
The fastest and easiest way to search and participate in Usenet - Free!

4473. Re: 2m amplifier FMvsSSB

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-27 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <s4304.5775$zQ4.435572@news2.giganews.com>
Source record: 65339

I'm not that familiar with those amplifiers but my guess is that the SSB mode simply adds a delay so it doesn't keep dropping back to receive mode between words. I doubt that there is anything much different in the actual amplifier, although it's possible that the bias is shifted slightly to make it more linear. In any case, that won't harm operation in FM mode I'm sure.

73, Bob K6DDX

4474. Re: Wanted VHF communications article on DK1OF 2m Linear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-27 00:00:00 UTC
From: "g0mjw.freeserve.co.uk" <Mike@g0mjw.freeserve.co.uk>
Message-ID: <81r9ktuog1@news6.svr.pol.co.uk>
Source record: 65340
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

```
well on 4m.
> >
> what is so good with W2GN design? 45% efficiency due to too low bypass
> capacitor in the anode circuit?

The modified version...
```

4475. Re: Homebrew Dummy Load

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-27 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19991127181924704 32@zetnet.co.uk>
Source record: 65341

> Where can I find suitable high watt, low reactance, 50 ohm resistors
> used to make hf dummy loads?
> I need something in the 100 watt range for now, 1000 watt later.
==========
Caddock Electronics Inc. 1717 Chicago Ave. - Riverside CA92507-2364
(tel: (714) 788 1700) make excellent non-inductive ,power film
resistors in a TO-220 package . Their model Kool-Tab MP820 can
handle 20 Watts and is available in various values , standard item
tolerance is 1% Range available from 1 to 10000 Ohms
For a 100W -50 Ohms dummy load you would need 5 resistors of 250 Ohms
or 8 pcs of 400 Ohms on a BIG heat sink .placing the resistors in a
circle with shortest possible lead to RF connector and ground.
When using 8 or more resistors some creativity will be necessary when
using more than 1 heat sink whilst ensuring shortest possible wire
connections . Although the latter is highly likely only essential
for freqs > 30 MHz
A cooling fan will probably be very useful at higher power levels.

G. L.

Frank , GM0CSZ / KN6WH

4476. Re: Annoying ham operator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-28 00:00:00 UTC
From: pdoxtater@aol.com
Message-ID: <19991127194948.12825.00000837@ng-ci1.aol.com>
Source record: 65243

Buy a high pass filter for your tv, and is the phone a portable or on the wall, on the wall can be fixed but a portable nothing can be done for it.Good Luck.

4477. Re: Homebrew Dummy Load

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-28 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <38409caa.183211860@news.online.no>
Source record: 65244

On Sat, 27 Nov 1999 15:16:10 -0800, William Janssen <billj@calweb.com>
wrote:

>Good advice below but you can make it even better if you get a couple
>hundred feet of RG58 and put the dummy load at the end of it.
>
>Bill K7NOM
>
perhaps not so good advice considering the max power level for this
sort of cable.....

Quote:
Fm : DL8ABO

BID (MID) : M27DB0EIN003

Tittel : Technische Daten Koaxialkabel:
Path:
!LA1G!SM6DLD!SK6SA!SK6LK!SK6BA!SK6YW!SK6FV!SK7OA!OZ3BOS!OZ4BOX!OZ4BBS!
!OZ4PAC!OZ5BBS!DB0OQ!DB0HES!DF0HMB!DB0FC!DB0NHM!DB0EIN!
From: DL8ABO @ DB0EIN.#NDS.DEU.EU (Mirko-AB0DL)
.....
Maximale Leistung in Watt bei:

Typ f/MHz: 10 30 50 100 145 200 400 435 500 1296 2320 3000
5000

RG-55 Belastbarkeit wie RG-223 U
RG-58 CU 550 240 125 100 90 49 31 30
20

RG-174 U 200 95 57 42 30 18 13
RG-188 AU 550 380 260 130 90
75
RG-196 AU 85 57 18

RG-223 U 950 300 200 100 68
40

.....
Quellenangaben: Rothammel, Suhner, Radiall...

..73 de Mirko

+++ AB 0 DL / DL 8 ABO +++ aus Kreiensen am Harz - JO41XU
+++ U S A / GERMANY +++

--- Slutt p melding nr. 340102 til TECHNI fra DL8ABO ---

(2) LA9K BBS>

4478. Re: other than 60, 50 & 400 Hz transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-28 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <384097bc.181950028@news.online.no>
Source record: 65245

On Sat, 27 Nov 1999 10:52:35 -0800, William Janssen <billj@calweb.com>
wrote:

>Electric railroads used DC and/or 25 Hz. In some locations
>the first user of electricity was the railroad. People living
>in those locations could sometimes get power from the railroad
>system. Also industry used these DC or 25 Hz systems. DC or low
>frequency has lower trasmission losses if I remember correctly.

sure about those 25Hz? Railways here uses 16 2/3Hz

4479. 2m amplifier FMvsSSB

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-28 00:00:00 UTC
From: Bill <bill@hovac.com>
Message-ID: <3840b821_6@news.newsfeeds.com>
Source record: 65246

Hello all,
I have a 2m 70 watt amplifier. It has a toggle switch to choose between FM and SSB. I have it remotely located in the car. I operate FM most of the time but also some SSB. Can I leave the switch in the SSB mode and transmit on FM without damaging it???? I know the in the FM mode won't work when transmitting SSB because of the lack of a carrier with out the audio but I don't see what it would hurt to have it in SSB and transmit on FM.

Thanks for all your help in advance.
73 and God Bless
Bill

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4480. Re: EXAR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-28 00:00:00 UTC
From: Frizz <senorpurpl@hotmail.com>
Message-ID: <81qfnknak1@autumn.news.rcn.net>
Source record: 65247

Just curious, but you wouldn't be trying to build something that generates DTMF tones of a specific nature would you?;-) If so, could you pass some info on to me? thanks!

Harold Johnson wrote in message
<81ohup$n4s$1@birch.prod.itd.earthlink.net>...
>Surely someone out there has one or more Exar 2206 voltage controlled
>oscillators that they'd rather have some money for.
>
>W4ZCB
>PLEASE? I'm trading my SPAM anonymity for this!
>
>
>

4481. Re: Where Do You Buy Project Supplies?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-28 00:00:00 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <zdBAOHI4=8qkyBEVMP8X3a43bDx0@4ax.com>
Source record: 65248

On Fri, 5 Nov 1999 19:17:48 -0500, "Billy Moore" <billymoore@nospam.mindspring.com> wrote:
>We have Radio Shhhh... Radio Shhhh.... Radio Shhhh.... I can't say it.
>You know, that Tandy company. We also have a couple of small shops like
>Radio Electronics that caters to local businesses, but they are expensive.
>I haven't been able to find any surplus shops around here. Does anyone know
>of a surplus shop in the Northeast Atlanta area?
>
>Billy Moore

Alas, Delta is now just a computer store, but they used to be a great surplus
outlet in Doraville. Austin Electronics is still around (off Oakbrook Parkway).
They have a fair assortment of new and surplus parts.

For new parts, there's Tech America (now Radio Shack.com) on Buford Highway.
Also in the Norcross area are branches of all the major distributors, Wyle, Pioneer,
Hamliton Havenot (really Avnet), etc. Unfortunately, most of them aren't stocking
sites. They'll have your part for you in a couple of days, but then so will Digi-Key.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

4482. Re: other than 60, 50 & 400 Hz transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-28 00:00:00 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <5sl14scoevcarqf311d8489j4f2nqfptsr@4ax.com>
Source record: 65249

On Sat, 27 Nov 1999 13:08:22 -0600, Jim Adney <jadney@vwtype3.org>
wrote:

>In addition, incandescent bulbs have enough thermal mass that they
>really don't cool down that much each cycle, so there really isn't
>much flicker to them.

This depends on the rated power and rated voltage of the bulb.

I once tried to use a simple rectifier to reduce light output in 50 Hz
and 230 V environment. This produced 50 light pulses each second, as
would both halfwaves from a 25 Hz supply. The light was very flickery
on 40 .. 60 W bulbs, but was quite nice on a 250 W (non-halogen) spot
light due to the thermal mass.

4483. Re: Where can I find plans for a Homebrew 6M SSB or 2M SSB Rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-28 00:00:00 UTC
From: n2cqr@erols.com
Message-ID: <38414d48.88133588@news.erols.com>
Source record: 65250

Rick: I'd advise you to start out with some less ambitious homebrew
projects. Gain some experience, get some easier projects working
right and then, later, take on your big dual band digital readout rig.

Lot of novice homebrewers start out by taking on projects that are
really too advanced (that's what I did). They get frustrated and
retire their soldering irons. Why not start out with some simple
receive converters for 6 and 2? Or maybe some QRP transmitters?

Good Luck 73 Bill N2CQR
http://www.erols.com/wmeara

>
>Rick wrote in message <384383d1.71795462@news>...
>>Hi...where can I find plans for such a rig?
>>Preferably one with a digital readout, but that does not matter.
>>
>>Also, a special type of antenna is required for SSB, isn't it? If so,
>>how could I build such an antenna out of either wire or pipes?
>>
>>Even better would be if you could come up with a PCB for such a
>>thing...one that could be downloaded and printed out...but it is not
>>mandatory. PCB would be nice, however, because all my wire-wrapping
>>attempts are very sloppy.
>>
>>
>>TNX,
>>Rick

4484. Re: 2m amplifier FMvsSSB

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-28 00:00:00 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <38410B35.343FA0A0@dialpoint.net>
Source record: 65251

Leave it in the ssb mode if you want. All that does is fix the time
delay to keep the relay from dropping out between words. Most amps just
add in a capacitor in the relay time delay circuit. Nothing is done to
the RF part. YOu can run an extra wire to the amp and hard key it
instead of using the RF to do the job and not worry about it dropping
out or waiting the extra second or so for it to drop while using FM.

Bill wrote:
>
> Hello all,
> I have a 2m 70 watt amplifier. It has a toggle switch to choose between FM
> and SSB. I have it remotely located in the car. I operate FM most of the
> time but also some SSB. Can I leave the switch in the SSB mode and transmit
> on FM without damaging it???? I know the in the FM mode won't work when
> transmitting SSB because of the lack of a carrier with out the audio but I
> don't see what it would hurt to have it in SSB and transmit on FM.
>
> Thanks for all your help in advance.
> 73 and God Bless
> Bill
>
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> ------== Over 73,000 Newsgroups - Including Dedicated Binaries Servers ==-----

4485. Re: other than 60, 50 & 400 Hz transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-28 00:00:00 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <kh324s8mhr4oufaod8jdvo7avkngc2p7ia@4ax.com>
Source record: 65252

On Sat, 27 Nov 1999 21:11:43 +0000, Nick <maad65@dial.pipex.com>
wrote:

>On Sat, 27 Nov 1999 10:52:35 -0800, William Janssen <billj@calweb.com> wrote:
>
>> DC or low
>>frequency has lower trasmission losses if I remember correctly.
>>Today there are DC transmission lines. An example is a line from
>>Oregon to Southern California.

That 3100 MW system operates at +500 kV and -500 kV.

>The advantages of DC for transmission are that line capacitance does not affect
>it and that the two ends do not have to be phase synchronous networks.

>Capacitance is normally only a problem with underground cables, wires on pylons
>have much less as they are wider spaced.

In submarine DC cables the sea floor and the water can be used as the
return conductor, thus only one isolated conductor has to be laid.

This was first used in the HVDC cable between Sweden and Gotland in
1954 (http://www.si.se/eng\esverige\inventio.html).

The 500 MW 400 kV Fenno-Skan link between Finland and Sweden is also a
single conductor type (http://www.abb.se/pow/l1112.htm).

In addition to transferring power, the return current has also been
used for geological studies (http://www.gf.oulu.fi/~pjk/fs_abs.htm).

Paul OH3LWR

4486. Re: 2m amplifier FMvsSSB

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-28 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <81rftj$qo1$1@nnrp1.deja.com>
Source record: 65253

In article <3840b821_6@news.newsfeeds.com>,
"Bill" <bill@hovac.com> wrote:
> Hello all,
> I have a 2m 70 watt amplifier. It has a toggle switch to choose
between FM
> and SSB. I have it remotely located in the car. I operate FM most of
the
> time but also some SSB. Can I leave the switch in the SSB mode and
transmit
> on FM without damaging it???? I know the in the FM mode won't work
when
> transmitting SSB because of the lack of a carrier with out the audio
but I
> don't see what it would hurt to have it in SSB and transmit on FM.
>
> Thanks for all your help in advance.
> 73 and God Bless
> Bill
>
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==----------
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World!
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>

Normally FM amplifiers are class C ones and operate saturated to get
more efficiency as the power is constant (independent of the modulation)
and DON'T serve for SSB transmission because the latter is an amplitude
modulation method and the audio will be severely distorted.
For SSB we need a very good linear amplifier to keep the information
fidelity and to avoid intermodulation products.
Besides this, the peak power output for a SSB transmission is higher
than for FM (despite the average power can be the same). So, if you
excite a SSB amplifier with a FM signal getting full output, it is
likely to damage the output devices because they will be operating
continuously with the maximum peak power condition.
So, if you want to operate FM on a linear (SSB) amplifier, you will get
less efficiency (but no distortion problem) and must be careful with
the average power you will give off.
--
Greetings,

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Before you buy.

4487. Re: R: AD9850: where to buy ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-28 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <81rhnfrrv1@nnrp1.deja.com>
Source record: 65254

In article <gv_%3.2555$Wa.14263@typhoon.libero.it>,
"Paolo Odone" <paolo@odone.it> wrote:
> Cerca sul web, io li ho comperati negli usa da un distributore
> Mouser ????? Digi-Key???? non ricordo
> i1odp
>
> Giovanni Mazzola <g.mazzola@tin.it> wrote in message
> 7vgp6rkjf1@nslave1.tin.it...
> > I'd like to buy an AD9850 (DDS from Analog Devices).
> > Can anybody please suggest me a reseller ?
> > Thanks in advance.
> > Giovanni, IT9XXS.
> >
> >
> >
>
>

Try AD salers and distributors in Italy:

Avnet EMG srl (02) 381901
Hellis S.A.S (0536) 804104
La Tecnika Due (011) 2425905
Pinnacle Special Technologies (02) 56810413
Tecnika Due (0438) 555447
LASI ELETTRONICA (02)661431

Sales Office

Analog Devices +39-02-614513-1

Representative

Eurolink (06) 52200186
--
Greetings,

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Before you buy.

4488. Re: 2m amplifier FMvsSSB

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-28 00:00:00 UTC
From: goldreged@aol.comJUNKBLOK
Message-ID: <19991128094414.08300.00000887@ng-fl1.aol.com>
Source record: 65255
Body handling: HTML body converted to readable text

<>

Check & see if the switch affects the RF section. It might (should) control the
Bias.
If so, just get a latching relay (dpdt) & control it that way.
Ed G.
(Please Remove "JUNKBLOK" to E-mail.
Unless it's a Flame.)
Check This Site !!!
http://www.charityweb.net/Safehaven

4489. Re: other than 60, 50 & 400 Hz transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-28 00:00:00 UTC
From: William Janssen <billj@calweb.com>
Message-ID: <38414B24.1948E694@calweb.com>
Source record: 65256

Ok I should have said they use DC, 25 Hz and 16 2/3 Hz. They
probably used other frequencies also.

Bill K7NOM

J M Noeding wrote:
>
> On Sat, 27 Nov 1999 10:52:35 -0800, William Janssen <billj@calweb.com>
> wrote:
>
> >Electric railroads used DC and/or 25 Hz. In some locations
> >the first user of electricity was the railroad. People living
> >in those locations could sometimes get power from the railroad
> >system. Also industry used these DC or 25 Hz systems. DC or low
> >frequency has lower trasmission losses if I remember correctly.
>
> sure about those 25Hz? Railways here uses 16 2/3Hz

4490. Plans for 120-130 Mhz receiver ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-28 00:00:00 UTC
From: spknews@aol.comxxxxxxxx
Message-ID: <19991128105739.08538.00000943@ng-ck1.aol.com>
Source record: 65257

Hi listers,

I'm not involve usually with HF design usually. I looks for plans for a 120-130Mhz synthetized receiver in order that I can control it with a microcontroller.

Other technical point, is that I must have the possibility to select receiver bandwith.

Help is greatly wanted !

Thanks
SP

PS: it's not for commercial design but I try to help an adolescent's aerospace club.

4491. Re: EXAR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-28 00:00:00 UTC
From: blackm00@cam.org
Message-ID: <blackm00-2811991208060001@dialup-521.hip.cam.org>
Source record: 65258

In article <81qfnknak1@autumn.news.rcn.net>, "Frizz"
<senorpurpl@hotmail.com> wrote:

> Just curious, but you wouldn't be trying to build something that generates
> DTMF tones of a specific nature would you?;-) If so, could you pass some
> info on to me? thanks!
>
While you'd see all kinds of schemes to generate touch tones in the early
days, there is no reason at this time to use anything other than a crystal
controlled generator for touch tone. The others are just too unstable in
the long term, and you actually have to adjust them in the first place.

I thought those other "boxes" didn't work anymore. And just because
someone wants a function generator IC like the 2206, does not mean
they want to control the phone system.

Michael

> Harold Johnson wrote in message
> <81ohup$n4s$1@birch.prod.itd.earthlink.net>...
> >Surely someone out there has one or more Exar 2206 voltage controlled
> >oscillators that they'd rather have some money for.
> >
> >W4ZCB
> >PLEASE? I'm trading my SPAM anonymity for this!
> >
> >
> >

4492. Kenwood TMV7A Computer Cable

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-28 00:00:00 UTC
From: Cam Fischer <camf@sk.sympatico.ca>
Message-ID: <wvd04.528$m6.36769@news1.sshe1.sk.home.com>
Source record: 65259

Hi!

I am looking for a schematic for the computer programming cable for the Kenwood TMV7A, does anyone have it, or know where on the net I could find it? I found it in German, but English would be much much better!

Thanks

Cam
VE5CAM

4493. Re: Wanted VHF communications article on DK1OF 2m Linear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-28 00:00:00 UTC
From: Kevin Cowdell <videotech@ukonline.co.uk>
Message-ID: <wBDaoCA3kSQ4Ew+o@ukonline.co.uk>
Source record: 65260
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

In article <38402582.152703392@news.online.no>, J M Noeding
<LA8AK@online.no> writes
>On Sat, 27 Nov 1999 15:41:27 +0000 (GMT), tgold@microvest.dem
>on.co.uk
>("Anthony R. Gold") wrote:
>
>>On Saturday, in article <383f2356.86601027@news.online.no>
>> LA8AK@Online.NO "J M Noeding" wrote:
>>
>>> well, I certainly know the difference between coupling capacitor
>and
>>> tuning capacitor
>>
>>The tuning capacitor does not affect the coupling as much as the
>>coupling capacitor affects the tuning :-)
>>
>yes, one reason to avoid W2GN construction
Hi,
Just seen this thread on UK amateur radio but I don't know who the
original author was.
I have a copy of the article on 6 pages of A4 from VHF comm 2/1978.
If it is still needed I will see if it will copy and post it on. Please email me
direct.

73 Kevin G8BDZ QTHR
--
Kevin Cowdell

4494. Re: Transformer oil for dummy load

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-28 00:00:00 UTC
From: DavidC <eDoc@netzero.net>
Message-ID: <s430caanmvm54@freenews.remarq.com>
Source record: 65261
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

> Ron N6AHA <ronc@sonic.net> wrote ...
> Does anyone know of a source for transformer oil like that used in the
> MFJ 1.5 kW dummy load?

I am told that Texaco sells an oil whose original purpose was for
jet turbines ... not sure how it is labeled in quart containers for auto
use but is supposedly awesome at handling heat. Would be curious
to know what you may learn ...

73, DavidC K1YP

* Sent from RemarQ http://www.remarq.com * The Internet's Discussion Network *
* The fastest and easiest way to search and participate in Usenet - Free! *

4495. Re: AD9850: where to buy ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-28 00:00:00 UTC
From: DavidC <eDoc@netzero.net>
Message-ID: <s430uoetmvm40@freenews.remarq.com>
Source record: 65262

> > I'd like to buy an AD9850 (DDS from Analog Devices).
> > Can anybody please suggest me a reseller ?
> > Thanks in advance.
> > Giovanni, IT9XXS.

http://www.mouser.com/
http://www.rfparts.com/home.html
http://www.hosfelt.com/
http://www.fix.net/dans.html
http://www.digikey.com/
http://www.ee.washington.edu/eeca/text/suppliers.html
http://www.syspac.com/~lansdale/index.html
http://www.newark.com/
https://www.pacparts.com/whlsl.html

Hope these help ... would be curious to learn of other sources
for common and hard-to-find components ... esp. the lcd-bcd
displays TIL-306 and TIL-308 for the Yaesu FT-301D.

- 73, DavidC K1YP
****

* Sent from RemarQ http://www.remarq.com * The Internet's Discussion Network *
* The fastest and easiest way to search and participate in Usenet - Free! *

4496. Re: Homebrew Dummy Load

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-28 00:00:00 UTC
From: Grif <kgriffit@wolfenet.com>
Message-ID: <38418120.1C1F@wolfenet.com>
Source record: 65263

William Janssen wrote:
Get the rg58 from radioshack and you don't need much on the end,,, Of course you can't tell the difference between the 200 ft of rg58 with a dummy load on the end and a 200 foot chunk with an antenna. Loss and feedline radiation are about the same in both cases. ;-)

>
> Good advice below but you can make it even better if you get a couple
> hundred feet of RG58 and put the dummy load at the end of it.
>
> Bill K7NOM

4497. Definition of IP3?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-28 00:00:00 UTC
From: Tomas Ahrne <dirac@takethisoutalgonet.se>
Message-ID: <YTg04.3886$ra7.32441@news1.online.no>
Source record: 65264

Hi,

I am designing an RF stage that needs to have quite low intermodulation distorsion.

When reading data sheets for various amplifiers they usually give a figure fo IP3.

What I haven't found anywhere is if IP3 is related to the input or the output. Can ayone help me on this point?

I need ntermodulation distorsion to be at least 100 dB down at the output of the amplifier at a level of 1.5 dBm, and I need a gain of approximately 30-40 dB.

If IP3 is realted to the input, then I reason like this: Mini-Circuits has an amplifier called HELA-10. IP3 is 47 dB and GAIN 10 dB. I could cascade 3 of these to get 30 dB gain. For the last HELA-10 in the chain, the input will be 1.5 dBm-10 dB = -8.5 dBm. Since 3rd order intermodulation products change twice as fast as the power of the input signal, then if the input to the last HELA-10 is at -8.5 dBm, 3rd order intermodulation products must be down 2*(47-(-8.5)) = 111 dB.

The general formula for calculating my resulting 3rd order intermodulation products must then be 2*(IP3 - 1.5 + GAIN). The 1.5 is my desired output level of +1.5 dBm.

If the above is true, then it is not IP3 that is important, but the sum of GAIN + IP3. Mini-Circuits has another amplifier, MAR-8, which has an IP3 of 27 dB and GAIN of 32.5 dB. GAIN + IP3 = 59.5 dB.

So my questions are:

1. Is IP3 realted to the input of the amplifier.

2. Do I think right when I say that it is GAIN + IP3 that is important?

3. Is there anything else I should think of?

Best,

Tomas

4498. Re: Definition of IP3?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-28 00:00:00 UTC
From: Charles Reichert <kd9jq@rsg.org>
Message-ID: <38419FFE.34EED1CE@rsg.org>
Source record: 65265

Some Good References are;

Solid State Design for Radio Amateur by Wes Hayward ï¿½ 1977 ARRL, Inc.
LCCCN 77-730-94

Solid State Radio Engineering by Herbert L. Krauss ï¿½ 1980 John Wiley &
Sons, Inc.
ISBN 0-471-03018-X

Designing With Field Effect Transistors by Arthur D. Evans ï¿½ 1981
McGraw-Hill, Inc.
ISBN 0-07-057449-9

In a nutshell cascading stages does not produce a linear reduction of
IP3.
Each follwing stage degrades the next stage by at least 3dB. Depends on
each
stage's OIP and Gain. Don't forget Noise Figure also gets degraded.

Chuck KD9JQ
http://www.mbn.net/kd9jq/hamradio/index.html

Tomas Ahrne wrote:
>
> Hi,
>
> I am designing an RF stage that needs to have quite low intermodulation
> distorsion.
>
> When reading data sheets for various amplifiers they usually give a figure
> fo IP3.
>
> What I haven't found anywhere is if IP3 is related to the input or the
> output. Can ayone help me on this point?
>
> I need ntermodulation distorsion to be at least 100 dB down at the output of
> the amplifier at a level of 1.5 dBm, and I need a gain of approximately
> 30-40 dB.
>
> If IP3 is realted to the input, then I reason like this: Mini-Circuits has
> an amplifier called HELA-10. IP3 is 47 dB and GAIN 10 dB. I could cascade 3
> of these to get 30 dB gain. For the last HELA-10 in the chain, the input
> will be 1.5 dBm-10 dB = -8.5 dBm. Since 3rd order intermodulation products
> change twice as fast as the power of the input signal, then if the input to
> the last HELA-10 is at -8.5 dBm, 3rd order intermodulation products must be
> down 2*(47-(-8.5)) = 111 dB.

>
> The general formula for calculating my resulting 3rd order intermodulation
> products must then be 2*(IP3 - 1.5 + GAIN). The 1.5 is my desired output
> level of +1.5 dBm.
>
> If the above is true, then it is not IP3 that is important, but the sum of
> GAIN + IP3. Mini-Circuits has another amplifier, MAR-8, which has an IP3 of
> 27 dB and GAIN of 32.5 dB. GAIN + IP3 = 59.5 dB.
>
> So my questions are:
>
> 1. Is IP3 realted to the input of the amplifier.
>
> 2. Do I think right when I say that it is GAIN + IP3 that is important?
>
> 3. Is there anything else I should think of?
>
> Best,
>
> Tomas

4499. source for 10meter HT antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-28 00:00:00 UTC
From: sachsarch@aol.com
Message-ID: <19991128172208.09011.00001420@ng-fx1.aol.com>
Source record: 65266

Have acquired a 10 meter HT. Need to build/buy a suitable antenna that performs better than the rubber duckie it came with.
dogs

4500. Re: Annoying ham operator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-28 00:00:00 UTC
From: "David M. Brodbeck" <dmbrodbe@mtu.edu>
Message-ID: <81scqj$mq9$1@campus3.mtu.edu>
Source record: 65267

colinlowe@jet <colinlowe@jet.es> wrote:
> Quote "as opposed to an illegal CB operator"

> Not all CB operators are illegal.

--> Definately true, but it's hard to get into most phones with only
5 watts. ;)

David Brodbeck, N8SRE dmbrodbe@mtu.edu
finger gull@cyberspace.org for my public key block.

"When the car is redlining and the engine is humming and the muscles of your face have frozen into the rictus death mask of a maniac and you're barreling down a road surrounded by utter nothingness, then you feel like you're touching God." -- Malachi Kenney

4501. Re: source for 10meter HT antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-28 00:00:00 UTC
From: "David M. Brodbeck" <dmbrodbe@mtu.edu>
Message-ID: <81sd53$mq9$2@campus3.mtu.edu>
Source record: 65268

Sachsarch <sachsarch@aol.com> wrote:
> Have acquired a 10 meter HT. Need to build/buy a suitable antenna that performs
> better than the rubber duckie it came with.
> dogs

--> Interesting problem. Have you looked at some of the CB stuff? A lot of
it's junk for people who don't know better, but if you find something good
you could probably retune it for 10 meters.

My 10 meter antenna at home used to be a CB base station vertical, shortened
up for a good SWR on 10. (Accomplished by jamming all the sections further
together, then drilling new holes for the sheet metal screws that held
it together.)

David Brodbeck, N8SRE dmbrodbe@mtu.edu
finger gull@cyberspace.org for my public key block.

"When the car is redlining and the engine is humming and the muscles of your
face have frozen into the rictus death mask of a maniac and you're barreling
down a road surrounded by utter nothingness, then you feel like you're
touching God." -- Malachi Kenney

4502. Re: Transformer oil for dummy load

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-28 00:00:00 UTC
From: Gregg Schwabauer <griggy@cyberhighway.net>
Message-ID: <3841D06D.334115EB@cyberhighway.net>
Source record: 65269
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I have worked with some industrial heat transfer oil made by Dow Chemical called DowTherm. Not sure of the chemical / physical properties but I might be able to find out.

The particular version I had to put up with had the consistency of wax when it was cold, but it was very efficient once it got up to a very high >300F. Safer than using steam in that application. No pressure!

GAS
KB7WWD

DavidC wrote:

> > Ron N6AHA <ronc@sonic.net> wrote ...
> > Does anyone know of a source for transformer oil like that used in the
> > MFJ 1.5 kW dummy load?
>
> I am told that Texaco sells an oil whose original purpose was for
> jet turbines ... not sure how it is labeled in quart containers for auto
> use but is supposedly awesome at handling heat. Would be curious
> to know what you may learn ...
>
> 73, DavidC K1YP
>
> * Sent from RemarQ http://www.remarq.com * The Internet's Discussion Network *
> * The fastest and easiest way to search and participate in Usenet - Free! *

4503. Re: looking for MV1401 varicap diode

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-28 00:00:00 UTC
From: rick@area.com
Message-ID: <81skvd$59e$1@vax.area.com>
Source record: 65270

In article <19991126171624.19331.00000512@ng-cm1.aol.com>,
CRDONMAX1 <crdonmax1@aol.com> wrote:
>Hi:
>I'm looking for a handfull of MV1401 varactor diodes for a VCO project. I've
>tried the usual source catalogs and have not been able to find this particular
>diode. I also didnt see a cross reference listed for it.
>If anyone knows of a source for these, I would appreciate it.

The MV1401 went out of production about 10 years ago because the
large glass package it used (to accomodate the large chip that had
the high capacitance) was discontinued by Motorola [general
obsolescence of through hole parts).

Fortunately, you can simply substitute an AM radio tuning diode
such as the Motorola MVAM109 or MVAM115. Philips, Siemens, Toko,
and others also make AM radio diodes, but the type numbers are
different. These diodes will always be made in huge quantities as
long as there is an AM broadcast band.

You can also parallel a bunch of lower capacitance high gamma
diodes. This has the advantage of higher Q. OTOH, Toko makes
diodes with even more capacitance than the MV1401.

Rick Karlquist N6RK
rick@area.com

4504. Re: Transformer oil for dummy load

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-28 00:00:00 UTC
From: Ted Busky <busky@portone.com>
Message-ID: <3841ECAE.C0958D09@portone.com>
Source record: 65271
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Dave (or anyone else),
I need a gallon for my dummy load. If single gallons are not available, I'd be interested in buying a 5 gallon pail if that is available.
Ted N1XLW.

DavidC wrote:

> > Ron N6AHA <ronc@sonic.net> wrote ...
> > Does anyone know of a source for transformer oil like that used in the
> > MFJ 1.5 kW dummy load?
>
> I am told that Texaco sells an oil whose original purpose was for
> jet turbines ... not sure how it is labeled in quart containers for auto
> use but is supposedly awesome at handling heat. Would be curious
> to know what you may learn ...
>
> 73, DavidC K1YP
>
> * Sent from RemarQ http://www.remarq.com * The Internet's Discussion Network *
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4505. 10 meter amps for sale!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-28 00:00:00 UTC
From: chocalatejay@webtv.net
Message-ID: <7458-3841E833-65@storefull-212.iap.bryant.webtv.net>
Source record: 65272

i have 10 meter amps for sale also have 10 meter beams by jogunn email me for phone number and website.

dirty south

4506. Re: cw on an SSB rig

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-28 00:00:00 UTC
From: dm <dmandjos@olypen.com>
Message-ID: <bCm04.8194$zQ4.545461@news2.giganews.com>
Source record: 65273

How about "Un-balancing" the balanced modulator....give you carrier... and keying the push to talk circuit?I once had a Gonset Model "something or another" , which had the balance controls on the front panel...I could give 'em a twist and go AM with one sideband. 73 "DM" N 7 D M

4507. R: AD9850: where to buy ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-28 00:00:00 UTC
From: Paolo Odone <paolo@odone.it>
Message-ID: <gv_%3.2555$Wa.14263@typhoon.libero.it>
Source record: 65342

Cerca sul web, io li ho comperati negli usa da un distributore
Mouser ????? Digi-Key???? non ricordo
i1odp

Giovanni Mazzola <g.mazzola@tin.it> wrote in message
7vgp6rkjf1@nslave1.tin.it...
> I'd like to buy an AD9850 (DDS from Analog Devices).
> Can anybody please suggest me a reseller ?
> Thanks in advance.
> Giovanni, IT9XXS.
>
>
>

4508. Idea to use Peltier cooler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-29 00:00:00 UTC
From: Martin John Hallsworth <Martin@g1gyc.demon.co.uk>
Message-ID: <943919922.14883.0.nnrp-08.9e98acde@news.demon.co.uk>
Source record: 65193
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,uk.radio.amateur

Hi,
I just was woundering if anybody has tried this idea,
using a peltier device to cool a VHF or UHF gaasfet
mast head preamp.
And if so did / does it have any effect on the preamps
performance noise figure etc ?

Thanks for your thoughts Martin G1GYC

--
~~~~~~
Remove "NOSPAM" from email address to reply
~~~~~~

4509. Re: Idea to use Peltier cooler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-29 00:00:00 UTC
From: Dale Parfitt <parinc@bellsouth.net>
Message-ID: <38432523.3C04F251@bellsouth.net>
Source record: 65194
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,uk.radio.amateur

Martin John Hallsworth wrote:

> Hi,
> I just was woundering if anybody has tried this idea,
> using a peltier device to cool a VHF or UHF gaasfet
> mast head preamp.
> And if so did / does it have any effect on the preamps
> performance noise figure etc ?
>
> Thanks for your thoughts Martin G1GYC
>
> --
> ~~~~~~
> Remove "NOSPAM" from email address to reply
> ~~~~~~

I would think this might prove beneficial for EME where the array looks at cold sky. But, the NF of today's devices for V/U at ambient temp are already below what I would think is sufficient for terrestrial communications where the array looks at warm earth and other noise sources that probably mask very low NF's.

Dale W4OP

4510. Re: 2m amplifier FMvsSSB

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-29 00:00:00 UTC
From: Bill <bill@hovac.com>
Message-ID: <38432cd9_9@news.newsfeeds.com>
Source record: 65195

Thanks,
The amp is actually rated at 100watts driving it at 15 watts but I am only driving it with 10 watts so it sounds like it will work.

Thanks again for your input.

Bill

----------== Posted via Newsfeeds.Com, Uncensored Usenet News ==----------
http://www.newsfeeds.com The Largest Usenet Servers in the World!
------== Over 73,000 Newsgroups - Including Dedicated Binaries Servers ==-----

4511. Re: looking for MV1401 varicap diode

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-29 00:00:00 UTC
From: Bob <bmiller@calweb.com>
Message-ID: <38433a60_1@news.calweb.com>
Source record: 65196

Hi Folks,

I've got a good pile of MV2301 200 PF varicaps in TO-92 cases. 200
plus for 10 bux. don't get any cheaper.

73

Bob, KE6F
Richard Karlquist <rick@area.com> wrote in message
news:81skvd$59e$1@vax.area.com...
> In article <19991126171624.19331.00000512@ng-cm1.aol.com>,
> CRDONMAX1 <crdonmax1@aol.com> wrote:
> >Hi:
> >I'm looking for a handfull of MV1401 varactor diodes for a VCO project.
I've
> >tried the usual source catalogs and have not been able to find this
particular
> >diode. I also didnt see a cross reference listed for it.
> >If anyone knows of a source for these, I would appreciate it.
>
> The MV1401 went out of production about 10 years ago because the
> large glass package it used (to accomodate the large chip that had
> the high capacitance) was discontinued by Motorola [general
> obsolescence of through hole parts).
>
> Fortunately, you can simply substitute an AM radio tuning diode
> such as the Motorola MVAM109 or MVAM115. Philips, Siemens, Toko,
> and others also make AM radio diodes, but the type numbers are
> different. These diodes will always be made in huge quantities as
> long as there is an AM broadcast band.
>
> You can also parallel a bunch of lower capacitance high gamma
> diodes. This has the advantage of higher Q. OTOH, Toko makes
> diodes with even more capacitance than the MV1401.
>
> Rick Karlquist N6RK
> rick@area.com

4512. What is this? Teletonic Berkeley Crystal detector

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-29 00:00:00 UTC
From: DavidC <eDoc@netzero.net>
Message-ID: <s46h9penmvm88@freenews.remarq.com>
Source record: 65197

I just came across this item in my junkbox. It is a three inch long
silver tube with a male BNC on one end and a female on the other.

It boasts the following text on the label and looks new.

NEG. DC OUT
Teletonic Berkeley
CRYSTAL DETECTOR
MODEL 8551 50 Ohms
S/N 00641-13
.1 - 1500 MHz 3V. MAX
RF IN

Should I build a receiver around it, use it as a RF probe, or what,
please?

- Thanks! & 73, DavidC K1YP
****

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* The fastest and easiest way to search and participate in Usenet - Free! *

4513. Re: Isolating jacks from chasis / cabinet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-29 00:00:00 UTC
From: Mark Erbaugh <mark@nospam.microenh.com>
Message-ID: <384347ee$0$80455@news.voyager.net>
Source record: 65198

Tom Bruhns <tomb@lsid.hp.com> wrote in message
news:3842FD0C.8854E6A3@lsid.hp.com...
> My first inclination would be to connect the box only to the mic
> connector ground, not any other ground, and go ahead and use the
> grounded jacks. If you want to use station ground for the box, you're
> right, you want to keep the mic ground separate from that. You can find
> plastic or fiber washers for insulating jacks, etc., though that's the
> sort of thing I've accumulated over the years from taking things apart
> and from "looks interesting, might use these sometime, they're cheap,
> get some" surplus-store raids, and finding just what you want when you
> want it isn't always easy. But...since everything in the box then would
> be isolated from the box, and only the box is connected to station
> ground, why bother with the box? For shielding? If so, why not connect
> it to the mic ground instead? If you don't need the shielding, why not
> just use a plastic box to begin with?
>
> Cheers,
> Tom

Thanks for the info - I am planning on using the box for shielding. I left one bit of info out of my original post that would explain why I can't use the mic ground - I also want to install a headphone jack in the box - and the headphone line has it's own ground.

Mark

4514. Re: Homebrew Dummy Load

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-29 00:00:00 UTC
From: Keith McQueen <n7hmf@ucares.org>
Message-ID: <3843321a_3@news.sisna.com>
Source record: 65199

A friend of mine built one that I used to borrow from time to time. It was built into copper pipe (about 2" I think). He used a short piece of copper pipe and two end caps with a BNC connector soldered into the end of one of the end caps. Inside he used a series/parallel arrangement to fit as many carbon resistors as he could such that the result was 50 ohms. It worked great because the copper pipe dissipated heat very well. You could also solder sheet copper fins to the outside to dissipate even more heat. He didn't fill his with oil, but I so reason that you couldn't. That would carry the heat to the outside even better.

Roger lascelles <rogerl@datafast.net.au> wrote in message news:38431E5C.39A235D1@datafast.net.au...
> Once you put the resistors in oil. you can increase the rating.
>
> I used to put 50 - 100 W into a few watts worth of metal film
> resistors. I used automatic transmission fluid (recommended in a
> magazine article) and soldered the resistors between two metal plates.
> I used a coffee can with a coax connector soldered into the lid, and the
> resistors soldered to the inside of the lid. The coffee can lets you
> open the lid when necessary. Mostly used it on HF, but it handled 144
> MHz ok with a reasonable SWR.
>
> Roger Lascelles
>
> Electro Tools - Worksheets for Electronics
> http://server24.hypermart.net/electrotools/
>
>
> J M Noeding wrote:
> >
> > On Fri, 26 Nov 1999 20:34:28 -0800, Gregg Schwabauer
> > <griggy@cyberhighway.net> wrote:
> >
> > >Where can I find suitable high watt, low reactance, 50 ohm resistors
> > >used to make hf dummy loads?
> > >
> > >I need something in the 100 watt range for now, 1000 watt later.
> > >
> > >GAS
> > >KB7WWD
> > >
> > If you only want to use it below 30MHz you do not need to look for low
> > reactance resistors, you can paralell many lower wattage carbon
> > resistors. If you wish to build it for higher than 30MHz the problem

> > with parallelling resistors is inductance in the connections between
> > the resistors, this has a physical extension for good cooling, and
> > also some capacitive effect.
> >
> > I used some non-inductive 200 ohm resistors (50W) from RCA TV
> > transmitter on 200MHz, resistor size 2" diameter tubular, 4" long,
> > they were good alone, but connected in parallell capacitance and
> > inductance of the leads is a problem, so it is still not much good on
> > 50MHz-up. For a single-band VHF operation a far better approach is a
> > single resistor with impedance transformer, but still - the physical
> > length of resistor has some inductance.
> >
> > In a dummy load you can probably use resistors rated for the sum of
> > 250W on 1kW if you do not intend to tune for minutes. Problem is that
> > coax cable may melt before resistors are damaged. With a simple fan
> > this is very much improved.
> >
> > For lower power levels it is easy to use 6 standard 2W 300 ohm
> > resistors in paralell to build a dummy with as much as 12dB reflection
> > loss on 1296MHz., and better on the lower bands.
> >
> > 73 jan-martin LA8AK

4515. S: Circuit Directional Coupler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-29 00:00:00 UTC
From: Peter Bolch <nc-bolchpe@netcologne.de>
Message-ID: <81ssdl$g8k$2@news.netcologne.de>
Source record: 65274

Hi

I'm looking for a circuit of a directional coupler suited for frequencies from 500 MHz to 1.5 GHz. Directivity should be > 25 dB. I already know the circuit published in the magazine VHF Communication / UKW Berichte.

Peter

4516. Re: Transformer oil for dummy load

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-29 00:00:00 UTC
From: "David M. Brodbeck" <dmbrodbe@mtu.edu>
Message-ID: <81svfr$3ai$2@campus3.mtu.edu>
Source record: 65275
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In rec.radio.amateur.homebrew DavidC <eDoc@netzero.net> wrote:
> I am told that Texaco sells an oil whose original purpose was for
> jet turbines ... not sure how it is labeled in quart containers for auto
> use but is supposedly awesome at handling heat. Would be curious
> to know what you may learn ...

--> Hmm...what about synthetic automobile oil?

David Brodbeck, N8SRE dmbrodbe@mtu.edu
finger gull@cyberspace.org for my public key block.

"When the car is redlining and the engine is humming and the muscles of your face have frozen into the rictus death mask of a maniac and you're barreling down a road surrounded by utter nothingness, then you feel like you're touching God." -- Malachi Kenney

4517. Re: 2m amplifier FMvsSSB

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-29 00:00:00 UTC
From: Harry SM0VPO <harryvpo@hotmail.com>
Message-ID: <81t8t6$bh@newstoo.ericsson.se>
Source record: 65276

Bill wrote in message <3840b821_6@news.newsfeeds.com>...
>...can I leave the switch in the SSB mode and transmit
>on FM without damaging it????

YES, but only if you drop your TX power on FM.
Harry

4518. Re: AD9850: where to buy ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-29 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <81tmv1$a3d$1@nnrp1.deja.com>
Source record: 65277

In article <s430uoetmvm40@freenews.remarq.com>,
"DavidC" <eDoc@netzero.net> wrote:
> > > I'd like to buy an AD9850 (DDS from Analog Devices).
> > > Can anybody please suggest me a reseller ?
> > > Thanks in advance.
> > > Giovanni, IT9XXS.
>
> http://www.mouser.com/
> http://www.rfparts.com/home.html
> http://www.hosfelt.com/
> http://www.fix.net/dans.html
> http://www.digikey.com/
> http://www.ee.washington.edu/eeca/text/suppliers.html
> http://www.syspac.com/~lansdale/index.html
> http://www.newark.com/
> https://www.pacparts.com/whlsl.html
>
> Hope these help ... would be curious to learn of other sources
> for common and hard-to-find components ... esp. the lcd-bcd
> displays TIL-306 and TIL-308 for the Yaesu FT-301D.
>
> - 73, DavidC K1YP
>
****
>
> * Sent from RemarQ http://www.remarq.com * The Internet's Discussion
Network *
> * The fastest and easiest way to search and participate in Usenet -
Free! *
>

TIL-306 can be found just with Newark Electronics or with Telepath
Internet at http://www.telepath.com/dwarders/semicond5.htm (this is a
'hard to find' site). Dial Electronics at
http://www.dialelectronics.co.uk/t8.htm seems to have it too.
TIL-308 seems to be more difficult to find but try Elfa at
http://www.elfa.se/elfa/produkter/se/20/2011621.htm
--
Greetings,

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Before you buy.

4519. Re: Where can I find plans for a Homebrew 6M SSB or 2M SSB Rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-29 00:00:00 UTC
From: "mikael.nordman" <mikael.nordman@lmf.ericsson.se>
Message-ID: <38425664.289344D3@lmf.ericsson.se>
Source record: 65278

Hi Rick,
I have made a 6 m SSB rig.

It is made using the 'dead beetle' contruction technique.
This technique uses an unetched copper PCB as a ground plane and the
other wiring is in the air.

I would like to put up the schematics of the 6 m rig on the web, but I
have not found a decent
schematic drawing program yet.

The main problem with such a project is to find suitable components.
Therefore it is important to understand the principles of the stages in
a transciever,
so you can apply the available components to the stages.

I used a technique like this:

WHILE((Transciever = Not Ready) AND (Builder = Not Dead))
1.Read the ARRL handbook
2.Check which components are available
3.See what others have done (homebrew pages on the web)
4.Read and understand the AARL handbook
5.Find used old SSB equipment to get hold of
'diffucult' components like VFO, SSB filter, carrier crystal.
(I took mine from an broken DRAKE TR-3)
6.Try to apply what you know and what you have(components).
7.Decide what kind of casing to use (RF aspects!).
8.Build another prototype
9.Test it
END WHILE

73's de Micke
OH2AUN

Rick wrote:
>
> Hi...where can I find plans for such a rig?
> Preferably one with a digital readout, but that does not matter.
>
> Also, a special type of antenna is required for SSB, isn't it? If so,
> how could I build such an antenna out of either wire or pipes?
>
> Even better would be if you could come up with a PCB for such a
> thing...one that could be downloaded and printed out...but it is not
> mandatory. PCB would be nice, however, because all my wire-wrapping

> attempts are very sloppy.
>
> TNX,
> Rick
>
> KE1JA@home.com
> actually...it's rick1 instead of ke1ja. But, many spam checkers pick
> up on e-mails in the body...so therefore i did that.

4520. Re: peltier device

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-29 00:00:00 UTC
From: pr7@st-andrews.ac.uk
Message-ID: <384260a7.2011984@nntphost.st-andrews.ac.uk>
Source record: 65279

On Thu, 25 Nov 1999 04:17:00 GMT, "gestyr" <gestyr@epix.net> wrote:

>Does anyone know a good source for a peltier device (also known as a
>thermoelectric cooling heat pump). Thanx for any help you can give me.
>
>
Ty RS components - devices http://rswww.com they do 1.4 to 51Watt
version

Paul
p.record@amru.ac.uk

4521. Antenna tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-29 00:00:00 UTC
From: Agust <agustNOagSPAM@rt.is.invalid>
Message-ID: <000b8d9b.5858eeca@usw-ex0101-002.remarq.com>
Source record: 65280

Hello!

I have had a license since 1964 (TF3OM), and intend to fire up my old rig again. I have not been active for many years.

I would like to ask a few questions regarding commercial antenna tuners that are available. I have been scanning the web and found some. My current antenna is a LW, but I intend to put up a G5RV or similar. Transceiver is an old 100W solid state Kenwood TS-130.

The tuners that I have been looking at are:

MFJ-949E from MFJ Enterprises.
VC-300DLP from Vectronics.
MFJ-969 with roller inductor from MFJ Enterprises.

All are 300W.

The VC-300DLP seems to be a little more expensive than MFJ-949E, but with similar specs. Which one is better?

The MFJ-969 has roller inductor. My interest is 3.5-30MHz. Does this one have any advantages?

Do the above tuners handle practically any mitchmatch? What is the approximate impedance range?

Any recommendations?

Best regards

Agust

TF3OM, Iceland

agust@-rt.is

(Please remove "RemoveAntiSpam-" in front of the domain rt.is)

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4522. Re: Transformer oil for dummy load

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-29 00:00:00 UTC
From: Marty <martyk@naples.infi.net>
Message-ID: <384272EA.51D8F842@naples.infi.net>
Source record: 65281
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Mobile 1, a synthetic oil, is or was based on polyoctene which I've used for many years in a dummy load. Will take a lot of heat and is very stable.

Gregg Schwabauer wrote:

> I have worked with some industrial heat transfer oil made by Dow Chemical called
> DowTherm. Not sure of the chemical / physical properties but I might be able to
> find out.
>
> The particular version I had to put up with had the consistency of wax when it was
> cold, but it was very efficient once it got up to a very high >300F. Safer than
> using steam in that application. No pressure!
>
> GAS
> KB7WWD
>
> DavidC wrote:
>
> > > Ron N6AHA <ronc@sonic.net> wrote ...
> > > Does anyone know of a source for transformer oil like that used in the
> > > MFJ 1.5 kW dummy load?
> >
> > I am told that Texaco sells an oil whose original purpose was for
> > jet turbines ... not sure how it is labeled in quart containers for auto
> > use but is supposedly awesome at handling heat. Would be curious
> > to know what you may learn ...
> >
> > 73, DavidC K1YP
> >
> > * Sent from RemarQ http://www.remarq.com * The Internet's Discussion Network *
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4523. Are Motorola SRF 3897s for RFC 2-117 Available?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-29 00:00:00 UTC
From: DavidC <eDoc@netzero.net>
Message-ID: <s4548d4qmvm71@freenews.remarq.com>
Source record: 65282
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I am considering buying a used RFC 2-117 2m amp.

The finals are Motorola SRF 3897s. I don't see them listed by
the usual suppliers on the Internet. Are these no longer
available? Is there a direct substitute?

- Thanks! & 73, DavidC K1YP

****

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4524. FA: Hewlett Packard HP400LR VTVM with manual

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-29 00:00:00 UTC
From: Joe Schreiber <jschreiber@adelphia.net>
Message-ID: <sYw04.2247$E4.185062@server2.news.adelphia.net>
Source record: 65283
Cross-posted to: misc.industry.electronics.marketplace,rec.radio.amateur.homebrew,rec.radio.swap,sci.electronics.equipment

Hewlett Packard HP400LR VTVM with manual

Measures rms voltage from 0.001 to 300 volts full scale over a frequency range of 10 Hz to 4 mHz. Input impedance is 10 megohms. Also provides amplified output of the measured signal. The front panel is in good shape, and it is very clean on the inside. I have checked the accuracy at several levels and it appears to be right on. A copy of the operating and servicing manual is included.

No Reserve

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=208028838

4525. Re: Annoying ham operator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-29 00:00:00 UTC
From: Kemosabie <jimo@vt.edu>
Message-ID: <81udfu$l1e$1@solaris.cc.vt.edu>
Source record: 65284

Dear Frustrated,

Be a good neighbor and talk to this person! Then come back and post a
REAL question.

Scott Wolfe <shantoa@wolfenet.com> wrote in message
news:81k4mcqkr1@sparky.wolfe.net...
> Down the street from me (about 4 houses) there is a ham operator and every
> time he is on I can hear garbage on my TV, Cordless phones, Radio's. etc.
>
> Is there any kind of filter I can buy to stop the interference? I know the
> guy has put a lot of money and time into his equipment but so did I.
>
> What can I do? It's frustrating.
>
> Thanks,
> -Scott
>
>
>

4526. Re: Definition of IP3?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-29 00:00:00 UTC
From: Al Lorona <alforo@megsinet.net>
Message-ID: <GUy04.4$HV4.884@news.corecomm.net>
Source record: 65285

Tomas wrote:

>Is IP3 related to the input of the amplifer.

In general, IP3 is related to the output for amplifiers and to the input for mixers.

In the example using the Mini-Circuits amplifiers, the output 3rd order intercept point will remain at essentially +47 dBM. With an output signal at the +1.5 dBM level, the distortion products will be at a level of -89.5 dBM. This is only 91 dB down from the output level and not the 100 dB desired.

In order for the distortion products to be at a level of -98.5 dBM, which is 100 dB down, the output intercept point of the last amplifier must be at least 51.5 dBM.

A Mini-Circuits MAR-8 will make things worse because of the lower OIP.

Gain has nothing to do with these calculations. However, something to keep in mind is that increasing gain reduces dynamic range at the high signal level end. While an increase in noise figure reduces dynamic range at the low signal level end.

73, AL, w6wqc, alforo@megsinet.net

4527. Re: EXAR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-29 00:00:00 UTC
From: Jim Devenport <jdport@concentric.net>
Message-ID: <3842D349.4856E01A@concentric.net>
Source record: 65286

I still use the 2206 in my tone generators, and will sell them in single lot quantities at $6.00 each including US continental postage.
JAMECO, as noted in other responses, still sells them, though I don't recall their current minimum order policy.
Jim W5AOX

Harold Johnson wrote:

> Surely someone out there has one or more Exar 2206 voltage controlled
> oscillators that they'd rather have some money for.
>
> W4ZCB
> PLEASE? I'm trading my SPAM anonymity for this!

4528. Isolating jacks from chasis / cabinet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-29 00:00:00 UTC
From: Mark Erbaugh <mark@nospam.microenh.com>
Message-ID: <3842e854$0$80464@news.voyager.net>
Source record: 65287

I'm a novice homebrewer and am just building simple accessories for my shack. I want to build some audio / mic switchboxes and I am concerned about ground loops.

Specifically, I have two microphones (one desk, one headset), both of which use a miniature phone plugs. I'd like to build a switch into a box that would allow me to leave both mics plugged in but use a DPDT-center off switch to select which (if any) mic is connected to the radio. I envision a small metal project box enclosure where the box itself is grounded to the shack ground. The problem is that the typical panel mount phone jacks are metalic and the barrel connector will be in contact with the panel and thus grounded. The mic input on my radio uses a separate ground. I don't think that it is a good idea to connect the mic and shack ground. Is there a recommended way to isolate the jack from the box?

73,
Mark, N8ME

4529. 30m QRP Freq Recommendation

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-29 00:00:00 UTC
From: Mark Erbaugh <mark@nospam.microenh.com>
Message-ID: <3842ea58$0$80463@news.voyager.net>
Source record: 65288

I recently purchased a Lectrokit SP-1B QRP transceiver kit. I'd like to build it for 30m. It supports two crystals and the kit comes with none. Can anyone recommend what frequencies I should opt for? Can anyone suggest a good source for the crystals? Any other tips on building this kit would be appreciated.

73,
Mark, N8ME

4530. Re: Antenna tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-29 00:00:00 UTC
From: Mark Erbaugh <mark@nospam.microenh.com>
Message-ID: <3842f325$0$80458@news.voyager.net>
Source record: 65289

> The tuners that I have been looking at are:
>
> MFJ-949E from MFJ Enterprises.
> VC-300DLP from Vectronics.
> MFJ-969 with roller inductor from MFJ Enterprises.
>

Let me suggest another 300W tuner: The Palstar AT300LCN. Palstar is a company started and run by Jim Hrivnak who founded Vectronics (although he is no longer associated with Vectronics). Check out their web site: www.palstarinc.com.

> The MFJ-969 has roller inductor. My interest is 3.5-30MHz. Does this
> one have any advantages?

Both of the the MFJ-969E and the VC-300DLP (and the Palstar, also) have 48 position inductor switches which gives you a lot of inductor choices. The Vectronics ad says that you can switch the inductor with power applied. I assume that the MFJ allows you to do that also, but that might be worth checking out. With these two features, theres probably no real advantage to a roller inductor in your case.

73,
Mark, N8ME

4531. Re: Transformer oil for dummy load

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-29 00:00:00 UTC
From: Tom Bruhns <tomb@lsid.hp.com>
Message-ID: <3842FADF.45BC583C@lsid.hp.com>
Source record: 65290
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

A long time ago, I got a gallon of transformer oil for my Heath Cantenna... I visited a transformer rewind/repair shop (happened to live in Tucson at the time), and asked for it. They gave it to me; not worth writing up a bill.

I'd recommend trying the yellow pages of your phone book: find a place that deals with big transformers and ask them. Ask your local power utility (undoubtedly will have to get beyond the front desk receptionist to get any action on this request! But then there may well be hams that work for them, too...). As a last resort, check petroleum products distributors and ask specifically for transformer oils...they likely will have catalogs/data sheets. In that event, you might indeed have to settle for a 5-gallon can of it. Share with other hams in your area? I'd expect by this time that there won't be any PCB-laden oils left in service in the US in any transformer serviced in the past 20 years at least.

Cheers,
Tom

Ted Busky wrote:
>
> Dave (or anyone else),
> I need a gallon for my dummy load. If single gallons are not available, I'd be
> interested in buying a 5 gallon pail if that is available.
> Ted N1XLW.

4532. Re: Isolating jacks from chasis / cabinet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-29 00:00:00 UTC
From: Tom Bruhns <tomb@lsid.hp.com>
Message-ID: <3842FD0C.8854E6A3@lsid.hp.com>
Source record: 65291

My first inclination would be to connect the box only to the mic
connector ground, not any other ground, and go ahead and use the
grounded jacks. If you want to use station ground for the box, you're
right, you want to keep the mic ground separate from that. You can find
plastic or fiber washers for insulating jacks, etc., though that's the
sort of thing I've accumulated over the years from taking things apart
and from "looks interesting, might use these sometime, they're cheap,
get some" surplus-store raids, and finding just what you want when you
want it isn't always easy. But...since everything in the box then would
be isolated from the box, and only the box is connected to station
ground, why bother with the box? For shielding? If so, why not connect
it to the mic ground instead? If you don't need the shielding, why not
just use a plastic box to begin with?

Cheers,
Tom

Mark Erbaugh wrote:
>
> I'm a novice homebrewer and am just building simple accessories for my
> shack. I want to build some audio / mic switchboxes and I am concerned about
> ground loops.
>
> Specifically, I have two microphones (one desk, one headset), both of which
> use a miniature phone plugs. I'd like to build a switch into a box that
> would allow me to leave both mics plugged in but use a DPDT-center off
> switch to select which (if any) mic is connected to the radio. I envision a
> small metal project box enclosure where the box itself is grounded to the
> shack ground. The problem is that the typical panel mount phone jacks are
> metalic and the barrel connector will be in contact with the panel and thus
> grounded. The mic input on my radio uses a separate ground. I don't think
> that it is a good idea to connect the mic and shack ground. Is there a
> recommended way to isolate the jack from the box?
>
> 73,
> Mark, N8ME

4533. Re: Are Motorola SRF 3897s for RFC 2-117 Available?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-29 00:00:00 UTC
From: "Thomas C. Sefranek" <tcs@cmcorp.com>
Message-ID: <3843005A.A5E23961@cmcorp.com>
Source record: 65292
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

DavidC wrote:

> I am considering buying a used RFC 2-117 2m amp.
>
> The finals are Motorola SRF 3897s. I don't see them listed by
> the usual suppliers on the Internet. Are these no longer
> available? Is there a direct substitute?
>
> - Thanks! & 73, DavidC K1YP
>
> **********
>
> * Sent from RemarQ http://www.remarq.com * The Internet's Discussion Network *
> * The fastest and easiest way to search and participate in Usenet - Free! *

The Motorola SRF seires is a custom made device.
It is protected and as such cannot be purchased without the written permission of
the origional customer.
You can't even get specs on the device.

--
Thomas C. Sefranek WA1RHP
ARRL Instructor, Technical Specialist, VE Contact.
http://www.harvardrepeater.org
http://hamradio.cmcorp.com/inventory/Inventory.html

4534. Re: Wanted VHF communications article on DK1OF 2m Linear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-30 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <81v6bv$9ui$1@news.hawaii.edu>
Source record: 65200
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

Anthony R. Gold <tgold@panix.com> wrote:
> LA8AK@Online.NO "J M Noeding" wrote:

>> what is so good with W2GN design? 45% efficiency due to too low bypass
>> capacitor in the anode circuit?

>I remember caring about efficiency back in the dawn of time when
>dinosaurs roamed the planet and my licence restricted input power.

Now Tony uses a dummy load (which is thermally efficient: 100% of the
power is converted into heat).

4535. Re: Homebrew Dummy Load

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-30 00:00:00 UTC
From: Roger lascelles <rogerl@datafast.net.au>
Message-ID: <38431E5C.39A235D1@datafast.net.au>
Source record: 65201

Once you put the resistors in oil. you can increase the rating.

I used to put 50 - 100 W into a few watts worth of metal film
resistors. I used automatic transmission fluid (recommended in a
magazine article) and soldered the resistors between two metal plates.
I used a coffee can with a coax connector soldered into the lid, and the
resistors soldered to the inside of the lid. The coffee can lets you
open the lid when necessary. Mostly used it on HF, but it handled 144
MHz ok with a reasonable SWR.

Roger Lascelles

Electro Tools - Worksheets for Electronics
http://server24.hypermart.net/electrotools/

J M Noeding wrote:
>
> On Fri, 26 Nov 1999 20:34:28 -0800, Gregg Schwabauer
> <griggy@cyberhighway.net> wrote:
>
> >Where can I find suitable high watt, low reactance, 50 ohm resistors
> >used to make hf dummy loads?
> >
> >I need something in the 100 watt range for now, 1000 watt later.
> >
> >GAS
> >KB7WWD
> >
> If you only want to use it below 30MHz you do not need to look for low
> reactance resistors, you can paralell many lower wattage carbon
> resistors. If you wish to build it for higher than 30MHz the problem
> with parallelling resistors is inductance in the connections between
> the resistors, this has a physical extension for good cooling, and
> also some capacitive effect.
>
> I used some non-inductive 200 ohm resistors (50W) from RCA TV
> transmitter on 200MHz, resistor size 2" diameter tubular, 4" long,
> they were good alone, but connected in parallell capacitance and
> inductance of the leads is a problem, so it is still not much good on
> 50MHz-up. For a single-band VHF operation a far better approach is a
> single resistor with impedance transformer, but still - the physical
> length of resistor has some inductance.
>
> In a dummy load you can probably use resistors rated for the sum of
> 250W on 1kW if you do not intend to tune for minutes. Problem is that

> coax cable may melt before resistors are damaged. With a simple fan
> this is very much improved.
>
> For lower power levels it is easy to use 6 standard 2W 300 ohm
> resistors in paralell to build a dummy with as much as 12dB reflection
> loss on 1296MHz., and better on the lower bands.
>
> 73 jan-martin LA8AK

4536. Re: Transformer oil for dummy load

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-30 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19991130003544704 32@zetnet.co.uk>
Source record: 65202

> A long time ago, I got a gallon of transformer oil for my Heath
> Cantenna... I visited a transformer rewind/repair shop (happened to
> live in Tucson at the time), and asked for it. They gave it to me; not
> worth writing up a bill.
==========
In 1985 ,when I was first licenced I made a dummy load comprising 20
pcs 1000 Ohms ,2W metal film resistors
fitted to the circular lid of a cocao tin , with the resistors
immersed in standard motor oil.
Last week ,after having not used the dummy load for a long time ,the
resistance measured was 52.5 Ohms
After heating the load for a couple of hours with a 24 V DC supply
(power : 24sq / 50 = approx 12 Watts)
the resistance measured was 50.6 Ohms and after cooling down to room
temp. I measured 49.8 Ohms.
Just before I started this message the resistance measured was 50.4 Ohms.
The motor oil has never been changed since 1985. The varnish /
paint on the resistors apparently is motor oil resistant. As
long as the resistors are just bare carbon , just try motor oil. A
KISS solution.

Frank , GM0CSZ / KN6WH

Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland UK
e-mail : gm0csz.kn6wh@ukrs.org

4537. Re: 10 meter amps for sale!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-30 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19991130004407704 32@zetnet.co.uk>
Source record: 65203

> have 10 meter amps for sale also have 10 meter beams by jogunn email
> me for phone number and website. dirty south
==========
This smells of a CB amplifier.....watch it !

Frank GM0CSZ / KN6WH

4538. Re: other than 60, 50 & 400 Hz transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-30 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19991130004955704 32@zetnet.co.uk>
Source record: 65204

> I suspect that the move to higher line frequencies was motivated by
> the reduction in iron (and consequently weight and size) in generators
> and transformers.
==========
Indeed ,that's why during the reign of glowbugs , AC power in
aircraft was generated at 400 Hz.
Perhaps this is still the case for some aircraft systems ....?

Frank GM0CSZ / KN6WH

Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland UK
e-mail : gm0csz.kn6wh@ukrs.org

4539. Re: cw on an SSB rig

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-30 00:00:00 UTC
From: davekdo@aol.com
Message-ID: <19991129221001.10347.00001436@ng-cq1.aol.com>
Source record: 65205

I've done this before on a PRC-47
unbalance the ballanced modulator by
opening one side of the network via
a normally closed or normally open
(I forget) relay contact. choose a relay
with a voltage that is readily available in the radio like 12v, or 6v. Key the
relay
via telegraph key at the cold end of the
relay.

test

4540. Re: Idea to use Peltier cooler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-30 00:00:00 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <81vr2d$mq5$1@lure.pipex.net>
Source record: 65206
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,uk.radio.amateur

Dale Parfitt wrote ...
> Martin John Hallsworth wrote:
> > I just was woundering if anybody has tried this idea,
> > using a peltier device to cool a VHF or UHF gaasfet
> > mast head preamp.
> > And if so did / does it have any effect on the preamps
> > performance noise figure etc ?
> I would think this might prove beneficial for EME where the array
> looks at cold sky. But, the NF of today's devices for V/U at ambient
> temp are already below what I would think is sufficient for terrestrial
> communications where the array looks at warm earth and other noise
> sources that probably mask very low NF's.

That'd be about right, the Peltier devices work well on Paramps, so don't see why they would not be beneficial on any input device.
You should take particular attention to the input losses of the amp this is where most of the noise is generated, (provided the stage gain is large enough to swamp the noise from the following stage).
You should be aiming for input losses to be of the order 0.1 dB or less.
Input VSWR is important; very much more so than for a transmitter.

Radio Astronomers routinely achieve noise figures of 0.7 dB with custom built L-Band (1-2 GHz) GaAS FET amplifiers, and 0.15 dB Noise Figures when operated at LiN (Liquid Nitrogen) Temperatures.
The corresponding temperatures are 50°K and 10°K.

When the Moon fills the aperture of an antenna at 2 GHz the Temperature when measured with an Rx of System Temperature 40°K comes out between 120°K and about 150°K, depending upon the phase of the Moon and just where on the disc you point the measuring Antenna.

A typical Ham Rx would see a lower temperature than this because the physical size of an antenna available to a ham of normal means would have such a wide beamwidth that the Moon's disc will only fill a part of the Aperture. Under these conditions a bit of noise figure enhancement may contribute a little, but not a lot.
However if you are going to be looking at cool sky, (you should measure that at about 4°K), any reduction of Noise Figure will increase usefulness of the Rx.
The improvement might not be worth the additional expense if you are not a dedicated Radio Astronomer.

Cooled Amps using high-electron-mobility (HEMT) FET get down to 5°K at L Band and 15°K at 8.5 GHz

Good luck with it anyway, you'll get loads of fun just trying to measure the improvement. To do so you'll need a hot and cold load to measure System Temperature.
note:
The better conditioned formula for reliable accurate results is:

Ts = (To-Tn) / (Yna(Yon-1))

To is an ambient load
Tn is a load immersed in LiN (liquid Nitrogen)
Yna is the ratio of the noise power from the nitrogen Load and the noise from the antenna when it is pointed at cold sky or the moon what ever condition you wish to measure.
Yon is the noise power difference between a load at ambient temperature and a load at LiN temperature (this must be increased slightly because of the loss of the feeder into the load that is at ambient temperature.)

If anyone is interested in the calculations I'll be pleased to send them.

You might see a formula Ts = (Th-YTc) / (Y-1)
Th is the hot load
Tc is the cold load
Y is the ratio of the noise powers from each of them in turn

But this formula does not behave well under experimental conditions and spurious results are unavoidable. Mathematically they are equivalent, but slight errors in the measurement are magnified.

Gary7SLL

4541. Re: Where to find plug-in coil forms

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-30 00:00:00 UTC
From: basil <basil@isoplethics5.free-online.co.uk>
Message-ID: <PJL04.1621$A8.23655@stones>
Source record: 65207

maddog@io.com wrote in message <32966472.215929914@news.io.com>...
>Remember the old days when plug-in coil forms allowed band-changes?
>Are those old forms, or something similar, available anywhere today?
>
>thanks,
>monty N5FC

1 1/2" Octal and 3/4" B0A coil formers available from

Isoplethics
13, Greenway Close,
North Walsham,
Norfolk NR28 0DE, UK.
Tel: 44 1692 403230.

4542. Re: Homebrew Dummy Load

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-30 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <820blo$7no$1@nnrp1.deja.com>
Source record: 65208

In article <3843321a_3@news.sisna.com>,
"Keith McQueen" <n7hmf@ucares.org> wrote:
> A friend of mine built one that I used to borrow from time to time.
It was
> built into copper pipe (about 2" I think). He used a short piece of
copper
> pipe and two end caps with a BNC connector soldered into the end of
one of
> the end caps. Inside he used a series/parallel arrangement to fit as
many
> carbon resistors as he could such that the result was 50 ohms. It
worked
> great because the copper pipe dissipated heat very well. You could
also
> solder sheet copper fins to the outside to dissipate even more heat.
He
> didn't fill his with oil, but I so reason that you couldn't. That
would
> carry the heat to the outside even better.
>
> Roger lascelles <rogerl@datafast.net.au> wrote in message
> news:38431E5C.39A235D1@datafast.net.au...
> > Once you put the resistors in oil. you can increase the rating.
> >
> > I used to put 50 - 100 W into a few watts worth of metal film
> > resistors. I used automatic transmission fluid (recommended in a
> > magazine article) and soldered the resistors between two metal
plates.
> > I used a coffee can with a coax connector soldered into the lid, and
the
> > resistors soldered to the inside of the lid. The coffee can lets
you
> > open the lid when necessary. Mostly used it on HF, but it handled
144
> > MHz ok with a reasonable SWR.
> >
> > Roger Lascelles
> >
> > Electro Tools - Worksheets for Electronics
> > http://server24.hypermart.net/electrotools/
> >
> >
> > J M Noeding wrote:
> > >

> > > On Fri, 26 Nov 1999 20:34:28 -0800, Gregg Schwabauer
> > > <griggy@cyberhighway.net> wrote:
> > >
> > > >Where can I find suitable high watt, low reactance, 50 ohm
resistors
> > > >used to make hf dummy loads?
> > > >
> > > >I need something in the 100 watt range for now, 1000 watt later.
> > > >
> > > >GAS
> > > >KB7WWD
> > > >
> > > If you only want to use it below 30MHz you do not need to look for
low
> > > reactance resistors, you can paralell many lower wattage carbon
> > > resistors. If you wish to build it for higher than 30MHz the
problem
> > > with parallelling resistors is inductance in the connections
between
> > > the resistors, this has a physical extension for good cooling, and
> > > also some capacitive effect.
> > >
> > > I used some non-inductive 200 ohm resistors (50W) from RCA TV
> > > transmitter on 200MHz, resistor size 2" diameter tubular, 4" long,
> > > they were good alone, but connected in parallell capacitance and
> > > inductance of the leads is a problem, so it is still not much good
on
> > > 50MHz-up. For a single-band VHF operation a far better approach is
a
> > > single resistor with impedance transformer, but still - the
physical
> > > length of resistor has some inductance.
> > >
> > > In a dummy load you can probably use resistors rated for the sum
of
> > > 250W on 1kW if you do not intend to tune for minutes. Problem is
that
> > > coax cable may melt before resistors are damaged. With a simple
fan
> > > this is very much improved.
> > >
> > > For lower power levels it is easy to use 6 standard 2W 300 ohm
> > > resistors in paralell to build a dummy with as much as 12dB
reflection
> > > loss on 1296MHz., and better on the lower bands.
> > >
> > > 73 jan-martin LA8AK
>
>

It is possible to use dry thin sand (not salty) instead of oil to get more dissipation. I've used this method for long in a homemade load.
--
Greetings,

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Before you buy.

4543. 144MHz In Europe Forum

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-30 00:00:00 UTC
From: g0nfa@aol.com
Message-ID: <19991130035920.07921.00001618@ng-cs1.aol.com>
Source record: 65209

Please subscribe to the new Mailing List for 144MHz in Europe.

For information on 144Mhz:- Contests, MS, Dxpeditions, Contest Reports,
Tropo Reports, Your Web Pages, Your Homepages and anything else
which you wish to email about 144MHz in Europe.

144MHz In Europe - Visit http://144MHzEU.listbot.com

The List Total as of Today (26th November 1999) is over 180.
(144MHz in Europe was launched on 1st November 1999).
The Aim is to encourage much more activity on 144MHz SSB.

Please Inform Others Of This Forum. Thanks

Please accept my apologies if you have received this invitation more than once.

Derek - G0NFA IO91NE
Email - g0nfa@aol.com Packet - G0NFA @ GB7PFD.#48.GBR.EU

144MHz In Europe - Visit http://144MHzEU.listbot.com
Chat for 144MHz In Europe - Visit http://www.delphi.com/144MHz

4544. Re: Idea to use Peltier cooler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-30 00:00:00 UTC
From: "Thomas C. Sefranek" <tcs@cmcorp.com>
Message-ID: <38438C78.3DBB1E06@cmcorp.com>
Source record: 65210
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,uk.radio.amateur

Martin John Hallsworth wrote:

> Hi,
> I just was woundering if anybody has tried this idea,
> using a peltier device to cool a VHF or UHF gaasfet
> mast head preamp.
> And if so did / does it have any effect on the preamps
> performance noise figure etc ?
>
> Thanks for your thoughts Martin G1GYC
>
> --
> ~~~~~~
> Remove "NOSPAM" from email address to reply
> ~~~~~~

The devices must be built in a pyramid to achieve the temperatures low
enough to make any difference.
Each device has about a 45 degree reduction in temperature.
On the CCD chip we were cooling we needed a stack 8 levels high!

--
Thomas C. Sefranek WA1RHP
ARRL Instructor, Technical Specialist, VE Contact.
http://www.harvardrepeater.org
http://hamradio.cmcorp.com/inventory/Inventory.html

4545. Searching for MC12080 prescaler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-30 00:00:00 UTC
From: Harri Jokela <hjokela@sci.fi>
Message-ID: <3843A121.57B4CDBC@sci.fi>
Source record: 65211
Cross-posted to: rec.radio.amateur.homebrew,nl.radio.amateur,rec.radio.amateur,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.misc,uk.radio.amateur

Please email me if you know where to buy (anywhere in the world.)
few pcs of Motorola MC12080P or MC12080D prescalers.

Motorola has canceled this IC last year.

Many thanks in advance

Harri Jokela

mailto:hjokela@sci.fi

4546. Re: Isolating jacks from chasis / cabinet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-30 00:00:00 UTC
From: n2cqr@erols.com
Message-ID: <3843ed9f.159006117@news.erols.com>
Source record: 65212

Mark: I once needed to keep both lines going to a speaker isolated
from chassis ground. I had a receiver mute scheme that worked by
lifting a line above ground on transmit -- I wanted the speaker ground
to connect to the mute line (and chassis ground) ONLY when I was in
receive mode.

I just got some STEREO phone plugs and stereo phone jacks. These have
two lines that are isolated from ground. Should work for your
application. Good luck. Let me know if this solves your problem.

73 Bill N2CQR

On Mon, 29 Nov 1999 15:53:01 -0500, "Mark Erbaugh"
<mark@nospam.microenh.com> wrote:

>I'm a novice homebrewer and am just building simple accessories for my
>shack. I want to build some audio / mic switchboxes and I am concerned about
>ground loops.
>
>Specifically, I have two microphones (one desk, one headset), both of which
>use a miniature phone plugs. I'd like to build a switch into a box that
>would allow me to leave both mics plugged in but use a DPDT-center off
>switch to select which (if any) mic is connected to the radio. I envision a
>small metal project box enclosure where the box itself is grounded to the
>shack ground. The problem is that the typical panel mount phone jacks are
>metalic and the barrel connector will be in contact with the panel and thus
>grounded. The mic input on my radio uses a separate ground. I don't think
>that it is a good idea to connect the mic and shack ground. Is there a
>recommended way to isolate the jack from the box?
>
>73,
>Mark, N8ME
>
>

4547. HFradio.org and Prefix Lookups, QSLing, etc.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-30 00:00:00 UTC
From: nw7us@hfradio.removethispart.org
Message-ID: <DiO04.2760$RI1.58075@sea-read.news.verio.net>
Source record: 65213
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hello,

I recently added a PREFIX look-up form on the QSL page. If you need to know where a prefix is from, simply enter the call or prefix and see what country it is assigned to.

You are invited to http://hfradio.org, a non-commercial site offering:

+ Azimuth Map / Equidistant Map Creation (choose any QTH as center, many options)

+ Propagational Resources (live, real-time reports, eAlert service (sign up for automatic email solar/geo reports, complete with Aurora index))

+ News, and DX information and reports

+ QSL Manager and Callsign Lookup center

+ Swap and Shop

+ FREE HOME PAGES THAT YOU CAN USE TO POST YOUR OWN HAM OR SWL SITE

+ Bookstore - SWL and Ham related books. Over a 1000 titles so far.

+ Plus more (Directories, etc.)

73!

--

: World-Wide Communications via Amateur Radio : 122.93W : 47.67N :
: 10x56526 : CW/SSB - DX hunter : Brinnon, WA : Code Warrior #60 :
: visit http://hfradio.org/ :

4548. Re: Isolating jacks from chasis / cabinet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-30 00:00:00 UTC
From: Mark Erbaugh <mark@nospam.microenh.com>
Message-ID: <3843d087$0$96890@news.infinet.com>
Source record: 65214

Bill Meara <n2cqr@erols.com> wrote in message
news:3843ed9f.159006117@news.erols.com...
> Mark: I once needed to keep both lines going to a speaker isolated
> from chassis ground. I had a receiver mute scheme that worked by
> lifting a line above ground on transmit -- I wanted the speaker ground
> to connect to the mute line (and chassis ground) ONLY when I was in
> receive mode.
>
> I just got some STEREO phone plugs and stereo phone jacks. These have
> two lines that are isolated from ground. Should work for your
> application. Good luck. Let me know if this solves your problem.
>

Thanks Bill,

I never thought of using stereo plugs in that way. Actually, the mic
connectors both have stereo plugs already on them, but use the tip and
barrel connections - the ring is unused.

73,
Mark, N8ME

4549. Re: Isolating jacks from chasis / cabinet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-30 00:00:00 UTC
From: Mark Erbaugh <mark@nospam.microenh.com>
Message-ID: <3843d054$0$67854@news.infinet.com>
Source record: 65215

Bill Meara <n2cqr@erols.com> wrote in message
news:3843ed9f.159006117@news.erols.com...
> Mark: I once needed to keep both lines going to a speaker isolated
> from chassis ground. I had a receiver mute scheme that worked by
> lifting a line above ground on transmit -- I wanted the speaker ground
> to connect to the mute line (and chassis ground) ONLY when I was in
> receive mode.
>
> I just got some STEREO phone plugs and stereo phone jacks. These have
> two lines that are isolated from ground. Should work for your
> application. Good luck. Let me know if this solves your problem.
>

Thanks Bill,

I never thought of using stereo plugs in that way. Actually, the mic
connectors both have stereo plugs already on them, but use the tip and
barrel connections - the ring is unused.

73,
Mark, N8ME

4550. Re: Isolating jacks from chasis / cabinet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-30 00:00:00 UTC
From: Mark Erbaugh <mark@nospam.microenh.com>
Message-ID: <3843d2b7$0$9493@news.infinet.com>
Source record: 65216

Nick,

Thanks.

> To avoid RF feedback you need to screen the mic cables and to avoid
'ground
> loops' you need to earth it all back to the Mic socket earth. This means
that
> metal sockets connected to the box with the box connected to the rig via
the
> screen of the mic cable are the order of the day.

Okay, I'm starting to understand. What does this mean for an external audio input device, such as a DVR? Since it is connected to the mic input of the radio, should I ground the DVR chassis to the station ground?

> The headphone side of life is a complication. It would be best to leave
these
> wires out of the box entirely but if you have to do it isolate the
headphone
> jacks and wiring from the box but connect the screens of the headphone
wiring to
> the box at RF using 1000pf capacitors with short leads.

I guess I could build the headphone connector into a separate box and just mount it near the mic jack box. My purpose is to provide a convenient place to connect the headphone and and mic from the headset, so that I didn't have cables going all over. Two adjacent boxes mounted under the shelf supporting the radio should work just fine.

73,
Mark, N8ME

4551. Re: Isolating jacks from chasis / cabinet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-30 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <384429B6.C0E669AA@bellsouth.net>
Source record: 65217

Mark Erbaugh wrote:
> that it is a good idea to connect the mic and shack ground. Is there a
> recommended way to isolate the jack from the box?

I've been known to mount a small piece of plastic in a rectangular hole in the box, and then mount some jacks in the plastic. With my metal/plastic-working skills it tends to be somewhat ugly, but it does work fine.
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

4552. Re: Idea to use Peltier cooler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-30 00:00:00 UTC
From: Mark West <markw@wwncorp.net>
Message-ID: <d4T04.835$8S1.879@client>
Source record: 65218
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,uk.radio.amateur

Peltier chips are interesting, but probably not very practical here.

1) They can support something around a 40 degree effect under IDEAL conditions, so you
would need to stack them.
2) They are EXTREMELY inefficinet, and require HUGE GOBS of current at 12V DC. You will
spend alot of money on a suitable power supply.
3) Due to their inefficieny they require very large heat sinks, preferrably with forced air cooling. If
the sink is too small or the flow is too low, the peltier chip becomes very very hot on both sides (i.e.
it becomes a heater).

- Mark West

Martin John Hallsworth <Martin@g1gyc.demon.co.uk> wrote in message news:943919922.14883.0.nnrp-08.9e98acde@news.demon.co.uk...
> Hi,
> I just was woundering if anybody has tried this idea,
> using a peltier device to cool a VHF or UHF gaasfet
> mast head preamp.
> And if so did / does it have any effect on the preamps
> performance noise figure etc ?
>
> Thanks for your thoughts Martin G1GYC
>
> --
> ~~~~~~
> Remove "NOSPAM" from email address to reply
> ~~~~~~
>
>

4553. Re: Transformer oil for dummy load

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-30 00:00:00 UTC
From: Mike Yetsko <joe@user.com>
Message-ID: <820tq7lkb1@fir.prod.itd.earthlink.net>
Source record: 65219
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

You know, the difference in cooling capacity is so close, that using
real PCB laced transformer oil and a safe alternative that you'd never
even notice the difference in a HAM environment.

This is starting to remind me of a power war. Sure, 4.2Watt is
better than 4.0Watt, but does it really matter in practice?

Mike

Tom Bruhns <tomb@lsid.hp.com> wrote in message
news:3842FADF.45BC583C@lsid.hp.com...
> A long time ago, I got a gallon of transformer oil for my Heath
> Cantenna... I visited a transformer rewind/repair shop (happened to
> live in Tucson at the time), and asked for it. They gave it to me;
not
> worth writing up a bill.
>
> I'd recommend trying the yellow pages of your phone book: find a
place
> that deals with big transformers and ask them. Ask your local power
> utility (undoubtedly will have to get beyond the front desk
receptionist
> to get any action on this request! But then there may well be hams
that
> work for them, too...). As a last resort, check petroleum products
> distributors and ask specifically for transformer oils...they likely
> will have catalogs/data sheets. In that event, you might indeed have
to
> settle for a 5-gallon can of it. Share with other hams in your area?
> I'd expect by this time that there won't be any PCB-laden oils left in
> service in the US in any transformer serviced in the past 20 years at
> least.
>
> Cheers,
> Tom
>
> Ted Busky wrote:
> >
> > Dave (or anyone else),
> > I need a gallon for my dummy load. If single gallons are not
available, I'd be
> > interested in buying a 5 gallon pail if that is available.
> > Ted N1XLW.

4554. Re: Antenna tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-30 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19991130011539704 32@zetnet.co.uk>
Source record: 65220

> The tuners that I have been looking at are:
> MFJ-949E from MFJ Enterprises.
> VC-300DLP from Vectronics.
> MFJ-969 with roller inductor from MFJ Enterprises.
> All are 300W.
> The VC-300DLP seems to be a little more expensive than MFJ-949E, but
> with similar specs. Which one is better?
==========
On this NG and others it has been reported that the MFJ ATs can't
really handle the power they are meant to
handle.....because of components rating.

I have not come across any comment on Vectronics tuners

Frank GM0CSZ / KN6WH

4555. Re: Idea to use Peltier cooler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-30 00:00:00 UTC
From: Tom Bruhns <tomb@lsid.hp.com>
Message-ID: <38441A4A.13989A3C@lsid.hp.com>
Source record: 65221
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,uk.radio.amateur

I'd agree with Dale Parfitt's comment that it might simply not be worth
the effort, and add a warning: be careful that cooling something like
that may lower its temperature below the dew point, and you may end up
with water all over it. This can be a bad thing for electronics...
it's kept me from using Peltier coolers for one or two things I've
thought of.

Cheers,
Tom

Martin John Hallsworth wrote:
>
> Hi,
> I just was woundering if anybody has tried this idea,
> using a peltier device to cool a VHF or UHF gaasfet
> mast head preamp.
> And if so did / does it have any effect on the preamps
> performance noise figure etc ?

4556. Re: Transformer oil for dummy load

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-30 00:00:00 UTC
From: Tom Bruhns <tomb@lsid.hp.com>
Message-ID: <38441963.A2F4F729@lsid.hp.com>
Source record: 65222
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Gee, when I mentioned that you probably won't find any PCB laced transformer oil nowdays, it was simply a comment for the safety-minded. It didn't even occur to me that there would be any _significant_ difference in heat capacity or heat transfer characteristics between the 30-year-old stuff and the modern transformer oil. So...if it was the start of a "war," I promise that it was done with no malice. :-) (I'd personally just as soon simply keep PCBs out of my life so I'd avoid the old stuff, but transformer oil was easy enough to get that it just didn't seem worth messing with 10 bottles of mineral oil from the drugstore [and the strange looks from clerks] or some unproven motor oil.)

Cheers,
Tom

Mike Yetsko wrote:
>
> You know, the difference in cooling capacity is so close, that using
> real PCB laced transformer oil and a safe alternative that you'd never
> even notice the difference in a HAM environment.
>
> This is starting to remind me of a power war. Sure, 4.2Watt is
> better than 4.0Watt, but does it really matter in practice?
>
> Mike
>
> Tom Bruhns <tomb@lsid.hp.com> wrote in message
> news:3842FADF.45BC583C@lsid.hp.com...
...
> > I'd expect by this time that there won't be any PCB-laden oils left in
> > service in the US in any transformer serviced in the past 20 years at
> > least.

4557. Re: Isolating jacks from chasis / cabinet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-30 00:00:00 UTC
From: blackm00@cam.org
Message-ID: <blackm00-3011991332360001@dialup-596.hip.cam.org>
Source record: 65223

In article <384429B6.C0E669AA@bellsouth.net>, Doug Smith
<w9wi@bellsouth.net> wrote:

> Mark Erbaugh wrote:
> > that it is a good idea to connect the mic and shack ground. Is there a
> > recommended way to isolate the jack from the box?
>
> I've been known to mount a small piece of plastic in a rectangular hole
> in the box, and then mount some jacks in the plastic. With my
> metal/plastic-working skills it tends to be somewhat ugly, but it does
> work fine.

I've done the same thing, but I've used pieces of circuit board. With
a little practice, you can fairly easily peel the copper foil off,
leaving a pice of insulated board. Or I've left the foil, and used
a Dremel tool and appropriate bit to carve an insulating moat around
the area that needs isolating.

The advantage of circuit board is that it's handy, I'm familiar with
cutting it, and you don't have to hunt around for a thin piece of
plastic.

And if we're talking about circuit board, you can make useful boxes
out of the stuff. Usually the ones I've made tend to be uneven,
but they are cheap. One could make a shielded box for the area that
needs shielding, and then mount it in a plastic box for neatness.

And then in this particular case, the jack that needs to be insulated
from ground could be mounted on the plastic box, rather than in the
shielded section.

Michael VE2BVW

4558. How I Should Test a Used SRF3897 Please?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-30 00:00:00 UTC
From: DavidC <eDoc@netzero.net>
Message-ID: <s48an3gpmvm81@freenews.remarq.com>
Source record: 65224
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Can someone instruct me how I should test a used SRF3897,
please?

I have Data Technology Model 20 capacitance & multimeter,
a RS multimeter, and Senior VolyOhmyst devices available.

Also have a TTM Oscilloscope Model 303, though I am not certain
it is operating properly. Got it for $10. at a yard sale and haven't
tried it out yet.

- Thanks! & 73, DavidC K1YP
****

* Sent from RemarQ http://www.remarq.com * The Internet's Discussion Network *
* The fastest and easiest way to search and participate in Usenet - Free! *

4559. Re: Searching for MC12080 prescaler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-30 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <821nme$90d$1@nnrp1.deja.com>
Source record: 65225
Cross-posted to: rec.radio.amateur.homebrew,nl.radio.amateur,rec.radio.amateur,rec.radio.amateur.digital.misc

In article <3843A121.57B4CDBC@sci.fi>,
Harri Jokela <hjokela@sci.fi> wrote:
>
> Please email me if you know where to buy (anywhere in the world.)
> few pcs of Motorola MC12080P or MC12080D prescalers.
>
> Motorola has canceled this IC last year.
>
> Many thanks in advance
>
> Harri Jokela
>
> mailto:hjokela@sci.fi
>
>

Try Richadson Electronics at http://www.rell.com/
--
Greetings,

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Before you buy.

4560. Re: What is this? Teletonic Berkeley Crystal detector

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-30 00:00:00 UTC
From: "Al, N2NKB"
Message-ID: <821b7q$cs4$1@bgtnsc01.worldnet.att.net>
Source record: 65226

francine wrote in message <1e230no.1cgv97ildd5koN@[192.168.1.2]>...
>DavidC <eDoc@netzero.net> wrote:
>
>> NEG. DC OUT
>> Teletonic Berkeley
>> CRYSTAL DETECTOR
>> MODEL 8551 50 Ohms
>> S/N 00641-13
>> .1 - 1500 MHz 3V. MAX
>> RF IN
>>
>> Should I build a receiver around it, use it as a RF probe, or what,
>> please?
>
>It's used on a vswr bridge, or on the coupling port of a directional
>coupler. It makes a dc voltage of the rf signal, so you can use a
>oscilloscoop or dc voltmeter with it.
>
>--
>francine

It also is a peak detector, so you may observe modulation envelopes
with your o'scope, even though your scope does not have the bandwidth
to see the carrier frequency.
Al

4561. Re: Transformer oil for dummy load

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-30 00:00:00 UTC
From: goldreged@aol.comJUNKBLOK
Message-ID: <19991130170141.01134.00000127@ng-fy1.aol.com>
Source record: 65227

Easiest I found was to go to the local Walgreens (Pharmacy desk). Ordered it &
got it in 3 days... That way, you don't get the strange looks... Maybe the
local utility company can help you, too....
Ed G.
(Please Remove "JUNKBLOK" to E-mail.
Unless it's a Flame.)
Check This Site !!!
http://www.charityweb.net/Safehaven

4562. Re: Where can I find plans for a Homebrew 6M SSB or 2M SSB Rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-30 00:00:00 UTC
From: Nick Caruso <nick.caruso@software.com>
Message-ID: <38444F98.9629C8BC@software.com>
Source record: 65228

marsgal42@hotmail.com wrote:

> In article <384383d1.71795462@news>,
> a1@home.com (Rick) wrote:
> > Hi...where can I find plans for such a rig?
> > Preferably one with a digital readout, but that does not matter.
> >
> > Also, a special type of antenna is required for SSB, isn't it? If so,
> > how could I build such an antenna out of either wire or pipes?

I think he's talking about polarization. Aren't FM antennas one way and SSB antennas the other? FM is vertical, and SSB horizontal, yes?

And I think I remember that this varies from place to place. I honestly haven't any idea how much difference it makes. Anyone know?

> > Even better would be if you could come up with a PCB for such a
> > thing...one that could be downloaded and printed out...but it is not
> > mandatory. PCB would be nice, however, because all my wire-wrapping
> > attempts are very sloppy.
>
> You can't, because people rarely build such things in the way you
> describe. And it doesn't matter how many times you ask.

Huh? He's asking for a pc board mask. People do do that, I think.

> A nice building block approach would build on work published
> by KK7B in QST and reprinted in QRP Power, with kits available
> through Kanga US. But it's not a turn-key approach, by any
> means. You will actually (gasp!) have to do some work.

Speaking as one in the middle of this exact process, I can tell you it's not easy. If you're very organised (I'm not) you stand a better chance of seeing something like this through.

I've got a miniR2 built and packaged, and have tested it at HF with a signal generator as the LO, but I've yet to build and package a six meter VFO. I'm doing the premix thing, with an HF VFO and a nice old air variable, but I've found it's very hard to figure out how to properly mount that big, clunky old air variable inside a nice hammond die-cast aluminum box. Sigh.

And that only leaves the T2, and maybe the LM2, and the phasing networks, and... maybe I'll just buy an FT-100... NO! MUST NOT BUY APPLIANCE! WILL BUILD OWN RIG! ... but those FT-100's look pretty slick, and my vx-5r works well, and the ft-100 is all mode on six and two, and I could just pop over to the HRO.... NO! MUST BE STRONG! MUST NOT GIVE UP! but at this rate, I may miss the whole sunspot cycle.... or how about an ic-706mkIIg? NO! :-)

Seriously, though, I think Hands Electronics may be making a modular 6M SSB kit
-- kanga US resells Hands UK kits too. check it out.
http://www.bright.net/~kanga/kanga/hands.htm

Also, FAR Circuits carries lots of published circuits as unpopulated etched
boards, look for them with www.google.com.

best regards,

--ncc
kb1dej

4563. HW 18 Xtal Controlled Transciever Info Needed...Bad!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-11-30 00:00:00 UTC
From: redbone1@postoffice.swbell.net
Message-ID: <38449EAE.AEB98E2A@postoffice.swbell.net>
Source record: 65229
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.homebrew

Hello and Greetings:
I have a Heath Kit HW 18 Crystal Controlled Transciever. I would like to know what the Frequency range for this unit is? Is there anyone out there will to sale me a HeathKit assembly manual or a copy of the manual. All that I have is the Mic , Power Supply, and the Radio itself.
This unit was originally designed for M.A.R.S. and C.A.P. use...is there anyway to convert it for amatuer use?

Thanks in Advance.....

4564. Re: Crystal filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-01 00:00:00 UTC
From: monte zuma <montezuma4@earthlink.net>
Message-ID: <823h1r$r85$1@oak.prod.itd.earthlink.net>
Source record: 65143

monte zuma wrote in message ...
>Looking for CRYSTAL filters. Came across one made
>by Showa. Please help tell me where this is available
>need >40 pieces for project..
>
>thanks
>monte
>
>
>

4565. RF Power Transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-01 00:00:00 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <1U5FOKuGVYVuobYmT+Xz5PpDSWl6@4ax.com>
Source record: 65144

I need to make a bunch of 2-meter linear amplifiers that have about a 10 watt output. It used to be that Motorola made a real nice line of inexpensive transistors that would take you in 15-20 dB steps from 10 milliwatts to 10 watts in about three steps. Now they only make a 10 watt device and the driver and predriver are gone.

Who makes a decent line of 100 mW, 1W, and maybe even the 10W output device in current production? I've done the searches on most of my RF web sources and have come up dry. I'd prefer to stay in bipolar, but FET will do if I can find a 12 volt series of fets. Most of them want 28 or 50 volts, and I just don't have that voltage available unless I go to another power supply, but that is a whole other design task...

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

4566. Re: PIC16F84 CW BEACON ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-01 00:00:00 UTC
From: srh@iname.killspam.com
Message-ID: <srh-0112991338460001@user-2ivekif.dialup.mindspring.com>
Source record: 65145

In article <7U1oO8JYkEB@r_buschner.knuut.de>, r_buschner@KNUUT.de (Ralf K. Buschner) wrote:

> colinlowe@jet wrote in <821p62ebp1@lola.ctv.es>:
>
> > I have been looking for info regarding building a CW Beacon using a
> > PIC16F84 or the PIC16C84.
> >
> > If you have a circuit and the asm code please can you let me know.
>
> You should try the K10 keyer chip from K1EL on his homepage. Not a
> 16F84, but very cheap and a simple hardware necessary...

If the original poster is [still] interested in a PIC-based beacon, he should have a look at <http://mks.niobrara.com/hamradio/beacon.html> -- looks pretty slick!

/s.holmes
--
Stephen R. Holmes | srh@iname.killspam.com
TNS, Inc. | (remove the middle part of the domain name
Reston, VA USA | to form my actual e-mail address)

4567. Polarization Re: Where can I find plans for a Homebrew 6M SSB or 2M SSB Rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-01 00:00:00 UTC
From: William Ricker N1VUX <wdr@world.std.com>
Message-ID: <FM2s6L.J96@world.std.com>
Source record: 65146

Nick Caruso replied to the original questioner:

> > > Also, a special type of antenna is required for SSB, isn't it? If so,
> > > how could I build such an antenna out of either wire or pipes?

> I think he's talking about polarization. Aren't FM antennas one way and SSB
> antennas the other? FM is vertical, and SSB horizontal, yes?

This may qualify as a FAQ, but it's covered an any good handbook on
the topic.

VHF FM uses vertical because (a) VHF FM is largely mobile, and
vertical antennas are far less awkward mobile than horizontal and
(b) with the FM capture effect, the noise implications are
(mostly) irrelevant. Since VHF FM is largely line-of-site, the
fixed stations talking to the mobiles need to be vertically
polarized too. (Mobile convenience is also why 11m/CB uses vertical
for nearly everything, in spite of being SSB/AM.)

On HF, usage varies. The preference for Horizontal polarization in
HF skip modes (of whatever modulation) is based on the observation
that most man-made EM noise is vertically polarized, so horizontal
antennas are quieter. With Rayleigh Rotation, the received
polarization of an ionospheric-skip-mode signal is random and
changing anyway (hence SOME of the fading). Which is why you can
use an HF vertical to communicate with a station using a horizontal
dipole (at significant penalty on ground-wave and not at all on NVIS).

For VHF+ SSB/WS modes, custom is to use Horizontal -- in part because
of HF usage, and in part to get the cross-polarization attenuation
protection from all the vertically polarized VHF signals in-band and in
adjacent hi-power bands. For SSB/WS modes, the vertical polarization
of man-made noise might also be a an issue?

But when the MUF gets up past 50MHz, there's no reason you can't use
vertical polarization on 6m when you try to work the world 6-side-band,
since it will rotate as is refracts just like HF (even more-so, IIRC).
My 6m QRP SSB/CW rig, Icom 501, has a whip as well as an SO-239.
It's difficult to do Horizontal with a whip, but I've done it :-)

I don't know what effect tropo-ducting or meteor scatter has on
polarization -- probably have to ask in rra.antennas or elsewhere to
get that answered?

Likewise, 10m FM could be done with an existing 10m horizontal
antenna when looking for DX ... and would probably work LOS locally

provided it's not QRP. (Haven't heard of any FM lower than 10m ...
which was previously considered VHF, but is now officially HF ...
and acts like both, as do 6m and 11m.)

> And I think I remember that this varies from place to place.

Not much, although a local LOS SSB net could agree to use Vertical
because it's easier. With "Halo" antennas, omni horizontal is
pretty simple to stick up there too.

73 de Bill N1VUX

--
Bill Ricker N1VUX wdr@world.std.com "The freedom of the press belongs
http://world.std.com/~wdr/ to those who own one."--A.J.Liebling

4568. Re: Idea to use Peltier cooler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-01 00:00:00 UTC
From: Chris Nicholson <csnichol@netusa1.net>
Message-ID: <384522A0.3BD2@netusa1.net>
Source record: 65147
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,uk.radio.amateur

Martin,
I have seen a lot of responses both pro and con. I recently disassembled
a LNA/downconvertor from some sort of earley 70's (guess)sat system.
I now have about 25 1.5" square Peltier junctions that were attached
to a 15 pound finned copper heatsink.

Chris
N9LLO

Martin John Hallsworth wrote:
>
> Hi,
> I just was woundering if anybody has tried this idea,
> using a peltier device to cool a VHF or UHF gaasfet
> mast head preamp.
> And if so did / does it have any effect on the preamps
> performance noise figure etc ?
>

4569. Re: 4MHz VFO Circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-01 00:00:00 UTC
From: Tom Bruhns <tom_bruhns@agilent.com>
Message-ID: <3845B4CE.E82A9940@agilent.com>
Source record: 65148
Cross-posted to: alt.ham-radio,alt.ham-radio.ssb,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Holy smoke! I trimmed the distribution a bit...seemed excessive.

You should be able to scale the frequency of a VFO on other freqs...in general, you can scale all the capacitors and inductors, though if you're not moving it very far, you can usually leave the bypass and coupling caps unchanged.

The oscillation frequency should be 1/(2*pi*sqrt(L*C)), where L is the inductor (usually only one inductor) and C is the net capacitance across the inductor. In practice, you might well have capacitors in series and parallel, and you have to just think about it from the inductor's point of view: what does the inductor "see"? You might want to include a guess for the input capacitance of the oscillator transistor, and maybe a little for the stray circuit capacitance, though at 4MHz all that should be a pretty small effect.

Usually one of those capacitors is variable, to get your tuning. There might be another one that's variable for trimming, and/or the inductor might be trimmable. But you can figure out the tuning range by plugging in the min and max values of the tuning cap while leaving everything else the same. You could do some math acrobatics and moosh your formula around to give you the tuning capacitor capacitance required for min and max frequencies you want to cover.

How do I do this sort of thing in practice? One easy, useful way is to use a spreadsheet like Excel. You can make a column of tuning capacitor values (corresponding to, say, 0degrees through 180 degrees rotation, in 20 degree increments), then a column of net total capacitance (the tuning cap combined with fixed caps), then the frequency (net capacitance and inductance, in the formula above). You can put all the "fixed" values into cells at the top, and use formulas in the columns that get the "fixed" values from those cells...then it's trivial to change one of the "fixed" values and see the new set of frequencies that results.

And you can plot freq versus cap rotation easily, and see visually both what range is covered, and how linear it is.

The spreadsheet lets me compare different parts values and also different circuit topologies quickly. I use spreadsheets for this sort of thing quite often in both hobby and professional work. They're not just for accounting!

Cheers,
Tom

Rick wrote:
>
> Hi.
>
> For the past few days now I have been searching for info or plans to
> build a 4MHz VFO...but cannot find them. I have looked in the ARRL
> handbook and found everything I need to know about VFO's except how to
> determine the pF capacitor to use when designing a VFO.
>
> If you can help...either by giving me the formula for determining the
> type of capacitor or by providing a schematic, it would be greatly
> appreciated.
>
> Thanks.

4570. Re: RF Power Transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-01 00:00:00 UTC
From: "Thomas C. Sefranek" <tcs@cmcorp.com>
Message-ID: <3845B2AB.4DAB2@cmcorp.com>
Source record: 65149

Jim Weir wrote:

> I need to make a bunch of 2-meter linear amplifiers that have about a 10 watt
> output. It used to be that Motorola made a real nice line of inexpensive
> transistors that would take you in 15-20 dB steps from 10 milliwatts to 10 watts
> in about three steps. Now they only make a 10 watt device and the driver and
> predriver are gone.
>
> Who makes a decent line of 100 mW, 1W, and maybe even the 10W output device in
> current production? I've done the searches on most of my RF web sources and
> have come up dry. I'd prefer to stay in bipolar, but FET will do if I can find
> a 12 volt series of fets. Most of them want 28 or 50 volts, and I just don't
> have that voltage available unless I go to another power supply, but that is a
> whole other design task...
>
> Jim
> Jim Weir, VP Eng. RST Eng. WX6RST
> A&P, CFI, and other good alphabet soup

I have a few hundred Motorola MRF237s.
Quan. Part # Mhz. Watts Gain db Voltage
350 MRF237 175 4 12 28

--
Thomas C. Sefranek WA1RHP
ARRL Instructor, Technical Specialist, VE Contact.
http://www.harvardrepeater.org
http://hamradio.cmcorp.com/inventory/Inventory.html

4571. Re: HW 18 Xtal Controlled Transciever Info Needed...Bad!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-01 00:00:00 UTC
From: "D. S. Platt" <jeepp@erols.com>
Message-ID: <3845D3D2.1184E6FE@erols.com>
Source record: 65150
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.homebrew

The HW-18 will tune up on the 75 meter ham band and its possible to connect a VFO into one of the crystal sockets. You will be able to get about 50 kHz worth of spread before you have to go inside and re-tweak things (for best output, etc.) The HW-18 was designed to work, nominally, from 4-5 MHz, as I recall. The HW-18 was a spin-off from a Heath model that had a VFO and covered the entire 80/75 meter band. I think they (Heath) may have had one for 40 meters, too.

redbone1@postoffice.swbell.net wrote:

> Hello and Greetings:
> I have a Heath Kit HW 18 Crystal Controlled Transciever. I would
> like to know what the Frequency range for this unit is? Is there anyone
> out there will to sale me a HeathKit assembly manual or a copy of the
> manual. All that I have is the Mic , Power Supply, and the Radio
> itself.
> This unit was originally designed for M.A.R.S. and C.A.P. use...is there
> anyway to convert it for amatuer use?
>
> Thanks in Advance.....

4572. Re: RF Power Transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-01 00:00:00 UTC
From: larryc@northwest.com
Message-ID: <3845FD28.20FA@northwest.com>
Source record: 65151

Jim,

Motorola has abandoned the low voltage/low power RF segment. There just
isn't any market for them. The consumer electronics market is now 5V/12V
FM-only devices. Some hi voltage/hi pwr devices still exist.

Philips has a small market, as does ST Microelectronics. Old favorites
like the 2N4427 simply disappeared. The 2N4427 is supposed to be
re-introduced by Unitrode sometime next year.

Hope this helps.

LarryC
N3CCW

Jim Weir wrote:
>
> I need to make a bunch of 2-meter linear amplifiers that have about a 10 watt
> output. It used to be that Motorola made a real nice line of inexpensive
> transistors that would take you in 15-20 dB steps from 10 milliwatts to 10 watts
> in about three steps. Now they only make a 10 watt device and the driver and
> predriver are gone.
>
> Who makes a decent line of 100 mW, 1W, and maybe even the 10W output device in
> current production? I've done the searches on most of my RF web sources and
> have come up dry. I'd prefer to stay in bipolar, but FET will do if I can find
> a 12 volt series of fets. Most of them want 28 or 50 volts, and I just don't
> have that voltage available unless I go to another power supply, but that is a
> whole other design task...
>
> Jim
> Jim Weir, VP Eng. RST Eng. WX6RST
> A&P, CFI, and other good alphabet soup

4573. PIC16F84 CW BEACON ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-01 00:00:00 UTC
From: "colinlowe@jet" <colinlowe@jet.es>
Message-ID: <821p62ebp1@lola.ctv.es>
Source record: 65230

I have been looking for info regarding building a CW Beacon using a PIC16F84
or the PIC16C84.

If you have a circuit and the asm code please can you let me know.

73 de Colin
colinlowe@jet.es
http://personales.jet.es/colinlowe/index.htm

4574. Re: Transformer oil for dummy load

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-01 00:00:00 UTC
From: WB <willyacht@yahoo.com>
Message-ID: <iz_04.145$gb7.2473@ozemail.com.au>
Source record: 65231
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

You can also use heat transfer oil, this stuff is used for the heat
treatment of metal. They produce tons of the stuff and is much cheaper than
transformer oil. There are many different grades, for fast or slow removal
of heat. I have used this stuff with great results.

Mike Yetsko <joe@user.com> wrote in message
news:820tq7lkb1@fir.prod.itd.earthlink.net...
> You know, the difference in cooling capacity is so close, that using
> real PCB laced transformer oil and a safe alternative that you'd never
> even notice the difference in a HAM environment.
>
> This is starting to remind me of a power war. Sure, 4.2Watt is
> better than 4.0Watt, but does it really matter in practice?
>
> Mike
>
>
> Tom Bruhns <tomb@lsid.hp.com> wrote in message
> news:3842FADF.45BC583C@lsid.hp.com...
> > A long time ago, I got a gallon of transformer oil for my Heath
> > Cantenna... I visited a transformer rewind/repair shop (happened to
> > live in Tucson at the time), and asked for it. They gave it to me;
> not
> > worth writing up a bill.
> >
> > I'd recommend trying the yellow pages of your phone book: find a
> place
> > that deals with big transformers and ask them. Ask your local power
> > utility (undoubtedly will have to get beyond the front desk
> receptionist
> > to get any action on this request! But then there may well be hams
> that
> > work for them, too...). As a last resort, check petroleum products
> > distributors and ask specifically for transformer oils...they likely
> > will have catalogs/data sheets. In that event, you might indeed have
> to
> > settle for a 5-gallon can of it. Share with other hams in your area?
> > I'd expect by this time that there won't be any PCB-laden oils left in
> > service in the US in any transformer serviced in the past 20 years at
> > least.
> >
> > Cheers,
> > Tom

> >
> > Ted Busky wrote:
> > >
> > > Dave (or anyone else),
> > > I need a gallon for my dummy load. If single gallons are not
> available, I'd be
> > > interested in buying a 5 gallon pail if that is available.
> > > Ted N1XLW.
>
>
>

4575. Re: Homebrew Dummy Load

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-01 00:00:00 UTC
From: WB <willyacht@yahoo.com>
Message-ID: <%C_04.149$gb7.3350@ozemail.com.au>
Source record: 65232

i use a old oil electric heater, it has a 2400 watt element with the already inside. Just rip off the power connector and install SO239 socket and feed into an antenna tuner, a instant 3kw cheap dummy load.

Keith McQueen <n7hmf@ucares.org> wrote in message news:3843321a_3@news.sisna.com...
> A friend of mine built one that I used to borrow from time to time. It was
> built into copper pipe (about 2" I think). He used a short piece of copper
> pipe and two end caps with a BNC connector soldered into the end of one of
> the end caps. Inside he used a series/parallel arrangement to fit as many
> carbon resistors as he could such that the result was 50 ohms. It worked
> great because the copper pipe dissipated heat very well. You could also
> solder sheet copper fins to the outside to dissipate even more heat. He
> didn't fill his with oil, but I so reason that you couldn't. That would
> carry the heat to the outside even better.
>
> Roger lascelles <rogerl@datafast.net.au> wrote in message
> news:38431E5C.39A235D1@datafast.net.au...
> > Once you put the resistors in oil. you can increase the rating.
> >
> > I used to put 50 - 100 W into a few watts worth of metal film
> > resistors. I used automatic transmission fluid (recommended in a
> > magazine article) and soldered the resistors between two metal plates.
> > I used a coffee can with a coax connector soldered into the lid, and the
> > resistors soldered to the inside of the lid. The coffee can lets you
> > open the lid when necessary. Mostly used it on HF, but it handled 144
> > MHz ok with a reasonable SWR.
> >
> > Roger Lascelles
> >
> > Electro Tools - Worksheets for Electronics
> > http://server24.hypermart.net/electrotools/
> >
> >
> > J M Noeding wrote:
> > >
> > > On Fri, 26 Nov 1999 20:34:28 -0800, Gregg Schwabauer
> > > <griggy@cyberhighway.net> wrote:
> > >
> > > >Where can I find suitable high watt, low reactance, 50 ohm resistors
> > > >used to make hf dummy loads?
> > > >

> > > >I need something in the 100 watt range for now, 1000 watt later.
> > > >
> > > >GAS
> > > >KB7WWD
> > > >
> > > If you only want to use it below 30MHz you do not need to look for low
> > > reactance resistors, you can paralell many lower wattage carbon
> > > resistors. If you wish to build it for higher than 30MHz the problem
> > > with parallelling resistors is inductance in the connections between
> > > the resistors, this has a physical extension for good cooling, and
> > > also some capacitive effect.
> > >
> > > I used some non-inductive 200 ohm resistors (50W) from RCA TV
> > > transmitter on 200MHz, resistor size 2" diameter tubular, 4" long,
> > > they were good alone, but connected in parallell capacitance and
> > > inductance of the leads is a problem, so it is still not much good on
> > > 50MHz-up. For a single-band VHF operation a far better approach is a
> > > single resistor with impedance transformer, but still - the physical
> > > length of resistor has some inductance.
> > >
> > > In a dummy load you can probably use resistors rated for the sum of
> > > 250W on 1kW if you do not intend to tune for minutes. Problem is that
> > > coax cable may melt before resistors are damaged. With a simple fan
> > > this is very much improved.
> > >
> > > For lower power levels it is easy to use 6 standard 2W 300 ohm
> > > resistors in paralell to build a dummy with as much as 12dB reflection
> > > loss on 1296MHz., and better on the lower bands.
> > >
> > > 73 jan-martin LA8AK
>
>

4576. Re: Antenna tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-01 00:00:00 UTC
From: WB <willyacht@yahoo.com>
Message-ID: <wE_04.151$gb7.3334@ozemail.com.au>
Source record: 65233

these tuners will always be crap, just buy a Surplus Bandits 10 KW roller and a couple of 500pf vacuums, this will give you the ultimate antenna tuner.

Frank Dinger <frank.dinger@zetnet.co.uk> wrote in message news:19991130011539704 32@zetnet.co.uk...
> > The tuners that I have been looking at are:
> > MFJ-949E from MFJ Enterprises.
> > VC-300DLP from Vectronics.
> > MFJ-969 with roller inductor from MFJ Enterprises.
> > All are 300W.
> > The VC-300DLP seems to be a little more expensive than MFJ-949E, but
> > with similar specs. Which one is better?
> ====================================
> On this NG and others it has been reported that the MFJ ATs can't
> really handle the power they are meant to
> handle.....because of components rating.
>
> I have not come across any comment on Vectronics tuners
>
> Frank GM0CSZ / KN6WH
>
>

4577. Re: 30m QRP Freq Recommendation

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-01 00:00:00 UTC
From: tiuk@aol.com
Message-ID: <19991130221139.01117.00000223@ng-fb1.aol.com>
Source record: 65234

Hi Mark,

10,106 khz is a good QRP frequency on 30 meters. Try not to get a crystal higher than 10,120 khz because you'll be in the digital portions of the band & not too many fruitful CW QSO's there.

Try Bry's crystal page for various sources of crystals.

www.geocities.com/CapeCanaveral/Hall/8701/mega/xtals.htm

73's, Roman, N2CDD

>. Can
>anyone recommend what frequencies I should opt for? Can anyone suggest a
>good source for the crystals?

4578. antenna tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-01 00:00:00 UTC
From: jeixray@aol.com
Message-ID: <19991130220641.01117.00000218@ng-fb1.aol.com>
Source record: 65235

Been thru all of that stuff. I was forced to modify a Heathkit roller inductor type tuner to get the g5rv to work properly on 160 mtrs. I suggest taht you get an older ARRL handbook and build your own. Best solution that i have found for the antenna problem is 265 ft wire center fed with open wire line and coupled to a balanced antenna tuner. I am able to work all bands with no problems. Contact ag6k (rich measures) at his web site, he shows a perfect balanced antenna tuner. I built it and i cannot believe how good it works. You can purchase the roller inductors at Fair Radio Sales (on the internet). If you have any questions etc. contact me via e mail.
73
jim
wa2njv

4579. transformer oil

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-01 00:00:00 UTC
From: jeixray@aol.com
Message-ID: <19991130221553.01117.00000226@ng-fb1.aol.com>
Source record: 65236

If you were here i would give you 50 gallons of it. However go into the yellow pages, under x-ray equipment repair, look for a local independent dealer (not G.E., Picker Siemans Etc) tell him what you need. Guaranty he will tell you to come down and take all you want. Presently when we want to get rid of oil we have to pay to have it disposed of.
good luck
jim
wa2njv

4580. Re: PIC16F84 CW BEACON ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-01 00:00:00 UTC
From: r_buschner@KNUUT.de
Message-ID: <7U1oO8JYkEB@r_buschner.knuut.de>
Source record: 65237

colinlowe@jet wrote in <821p62ebp1@lola.ctv.es>:

> I have been looking for info regarding building a CW Beacon using a
> PIC16F84 or the PIC16C84.
>
> If you have a circuit and the asm code please can you let me know.

You should try the K10 keyer chip from K1EL on his homepage. Not a
16F84, but very cheap and a simple hardware necessary...

cu, Ralf, dl5mhk

--
Was fuer 'ne Signatur?

4581. FS: VACUUM TUBES...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-01 00:00:00 UTC
From: erpi@junction.net
Message-ID: <822dme$9kj$2@news.junction.net>
Source record: 65238

Hi! I have the followimg items for sale:
TUBES: (1) 931A NOS $25.00
(3) 6JR6 NOS $20.00 each
(2) 4-400 pull from working equip. $75.00 each
(2) 8417 GE NOS $30.00 each
(2) 7360 GE NOS $30.00 each
(1) 7199 SYL NOS $20.00

If interested please email me...73 (U.S. Funds)

Net-Tamer V 1.11.2 - Test Drive

4582. FS: UHF Programmable Trans. 32 Channels..

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-01 00:00:00 UTC
From: erpi@junction.net
Message-ID: <822do3$9kj$8@news.junction.net>
Source record: 65239

Hi! I do have for sale a uhf commercial radio programmable
32 channel,excellent condition.
make: STANDARD
model: GX-2000
Asking $150.00us + shipping
if interested feel free to email me. Thanks....Eric
Net-Tamer V 1.11.2 - Test Drive

4583. List of the rec.radio newsgroups

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-01 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <822ism$4dj$1@news.hawaii.edu>
Source record: 65240
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

```
Archive-name: radio/personal-brief-introduction

In an effort help ensure a poster's article reaches the appropriate
audience, below is a list of the rec.radio newsgroups. In most cases,
a group's name will explain its purpose. Cross-posting should rarely
be necessary.

*rec.radio.broadcasting (devoted to the broadcast industry; moderated)*
rec.radio.cb
rec.radio.info (periodic informational bulletins; moderated)
rec.radio.scanner
rec.radio.shortwave
rec.radio.swap (for buying, selling, and trading; not a discussion group)

rec.radio.amateur.antenna
rec.radio.amateur.boatanchors (tube-type communications equipment)
rec.radio.amateur.digital.misc (packet, pactor and other digital modes)
rec.radio.amateur.dx (long-distance amateur communications)
rec.radio.amateur.equipment (questions, comments regarding commercially-
built amateur gear; not for buying/selling)
rec.radio.amateur.homebrew (devoted to home-building ham gear)
rec.radio.amateur.policy (issues include code, restructuring, local
restrictions in conflict with FCC R&R)
rec.radio.amateur.space (satellites, meteor scatter, EME)
rec.radio.amateur.misc (any topic not covered in the above groups)

(At least two other English language radio hierarchies exist, prefixed
with "uk" (United Kingdom), and "aus" (Australia), in place of "rec.")

Again, cross-posting should rarely be necessary. Many times, a long-
running thread results from a single cross-posted article, and its
content drifts further and further away from being "on-topic" in the
various NGs which receive each and every followup.

For more detailed information, see "Guide to the Rec.radio Newsgroups"
posted on the 15th of each month.

Jeffrey Herman, KH6O
(rec.radio.amateur working-group)

*It's been sadly reported that the moderator was lost to us in an
automobile accident; the future of this newsgroup is not known. 73 Bill...
```

4584. need HP141 plug-in extender cable

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-01 00:00:00 UTC
From: Bruno <i6ypk@hotmail.com>
Message-ID: <01bf3bfb$1d5fa220$420001c0@scedsant.emsargroup.com>
Source record: 65241

I am looking for :

140/141 analyzer plug-in extender cable assembly
(HP 11592-60015)

IF to RF Unit interconnection extender cable assembly
(HP 11592-60016)

Anyone can help me ??

Thanks in advance for your reply.

73 de Bruno, I6YPK

i6ypk@hotmail.com

4585. Re: PIC16F84 CW BEACON ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-01 00:00:00 UTC
From: Colin Lowe <colinlowe@jet.es>
Message-ID: <82398s$cf5$1@lola.ctv.es>
Source record: 65242

OK Ralf,

Many thanks for the info. I have found the Webpage, the URL is:
http://members.aol.com/k1el/ for those who are interested.

Thanks again and 73

Colin
EB/G1IVG in Barcelona.

Ralf K. Buschner <r_buschner@KNUUT.de> wrote in message
news:7U1oO8JYkEB@r_buschner.knuut.de...
>
> colinlowe@jet wrote in <821p62ebp1@lola.ctv.es>:
>
> > I have been looking for info regarding building a CW Beacon using a
> > PIC16F84 or the PIC16C84.
> >
> > If you have a circuit and the asm code please can you let me know.
>
> You should try the K10 keyer chip from K1EL on his homepage. Not a
> 16F84, but very cheap and a simple hardware necessary...
>
> cu, Ralf, dl5mhk
>
>
> --
> Was fuer 'ne Signatur?

4586. European VHF/UHF/SHF techniques

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-02 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <3845a100.10215459@news.online.no>
Source record: 65152

information about the Weinheim (DF0UKW/DL0WH) VHF/UHF/SHF convention
is found on http://www.2burgen-apotheke.de

or
http://www.ukw-tagung.de

and the annual books may be ordered at the DARC-Verlag
http://www.darc.de or
http://www.darc-verlag.de

but this does not include 1999 issue
so then you must send an email to
DARC-Verlag darcverlag@t-online.de

perhaps the DARC site will be updated later(?)

73 jan-martin LA8AK

PS. at least a few of the sites has information in English, so pse
don't hesitate to see what VHF/UHF/SHF technical discussions are going
on in Europe

4587. FS Celwave UHF Duplexer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-02 00:00:00 UTC
From: rnelson@farmtel.net
Message-ID: <3845c541.1447427@news.mwci.net>
Source record: 65153

Celwave TDN7407 duplexer used by Motorola. This is the same duplexer found on R100, GR300/500 and GR1225 repeaters. Small 6 cavity mobile type duplexer with N connectors. Will handle up to 50 watts RF.

Will tune down to the 444 MHz ham freqs and up to 470 MHz. I can have this duplexer tuned to your freqs too.

$ 195.00

Please reply via e-mail

4588. Re: RF Power Transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-02 00:00:00 UTC
From: goldreged@aol.comJUNKBLOK
Message-ID: <19991201203506.18936.00000038@ng-fc1.aol.com>
Source record: 65154

<<Who makes a decent line of 100 mW, 1W, and maybe even the 10W output device
in
current production? I've done the searches on most of my RF web sources and
have come up dry. I'd prefer to stay in bipolar, but FET will do if I can find
a 12 volt series of fets. Most of them want 28 or 50 volts, and I just don't
have that voltage available unless I go to another power supply, but that is a
whole other design task...>>

http://www.rfparts.com
has a great website & order (or print out) their catalog.

Motorola RF Data book is a great book to have as a reference, too...

Ed G.
(Please Remove "JUNKBLOK" to E-mail.
Unless it's a Flame.)
Check This Site !!!
http://www.charityweb.net/Safehaven

4589. What is a Raytheon CK5829?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-02 00:00:00 UTC
From: tubepwr813@aol.com
Message-ID: <19991201202745.16835.00000037@ng-cr1.aol.com>
Source record: 65155

Does anyone have a pinout for this ultra mini tube? Voltages? What type it is? I found it in a box of junk parts and was still wrapped up. I would like to make a little QRP rig with it. Simple oscillator maybe for 40M.

Thanks!
Chris

4590. WTB HP Signal Generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-02 00:00:00 UTC
From: w8irq@aol.com
Message-ID: <19991202005159.18693.00000137@ng-bk1.aol.com>
Source record: 65156

Would like something in the 8600 series,Let me know what you have and price.
Nick W8IRQ

4591. Re: 4MHz VFO Circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-02 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <8265oqehm1@nnrp1.deja.com>
Source record: 65157
Cross-posted to: alt.ham-radio,alt.ham-radio.ssb,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Solid State Design for the Radio Amateur, page 36.

Works for me every time. I like to make tiny SMD versions
(board the size of a postage stamp) and mummify them in
bubble packing.
--
Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte
Satellite: VA3SFL on AO-16, UO-22, KO-23, KO-25

Sent via Deja.com http://www.deja.com/
Before you buy.

4592. Re: PIC16F84 CW BEACON ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-02 00:00:00 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <8268o1gso1@nnrp1.deja.com>
Source record: 65158

In article <821p62ebp1@lola.ctv.es>,
"colinlowe@jet" <colinlowe@jet.es> wrote:
> I have been looking for info regarding building a CW Beacon using a
PIC16F84
> or the PIC16C84.
>
> If you have a circuit and the asm code please can you let me know.

I've nearly finished a Morse trainer for the Atmel AVR (better than the
PIC) which would be easy to turn into a beacon, if that is of any
interest.

Leon
--
Leon Heller, G1HSM
Tel: (Mobile) 079 9098 1221 (Work) +44 1327 357824
Email: leon_heller@hotmail.com
Web: http://www.geocities.com/SiliconValley/Code/1835

Sent via Deja.com http://www.deja.com/
Before you buy.

4593. Looking for 120 to 140 Mhz receiver schema. Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-02 00:00:00 UTC
From: spknews@aol.comxxxxxxxx
Message-ID: <19991202034546.02087.00000397@ng-fr1.aol.com>
Source record: 65159

Hi,

I'm a newbie to HF design. In order to help aerospatial club, I have to make a receiver wich can receive from 120 to 140 MHz (I think after some searches but I may wrong, a synthetised receiver will be the solution).

Any help are welcome

SP

4594. Re: Looking for 120 to 140 Mhz receiver schema. Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-02 00:00:00 UTC
From: JW <jdwalton@home.com>
Message-ID: <38467A48.618919B8@home.com>
Source record: 65160

Use your search engine to look for "Bendix+King". I just sold a transponder on EBay and found information on similar King radios with this method.

Spknews wrote:

> Hi,
>
> I'm a newbie to HF design. In order to help aerospatial club, I have to make a
> receiver wich can receive from 120 to 140 MHz (I think after some searches but
> I may wrong, a synthetised receiver will be the solution).
>
> Any help are welcome
>
> SP

4595. Re: Idea to use Peltier cooler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-02 00:00:00 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <825oa1$a74$1@lure.pipex.net>
Source record: 65161
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,uk.radio.amateur

Mark West wrote ...
> Peltier chips are interesting, but probably not very practical here.
> 1) They can support something around a 40 degree effect under IDEAL
> conditions, so you would need to stack them.
> 2) They are EXTREMELY inefficinet, and require HUGE GOBS of current
>at 12V DC. You will spend alot of money on a suitable power supply.

Please see this artical from 1908 that outlines the requirements of current and Voltage for a given required condition.

> 3) Due to their inefficieny they require very large heat sinks,

If you can keep the mass to be cooled very small and an efficient Dewar constructed to house that mass then perhaps not such a problem as you discribe.

>preferrably with forced air cooling. If the sink is too small or the flow is too low,
>the peltier chip becomes very very hot on both sides (i.e. it becomes a heater).

If you connect them up the wrong way around they most certainly will.

The Peltier Effect
When one junction of an antimony/ bismuth couple is heated, the current flows through the hot junction from bismuth to antimony (Fig. 261). Peltier observed, in 1834, that if both junctions are at the same temperature, and if a battery is included in the circuit so as to send a current in the same direction as before, then heat is absorbed at the junction T, and generated at the junction t. Also, these heat effects are reversed when the direction of the current is reversed. This is termed the Peltier Effect. It is quite independent of the heat generated according to Joule's Law, which is equal to t I^2 R :
It can therefore be most readily observed by using thick bars of metal in which the Joule effect will be a minimum. Fig. 262 represents the method adopted by Peltier to observe the effect, in which two rods of antimony and bismuth (11 cms. long and 16 sq. mms. cross section) are soldered together to form a cross. If a current is sent across the junction in the direction of the arrow, the deflection of the galvanometer needle will indicate a thermo-current across the junction from antimony to bismuth, showing that the junction is cooled.
EXPERIMENT 75 -- Connect together, as shown in Fig, 263, a battery B, commutator C (with diagonal wires removed), thermo-pile TP, and a low resistance galvanometer G. Pass a current through TP for a short time, and quickly reverse the commutator so as to cut out the battery and complete the

circuit through G and TP. The observed deflection will indicate a current through TP in a reverse direction. By varying the strength of current from the battery it may be shown that the tbermo-current is approximately proportional to the battery current.
The Peltier effect may be explained if we assume that there is, at a junction of two metals, a sudden change of potential which is independent of the potential changes due to the battery. Thus, if a current traverses the junction represented in Fig. 264 from left to right, heat will be generated at the junction since the current will do work in traversing a fall of potential. If the direction of the current is reversed beat will be absorbed to an amount equivalent to the work done in overcoming the rise in potential. The mechanical equivalent of the heat generated or absorbed by a current of strength I in 1 second is given by the equation
JH = (V1 - V2) It = PIt.
The Peltier coefficient P Is defined as the energy generated or absorbed at a junction of two metals traversed by unit current for unit time.
(JH) = tI^2R + PIt
In any portion of a circuit, of resistance R, which includes a single thermo-junction, the total energy generated when the current is in one direction; but if the current is reversed the total energy
(JH') = tI^2R - PIt
The value of the coefficient P is determined by measuring the difference between the above quantities, thus
P= J (H - H') / It
Le Roux adopted the method of Fig. 265 in order to measure the Peltier coefficient. A and B are two antimony/bismuth couples, the shaded elements being antimony, immersed in water contained in two calorimeters.
On passing a current of known strength through the circuit for a given time, the heat developed in the calorimeters is given by the equations
H1 = w1t1, and H2 = w2t2
(where w1 and w2 are the water equivalents of the calorimeters and contents, t1 and t2 the observed rise of temperature).
If Q1 and Q2 represent the heat due to the Joule effect in the two cases, also P1 and P2 the Peltier heat effect, then
H1 = Q1 + P1, and H2 = Q2 - P2.
If a current of the same strength is now passed in the reverse direction for the same time, then
H1'= Q1 - P1, and H2' = Q2 + P2
Hence Pl = (H1 - H1') / 2, and P2 = (H2' - H2) / 2
But Pl = P2, therefore P = (H1 - H1' + H2' - H2) / 4

Le Roux found that the value of P for any couple is proportional to the thermo-electric power of the couple, and also that the value increased with increase of temperature.
More accurate results have been obtained by Jahn (1888) by measuring the heat developed when the junction is enclosed in a Bunsen ice-calorimeter. The Joule effect was eliminated by repeating the observation when the current was reversed.
Thermodynamics of the Peltier Effect
Consider the case of a single antimony/bismuth couple,

with the junctions at 100°C. and 0°C.
Heat is absorbed at the hot junction, and is generated at the cold junction; moreover, these effects are reversible. The current which is generated will also develop in the circuit a quantity of heat proportional to t I^2 R: this is independent of the direction of the current and is therefore irreversible. The whole cycle of operations is therefore not reversible. But if we assume the circuit to have so low a resistance that the Joule effect is negligible, and that the circuit includes some mechanism, such as a perfect motor, which will convert all the electrical energy into mechanical work, then the cycle of operations may be regarded as completely reversible ; for, if the junctions are initially at the same temperature, and if the motor is rotated in the opposite direction, a reverse current will be generated which will produce reversed heat effects at the junctions. With this assumption the circuit is comparable to a perfect heal engine,' in which the ratio of the heat absorbed to the heat given up to the condenser is equal to the ratio of the absolute temperature of the source of heat to that of the condenser. Hence, if P1 and P2 are the mechanical equivalents of the heat absorbed and liberated at the hot and cold junctions respectively when unit quantity traverses the circuit, P2 / P1 = T2 / T1, where T2 and T1 are the absolute temperatures of the junctions ; or,
(P2 - P1) / P1 = (T2 - T1) / T1, or E = (T2 - T1) P1 / T1
According to this result, the E. M. F. would be directly proportional to the difference of temperature of the Junctions, which is contrary to observed facts. This process of reasoning led Lord Kelvin, in 1851, to predict the existence of reversible heat effects in other parts of the circuit besides the junctions. He afterwards demonstrated, when a current flowed through unequally heated conductors, that heat was generated in some cases, but absorbed in others; thus, a current through iron from a hotter to a colder part is accompanied by absorption of heat, while. the same conditions in copper are accompanied by generation of heat. This is known as the Thomson Effect.

As the modern units are semiconductor and the amount of current required depends upon the temperature difference required and the mass to be frozen. It might be a good idea if the transistor manufacturers were to build a Peltier device into a low noise chip such the mass to be cooled is the minimum.

Gary7SLL

4596. Re: PIC16F84 CW BEACON ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-02 00:00:00 UTC
From: quinnja@my-deja.com
Message-ID: <826pdr$u35$1@nnrp1.deja.com>
Source record: 65162

Have a look at http://www.conquestsys.com/projects/hellbeacon.shtml for
16F84 code for a CW and Hellschreiber beacon.

Sent via Deja.com http://www.deja.com/
Before you buy.

4597. Re: (no subject)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-02 00:00:00 UTC
From: "Robert <DC6XS> Eckelmann" <robert.eckelmann@netsurf.de>
Message-ID: <38467057.A4EFF770@netsurf.de>
Source record: 65163

nice..
;-))

Jan Aaslund wrote:

>
>

4598. Re: Searching for MC12080 prescaler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-02 00:00:00 UTC
From: crabtreejr@aol.com
Message-ID: <19991202090639.02195.00000028@ng-bj1.aol.com>
Source record: 65164

In article <3843A121.57B4CDBC@sci.fi>,
Harri Jokela <hjokela@sci.fi> wrote:
>
> Please email me if you know where to buy (anywhere in the world.)
> few pcs of Motorola MC12080P or MC12080D prescalers.

Dial Electronics has them.
See http://www.dialelectronics.co.uk/m8.htm

73 John KCOGGH

4599. Home Ethernet?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-02 00:00:00 UTC
From: c.c.tqbssz@HomeXEther.killspam.us.com
Message-ID: <8268qaiqa1@samba.rahul.net>
Source record: 65165

How bad is the RFI from 10 or 100 baseT Ethernet? Is there a low radiation alternative? I'm forced into installing some kind of networking for my home office and wondering what anyone's experience has been.

Stephen

4600. Re: Home Ethernet?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-02 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <38470213.BA81A8B2@bellsouth.net>
Source record: 65166

c.c.tqbssz@HomeXEther.killspam.us.com wrote:
> How bad is the RFI from 10 or 100 baseT Ethernet? Is there a low radiation
> alternative? I'm forced into installing some kind of networking for my
> home office and wondering what anyone's experience has been.

I've never noted any RFI I could ascribe to my 10BT network. (in either
direction - I can run 600 watts & not lose a byte)
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

4601. Re: RF Power Transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-02 00:00:00 UTC
From: Tom Bruhns <tom_bruhns@agilent.com>
Message-ID: <3846CB00.15CED475@agilent.com>
Source record: 65167

larryc@northwest.com wrote:
> The 2N4427 is supposed to be
> re-introduced by Unitrode sometime next year.

Hmmm...and Unitrode was just acquired by Texas Instruments. At least some of it was...not sure if it was everything. Wonder where that puts the plans.

Cheers,
Tom

4602. QRO Amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-02 00:00:00 UTC
From: Phil <psmeatonNOpsSPAM@globalnet.co.uk.invalid>
Message-ID: <028b2f64.213b612d@usw-ex0108-061.remarq.com>
Source record: 65168

I'm interested in building amps for HF, VHF and UHF use.
I'm currently building a 70cms amp using a GS23b - so far
so good!

I'm after a design using the DOD006 tube thogh. I've got my
paws on a couple of tubes, but no design as yet. Should've
done my homework first!!

Anyway, if you know of such a design then please let me
know at :

psmeaton@globalnet.co.uk

And if you just want to swap ideas / circuits / whatever,
to do with this sort of stuff, then that would be good to!

Phil
G0HSS

* Sent from AltaVista http://www.altavista.com Where you can also find related Web Pages,
Images, Audios, Videos, News, and Shopping. Smart is Beautiful

4603. Re: Home Ethernet?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-02 00:00:00 UTC
From: rudder_NoCannedOffal@gulfcoast.net
Message-ID: <8E90A96E6zzz@209.26.110.228>
Source record: 65169

w9wi@bellsouth.net (Doug Smith) wrote in <38470213.BA81A8B2@bellsouth.net>:

>c.c.tqbssz@HomeXEther.killspam.us.com wrote:
>> How bad is the RFI from 10 or 100 baseT Ethernet? Is there a low radiation
>> alternative? I'm forced into installing some kind of networking for my
>> home office and wondering what anyone's experience has been.
>
>I've never noted any RFI I could ascribe to my 10BT network. (in either
>direction - I can run 600 watts & not lose a byte)

Ditto at 100-150 watts. I have two PCs connected. Both are less than three
feet from my radios (one is on the other side of the wall).

--
Regards,
Malcolm
WX4YZ

(To reply via email, remove all between rudder and @)

4604. Moto conversions ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-02 00:00:00 UTC
From: David Shaughnessy <dshaughn@peak.org>
Message-ID: <38471668.E38ABA45@peak.org>
Source record: 65170

Not exactly homebrew but might be half-way there...
I'm studying for my ticket and searching for prospective rigs and find
a lot of Motorola gear in auctions like e-bay where GMRS radios are
reported by the seller as "can be tuned to Ham frequencies". Is there
a web site out there with info on how-to, to substantiate these claims ?
Some of these radios are programed and synth so it may just be entering
the right freqs or it may take some other code work. I'm interested in
all the techniques.

Please e-mail to dshaughn@peak.org as I (so far) check this news group
rarely (actually I just found it; may be more regular).

Thanks all.
Dave

4605. amplifier parts for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-02 00:00:00 UTC
From: "R. Alfred Whiting" <gdwhiting@erols.com>
Message-ID: <82762o$rg2$1@autumn.news.rcn.net>
Source record: 65171

I have a Jennings vacuum variable capacitor 365pf. and a B&W tank coil for sale. The B&W item is the coil wound entirely with tubing except for the ten meter portion which is a coiled strap. This is the coil for low impedance applications ala 4CX1000A etc.

Al k3BRS

4606. WTB Vac Vari cap

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-02 00:00:00 UTC
From: Matt Erickson <kk5dr@hotmail.com>
Message-ID: <38472030.B039E82A@hotmail.com>
Source record: 65172

```
1500-2000pf max. @ 3-5kv
Reasonably priced!
```

4607. Re: Transformer oil for dummy load

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-02 00:00:00 UTC
From: johng@comm.mot.com
Message-ID: <johng-ya02408000R0212991812490001@nntp.cig.mot.com>
Source record: 65173
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

As I recall, I got mineral oil for my Heath Cantenna at a farm supply store. As I understand, mineral oil is used as a cow laxative. You can also refresh you stock of "cow magnets" while you're there.

John

--
John Gilbert
johng@comm.mot.com

4608. Plate transformer FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-03 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <HF024.114249$y45.2130941@news4.giganews.com>
Source record: 65093

Pulled from military equipment, hermetically sealed plate transformer.

Primary 115 V 60 Hz
Secondary 3100 V 500 mA DC

Not very large, but very heavy. Pickup only in Los Angeles. $75.

73, Bob K6DDX

4609. Re: Transformer oil for dummy load

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-03 00:00:00 UTC
From: Roger lascelles <rogerl@datafast.net.au>
Message-ID: <3847089A.7BA179FF@datafast.net.au>
Source record: 65174
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I've used Auto Transmission Fluid in a dummy load. It was recommended
in a magazine project article. I built the load 15 years ago and the
fluid is still there and the resistors are OK.

DavidC wrote:
>
> > Ron N6AHA <ronc@sonic.net> wrote ...
> > Does anyone know of a source for transformer oil like that used in the
> > MFJ 1.5 kW dummy load?
>

--
Roger Lascelles

Electro Tools - Worksheets for Electronics
http://server24.hypermart.net/electrotools/

4610. Re: (no subject)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-03 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <3846de96.91530239@news.online.no>
Source record: 65175

On Thu, 02 Dec 1999 10:56:49 +0100, Jan Aaslund
<jan.aaslund@emw.ericsson.se> wrote:

>
klarer nok ? skrive tekst senere`?

4611. Re: RF Power Transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-03 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <3846e321.92692879@news.online.no>
Source record: 65176

On Thu, 02 Dec 1999 11:39:44 -0800, Tom Bruhns
<tom_bruhns@agilent.com> wrote:

>
>
>larryc@northwest.com wrote:
>> The 2N4427 is supposed to be
>> re-introduced by Unitrode sometime next year.
>
>Hmmm...and Unitrode was just acquired by Texas Instruments. At least
>some of it was...not sure if it was everything. Wonder where that puts
>the plans.
>
>Cheers,
>Tom
any 70cm power transistor will have quite high gain on 2m, shouldn't
be difficult to find 'any' 70cm power transistor?

Haven't measured how much gain you get this way on 2m, but experienced
that 2N6082, 2N6083, 2N6084 all have 19-20dB gain on 6m@20W RF with
13VDC supply

73
jan-martin

4612. Re: Home Ethernet?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-03 00:00:00 UTC
From: Dan K Nelson <w6dkn@qsl.net>
Message-ID: <NZE14.654$6A5.31549@dfiatx1-snr1.gtei.net>
Source record: 65177

<c.c.tqbssz@HomeXEther.killspam.us.com> wrote in message
news:8268qaiqa1@samba.rahul.net...
> How bad is the RFI from 10 or 100 baseT Ethernet? Is there a low radiation
> alternative? I'm forced into installing some kind of networking for my
> home office and wondering what anyone's experience has been.
>
> Stephen
>

I run three computers in my shack, a P3-400 notebook for Sat tracking, a general use P3-500, and a dual processor 24x7 internet proxy server. I have used both 10 base 2, as well as ten base T, with no problems at all at 1500 watts HF and up to 450 watts on 2 meters. The ten base T cables run directly behind my main operating desk and within 2 feet of the HF amp and all of the coax feedthru's to the outside.

73 de W6DKN

4613. fa: CESCO swr meter, 1950's & Vacuum cap, Cheep, 1-Day

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-03 00:00:00 UTC
From: rlucch2098@aol.com
Message-ID: <19991202233616.06564.00000169@ng-fr1.aol.com>
Source record: 65178

All no reserves with pics, no bids, ends tomorrow nite, Cheep!
Vacuum cap>>
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=208487899
Cesco meter>>
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=208502715
HAPPY HOLIDAYS to you and the Family!

4614. FA: HYGAIN BN24 BALUN, NEW 2.5KW, 7-15mhz, $9.99

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-03 00:00:00 UTC
From: rlucch2098@aol.com
Message-ID: <19991202234048.06564.00000177@ng-fr1.aol.com>
Source record: 65179

Only one day to go and its still only at 9.99 with no reserve.
See pics and Ebay page >>
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=208513913
HAPPY HOLIDAYS to you and the Family!

4615. Re: Home Ethernet?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-03 00:00:00 UTC
From: Dwight Stewart <stewart@amouse.net>
Message-ID: <3847A9D3.F89B5134@amouse.net>
Source record: 65180

c.c.tqbssz@HomeXEther.killspam.us.com wrote:
>
> How bad is the RFI from 10 or 100 baseT Ethernet? Is there a low radiation
> alternative? I'm forced into installing some kind of networking for my
> home office and wondering what anyone's experience has been.

Not as bad as you may imagine, Stephen. My radio sets in a room between two Macintosh PowerBooks, a laser printer, a scanner, a cable modem, and all their accessories.

My radio sits about 10 inches from one computer, and the other computer is about five feet on the other side of the radio. The laser printer sits about three feet from the radio. The radio's power supply sits about 2 1/2 inches from the computer.

The computer equipment is connected together by a 10Base-T network. The hub recommends that you keep it about 10 feet from any source of RFI, but so far I've had no problem with the hub placed directly under the laser printer (a good source of RFI) about three feet from the nearest computer.

In fact, so far there appears to be no problems with any of this. The radio does not bother the computer equipment, and the computer equipment does not bother the radio (no noise).

In fact, I'm occasionally typing on the computer while talking to people on the radio. The microphone is mounted on a long boom arm that reaches across the computer and I use a foot switch to key the radio.

I'm not sure this would work in all situations. A radio with more power might be a problem (mine puts out about 100 watts). And many computers generate too much noise to be placed this close to the radio. But it works well for me.

Dwight Stewart
Amateur Radio, Technician
F.C.C. License: W5NET
http://www.qsl.net/w5net

4616. New EBay Categories

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-03 00:00:00 UTC
From: JW <jdwalton@home.com>
Message-ID: <3847E033.6FA11330@home.com>
Source record: 65181

EBay has now split up the Test Equipment section: General (stuff),
O-scopes, sig generators and multimeters. They must have some OT's
there as they term the last category "VOM" rather than DVM!

4617. Re: IC IF amp & detector for AM????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-03 00:00:00 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <yA5IOOFfaw3TEd0pRycRO3OUL0Tz@4ax.com>
Source record: 65182

"Martin" <jalnz@ihug.co.nz>
shared these priceless pearls of wisdom:

->I'm building an aircraft receiver using the NE602 as the front end.

Okay, so now let me up the ante a little bit. For some good reasons, I want the IF at 70 Mhz, and I don't want to do a second conversion down to 10.7 or 455 or anywhere else. I also only have 10 volts. Anybody got a good AM IF strip with detector that will work up at this altitude?

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

4618. Re: RF Power Transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-03 00:00:00 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <9hBIOHb=g8SuGgxa6YOf5m0LIRwn@4ax.com>
Source record: 65183

LA8AK@online.no (J M Noeding)
shared these priceless pearls of wisdom:

->Haven't measured how much gain you get this way on 2m, but experienced
->that 2N6082, 2N6083, 2N6084 all have 19-20dB gain on 6m@20W RF with
->13VDC supply

And these devices are made by....???

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

4619. Re: QRO Amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-03 00:00:00 UTC
From: Martin John Hallsworth <Martin@g1gyc.demon.co.uk>
Message-ID: <944249213.19262.0.nnrp-03.9e98acde@news.demon.co.uk>
Source record: 65184

Phil, subscribe to the "AMPS" reflector at www.contesting.com
and post a request on there you should get some (a lot of)
response I would think.

73 good luck with the GS23b amp.
I am starting a refurbish / rebuild of my single 4cx250FG for 70 for
contest use (only 250W ssb but that is ok for me).
so I hope to hear you in 2000 with a big signal hi hi.

Martin G1GYC

>Phil wrote in message <028b2f64.213b612d@usw-ex0108-061.remarq.com>...
>I'm interested in building amps for HF, VHF and UHF use.
>I'm currently building a 70cms amp using a GS23b - so far
>so good!
>
>I'm after a design using the DOD006 tube thogh. I've got my
>paws on a couple of tubes, but no design as yet. Should've
>done my homework first!!
>
>Anyway, if you know of such a design then please let me
>know at :
>
>psmeaton@globalnet.co.uk
>
>And if you just want to swap ideas / circuits / whatever,
>to do with this sort of stuff, then that would be good to!
>
>Phil
>G0HSS
>
>
>* Sent from AltaVista http://www.altavista.com Where you can also find
related Web Pages, Images, Audios, Videos, News, and Shopping. Smart is
Beautiful
>

4620. Re: Home Ethernet?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-03 00:00:00 UTC
From: c.c.tqbssz@HomeXEther.killspam.us.com
Message-ID: <82985tgpr1@samba.rahul.net>
Source record: 65185

Thanks Doug, Malcolm, Dwight. Seems to be "no big deal".

Stephen

Dwight Stewart (stewart@amouse.net) wrote:
: c.c.tqbssz@HomeXEther.killspam.us.com wrote:
: >
: > How bad is the RFI from 10 or 100 baseT Ethernet? Is there a low radiation
: > alternative? I'm forced into installing some kind of networking for my
: > home office and wondering what anyone's experience has been.

: Not as bad as you may imagine, Stephen. My radio sets in a room
: between two Macintosh PowerBooks, a laser printer, a scanner, a cable
: modem, and all their accessories.

: My radio sits about 10 inches from one computer, and the other
: computer is about five feet on the other side of the radio. The laser
: printer sits about three feet from the radio. The radio's power supply
: sits about 2 1/2 inches from the computer.

: The computer equipment is connected together by a 10Base-T network.
: The hub recommends that you keep it about 10 feet from any source of
: RFI, but so far I've had no problem with the hub placed directly under
: the laser printer (a good source of RFI) about three feet from the
: nearest computer.

: In fact, so far there appears to be no problems with any of this. The
: radio does not bother the computer equipment, and the computer equipment
: does not bother the radio (no noise).

: In fact, I'm occasionally typing on the computer while talking to
: people on the radio. The microphone is mounted on a long boom arm that
: reaches across the computer and I use a foot switch to key the radio.

: I'm not sure this would work in all situations. A radio with more
: power might be a problem (mine puts out about 100 watts). And many
: computers generate too much noise to be placed this close to the radio.
: But it works well for me.

: Dwight Stewart
: Amateur Radio, Technician
: F.C.C. License: W5NET
: http://www.qsl.net/w5net

4621. Re: Isolating jacks from chasis / cabinet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-03 00:00:00 UTC
From: Tom Bruhns <tom_bruhns@agilent.com>
Message-ID: <3848259F.238BE0E5@agilent.com>
Source record: 65186

Mark Erbaugh wrote:

> Okay, I'm starting to understand. What does this mean for an external audio
> input device, such as a DVR? Since it is connected to the mic input of the
> radio, should I ground the DVR chassis to the station ground?

:-) You're probably at a point where you'd begin to appreciate some of the reasons why broadcast stations use balanced audio lines and transformers darned near everywhere, to make sure there are no ground loops and still allow for proper RF filtering. I've been away from that industry for a while (30+ years?), and guess they've started to use differential amplifiers instead of transformers some places. Those little audio transformers get a bit expensive for most ham stations, and usually aren't needed if there's only one mic, etc. But there's nothing to keep you from using transformers, which might let you not worry about bonding all your grounds together.

The equipment I design at work generally just has one groundplane, and I'm actually surprised how few problems we have with ground loops. I'm always on the lookout for them, but they are very rare. If your mic and speaker commons are close enough together on your rig, you may get away just fine with simply having them tied together in your switch box. I mean, if I end up with a spurious response 90dB below full scale (which might be 10 millivolts full scale) in my systems, it can be a killer...you can undoubtedly tolerate a lot more than that. It might be worth a try, and if you then must isolate the mic and speaker commons at the box, you can modify the box with larger holes and insulating washers.

Oh, the local Eagle Hardware stores here have a pretty good assortment of nylon washers and sleeves. You may well have something similar there that you could use if isolation is needed.

Cheers,
Tom

4622. FA on EBAY: Conar Model 500 Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-03 00:00:00 UTC
From: alg460@aol.com
Message-ID: <19991203171343.05196.00000438@ng-bd1.aol.com>
Source record: 65187

see pics and description at:

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=213171820

4623. Re: Home Ethernet?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-03 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <s4gh0f53kdq18@corp.supernews.com>
Source record: 65188

-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

Although, I would submit that a somewhat "safer" approach is to use
the "thin coax" ethernet ... in addition to operating in a shielded cable
vs. unshielded twisted pair, it has the additional advantage that a
hub is not required.

73,
Carl - wa6vse

<c.c.tqbssz@HomeXEther.killspam.us.com> wrote in message
news:82985tgpr1@samba.rahul.net...
> Thanks Doug, Malcolm, Dwight. Seems to be "no big deal".
>
> Stephen
>
>
> Dwight Stewart (stewart@amouse.net) wrote:
> : c.c.tqbssz@HomeXEther.killspam.us.com wrote:
> : >
> : > How bad is the RFI from 10 or 100 baseT Ethernet? Is there a low radiation
> : > alternative? I'm forced into installing some kind of networking for my
> : > home office and wondering what anyone's experience has been.
>
>
> : Not as bad as you may imagine, Stephen. My radio sets in a room
> : between two Macintosh PowerBooks, a laser printer, a scanner, a cable
> : modem, and all their accessories.
>
> : My radio sits about 10 inches from one computer, and the other
> : computer is about five feet on the other side of the radio. The laser
> : printer sits about three feet from the radio. The radio's power supply
> : sits about 2 1/2 inches from the computer.
>
> : The computer equipment is connected together by a 10Base-T network.
> : The hub recommends that you keep it about 10 feet from any source of
> : RFI, but so far I've had no problem with the hub placed directly under
> : the laser printer (a good source of RFI) about three feet from the
> : nearest computer.
>
> : In fact, so far there appears to be no problems with any of this. The
> : radio does not bother the computer equipment, and the computer equipment
> : does not bother the radio (no noise).
>

> : In fact, I'm occasionally typing on the computer while talking to
> : people on the radio. The microphone is mounted on a long boom arm that
> : reaches across the computer and I use a foot switch to key the radio.
>
> : I'm not sure this would work in all situations. A radio with more
> : power might be a problem (mine puts out about 100 watts). And many
> : computers generate too much noise to be placed this close to the radio.
> : But it works well for me.
>
> : Dwight Stewart
> : Amateur Radio, Technician
> : F.C.C. License: W5NET
> : http://www.qsl.net/w5net
>
-----BEGIN PGP SIGNATURE-----
Version: PGP for Personal Privacy 5.5.3

iQA/AwUBOEhD2Je+N6+q84HiEQKT5gCgyI7TGZRIabh7ihBTz/nshFBUZiEAoKzv
qkRMDyEyNGm2vSOP7ATqw8Kk
=Es/G
-----END PGP SIGNATURE-----

4624. pic programming

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-03 00:00:00 UTC
From: monte zuma <montezuma4@earthlink.net>
Message-ID: <829h2u$n2g$1@oak.prod.itd.earthlink.net>
Source record: 65189

wishing to learn to program PIC
whats a good way to start?
Recommended reading?

4625. Tube Radio Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-03 00:00:00 UTC
From: weathrship@aol.com
Message-ID: <19991203184021.05190.00000436@ng-bd1.aol.com>
Source record: 65190

visit:

www.ghostmoon.bigstep.com

new webpage with closeup photos.

Tube radio kits from the Atomic age!

4626. Re: Transformer oil for dummy load

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-03 00:00:00 UTC
From: Corky <corkyNOcoSPAM@myremarq.com.invalid>
Message-ID: <01906254.ed2003f8@usw-ex0102-015.remarq.com>
Source record: 65191
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Go to a heating and air conditioning supply house or a heating and air
conditioning contractor. They sell mineral oil in 150 and 300 viscosity
for around 8-12 dollars a gallon.
I have used this in high voltage transformers.

* Sent from RemarQ http://www.remarq.com The Internet's Discussion Network *
The fastest and easiest way to search and participate in Usenet - Free!

4627. Re: Home Ethernet?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-03 00:00:00 UTC
From: WebMonkey <webmonkey@mad.scientist.com>
Message-ID: <384893BD.5CA@mad.scientist.com>
Source record: 65192

c.c.tqbssz@HomeXEther.killspam.us.com wrote:
>
> Carl R. Stevenson (wa6vse@fast.net) wrote:
> : -----BEGIN PGP SIGNED MESSAGE-----
> : Hash: SHA1
>
> : Although, I would submit that a somewhat "safer" approach is to use
> : the "thin coax" ethernet ... in addition to operating in a shielded cable
> : vs. unshielded twisted pair, it has the additional advantage that a
> : hub is not required.
>
> I thought about that but apparently it's even slower than 10baseT. I've
> haven't seen BNC's on recently manufactured equipment, certainly all of
> mine is just twisted pair, and much is 10/100 so I guess the good old days
> of thinnet and daisy chaining PC's are gone:-(
>
> Stephen
>
most 10base2 cards are now full duplex realising the same speed as their
10baset counterparts.
50ohm rules
--
A.C. Curtis
KBï¿½WLF
53.45 and 442.45, 77.0Hz enc/dec [multi-cast repeater system]
mailto:demoman@rollanet.org
http://www.rollanet.org/~demoman

4628. FS: Pair of 813's Amplifier in WNC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-04 00:00:00 UTC
From: techham@my-deja.com
Message-ID: <82b033qal1@nnrp1.deja.com>
Source record: 65094

I constructed this amplifer about 7 years ago....a labor of
love..pictures available. three(3) meters, grid/plate/HV...covers 160
to 20 Meters as constructed, could go higher if desired...B&W switching
networks, 3200 volts approx...works fine; neutralized... I have seen
900 watts out on this amplifier... pickup only, Asheville NC or dropoff
in Va or possibly/nearby TN/NC. $165....John W4QCF

Sent via Deja.com http://www.deja.com/
Before you buy.

4629. Re: Home Ethernet?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-04 00:00:00 UTC
From: c.c.tqbssz@HomeXEther.killspam.us.com
Message-ID: <829v09$l48$1@samba.rahul.net>
Source record: 65095

Carl R. Stevenson (wa6vse@fast.net) wrote:
: -----BEGIN PGP SIGNED MESSAGE-----
: Hash: SHA1

: Although, I would submit that a somewhat "safer" approach is to use
: the "thin coax" ethernet ... in addition to operating in a shielded cable
: vs. unshielded twisted pair, it has the additional advantage that a
: hub is not required.

I thought about that but apparently it's even slower than 10baseT. I've
haven't seen BNC's on recently manufactured equipment, certainly all of
mine is just twisted pair, and much is 10/100 so I guess the good old days
of thinnet and daisy chaining PC's are gone:-(

Stephen

: 73,
: Carl - wa6vse

: <c.c.tqbssz@HomeXEther.killspam.us.com> wrote in message
: news:82985tgpr1@samba.rahul.net...
: > Thanks Doug, Malcolm, Dwight. Seems to be "no big deal".
: >
: > Stephen
: >
: >
: > Dwight Stewart (stewart@amouse.net) wrote:
: > : c.c.tqbssz@HomeXEther.killspam.us.com wrote:
: > : >
: > : > How bad is the RFI from 10 or 100 baseT Ethernet? Is there a low radiation
: > : > alternative? I'm forced into installing some kind of networking for my
: > : > home office and wondering what anyone's experience has been.
: > >
: > >
: > : Not as bad as you may imagine, Stephen. My radio sets in a room
: > : between two Macintosh PowerBooks, a laser printer, a scanner, a cable
: > : modem, and all their accessories.
: > >
: > : My radio sits about 10 inches from one computer, and the other
: > : computer is about five feet on the other side of the radio. The laser
: > : printer sits about three feet from the radio. The radio's power supply
: > : sits about 2 1/2 inches from the computer.
: > >
: > : The computer equipment is connected together by a 10Base-T network.
: > : The hub recommends that you keep it about 10 feet from any source of
: > : RFI, but so far I've had no problem with the hub placed directly under

: > : the laser printer (a good source of RFI) about three feet from the
: > : nearest computer.
: >
: > : In fact, so far there appears to be no problems with any of this. The
: > : radio does not bother the computer equipment, and the computer equipment
: > : does not bother the radio (no noise).
: >
: > : In fact, I'm occasionally typing on the computer while talking to
: > : people on the radio. The microphone is mounted on a long boom arm that
: > : reaches across the computer and I use a foot switch to key the radio.
: >
: > : I'm not sure this would work in all situations. A radio with more
: > : power might be a problem (mine puts out about 100 watts). And many
: > : computers generate too much noise to be placed this close to the radio.
: > : But it works well for me.
: >
: > : Dwight Stewart
: > : Amateur Radio, Technician
: > : F.C.C. License: W5NET
: > : http://www.qsl.net/w5net
: >
: -----BEGIN PGP SIGNATURE-----
: Version: PGP for Personal Privacy 5.5.3

: iQA/AwUBOEhD2Je+N6+q84HiEQKT5gCgyI7TGZRIabh7ihBTz/nshFBUZiEAoKzv
: qkRMDyEyNGm2vSOP7ATqw8Kk
: =Es/G
: -----END PGP SIGNATURE-----

4630. fs: BIG Vacuum Cap, Fixed 25pf x 32kv, $12.00ppd

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-04 00:00:00 UTC
From: rlucch2098@aol.com
Message-ID: <19991203234250.21968.00000553@ng-fk1.aol.com>
Source record: 65096

Hi Fellas;
I have for SALE:
Very Large Fixed Vacuum Cap, rated at 25pf x 32KV, made by Dolinko & Wilkens in Union NJ. Appears to be NOS
Heres a pic>>http://member.aol.com/nutzrus/vacuumcap.jpg
Price is $12.00ppd
Thanks es 73....Rich WA2RQY (1961)
RLUCCH2098@aol.com
"Keep those heaters on"

4631. Re: RF Power Transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-04 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <3848503d.2701478@news.online.no>
Source record: 65097

On Fri, 03 Dec 1999 10:51:08 -0800, Jim Weir <jim@rst-engr.com> wrote:

>LA8AK@online.no (J M Noeding)
>shared these priceless pearls of wisdom:
>
>->Haven't measured how much gain you get this way on 2m, but experienced
>->that 2N6082, 2N6083, 2N6084 all have 19-20dB gain on 6m@20W RF with
>->13VDC supply
>
>And these devices are made by....???
>
Motorola and many other

>Jim
>Jim Weir, VP Eng. RST Eng. WX6RST
>A&P, CFI, and other good alphabet soup

4632. Silver Mica Caps.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-04 00:00:00 UTC
From: Harold Johnson <w4zcb@earthlink.net>
Message-ID: <82auotkbi1@holly.prod.itd.earthlink.net>
Source record: 65098

I need quite a few DM19 size Silver Mica's to make some transmit low pass filters. Anyone have a stash they'd care to sell? They all go on PC boards, short leads are no particular problem.

W4ZCB

4633. Re: Home Ethernet?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-04 00:00:00 UTC
From: "Laszlo I. Morocz" <kf4pv@SPAMMENOTlmorocz.com>
Message-ID: <6l724.2664$Jh3.6538@jump.innerx.net>
Source record: 65099

Not necessarily. I just set up one of those at home a couple of weeks ago. Those NE2000 compatible cards are dirt cheap (under $20), recognized by every plug & pray system on the planet and plenty fast for home use. Not to mention that as VHF operators, we're probably sitting on the largest collection of BNC connectors on the planet :-)

73 de KF4PV/3

--
To reply, remove the text SPAMMENOT from the e-mail address.
c.c.tqbssz@HomeXEther.killspam.us.com wrote in message
<829v09$l48$1@samba.rahul.net>...
>Carl R. Stevenson (wa6vse@fast.net) wrote:
>: -----BEGIN PGP SIGNED MESSAGE-----
>: Hash: SHA1
>
<snip...so I guess the good old days
>of thinnet and daisy chaining PC's are gone:-(
>
>Stephen
>
>
>: 73,

4634. CT by K1EA and SB

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-04 00:00:00 UTC
From: arturodaprilePPP@PPPlibero.it
Message-ID: <3849395a.1937522@news.libero.it>
Source record: 65100

anyone here has checked if is possible to use any sound blaster like a
digital voice processor for contesting SSB with the CT software by
K1EA ?

Ing.Arturo D'Aprile
Ham-Radio: IK7JWY
Web-Site: www.qsl.net/ik7jwy
ICQ#: 18282185

4635. FS:Heatkit HF Station...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-04 00:00:00 UTC
From: erpi@junction.net
Message-ID: <82be9gqfu3@news.junction.net>
Source record: 65101

Hi! I have for sale a heatkit HF station,SB-401 & SB-303
with all the cables and manuels.The transceiver SB-401 needs
repairs,I turned it on a few days ago and I saw smoke coming
out from under the chassie,since then it does not transmit.
I didn't really try to fix it because my electronic skills
are very poor.The receiver SB-303 works really good.
Both pieces are very clean.I bouth them last year and
paid $450.00 for them,I will sell them for $250.00 obo...
If interested,email me direct...Thanks...Eric....73

Net-Tamer V 1.11.2 - Test Drive

4636. FS: 400 NOS TUBES & CADDY...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-04 00:00:00 UTC
From: erpi@junction.net
Message-ID: <82be9mqfu6@news.junction.net>
Source record: 65102

Hello !
I do have for sale a tube caddy containing about 400
NOS tubes all in their boxes,a few of the 5 volts serie
most are 6 & 12 volts serie and a few odd balls.
I got these tubes from a retired radio technician,
Asking $250.00 plus shipping.I interested,email me
direct......Thanks....73

Net-Tamer V 1.11.2 - Test Drive

4637. UTC VM-4 Modulation Transformer Advice Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-04 00:00:00 UTC
From: Cliff Kotchka <cliffkot@interaccess.com>
Message-ID: <s4ig4bm7qeg140@corp.supernews.com>
Source record: 65103

I have an opportunity to pick up a VM-4 modulation transformer from a friend who isn't planning to do anything with it. I know it is rated for 300 watts, but I was wondering if it could be pushed to about 450 watts or so without distortion.

I'd like to hear from anyone who has experience with this unit.

thanks
Cliff
WA9YXG

4638. Re: Home Ethernet?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-04 00:00:00 UTC
From: quatsein@island.net
Message-ID: <384969c7.48492251@news.cr.island.net>
Source record: 65104

Laszlo, I am having problems setting up file sharing between a Win 95 and Win 311, with the machines having E2000 boards installed. The Win 95 machine has a plug and play board, but I am having dificulty getting the driver installed on that machine. Also the other machine accepts the driver, but get messages at startup that the board is not working properly. Do you have any suggestions or site references that may help me with this quest. Thanks for your time.

Steve Carlisle VE7AHL

4639. RL DRAKE RCVR W/ALL FILTERS FOR SALE!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-04 00:00:00 UTC
From: Lcagle <lcagle@zebra.net>
Message-ID: <01bf3e8a$6a317ba0$13450cd1@larrycag>
Source record: 65105

BEAUTIFUL R7 W/MANUAL FOR SALE.

MAKE OFFER

lcagle@zebra.net

4640. Re: Home Ethernet?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-04 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <s4iq0uobqeg53@corp.supernews.com>
Source record: 65106

```
-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

You have to buy a "combo" card, which has both the RJ *and* a BNC.
The "old" ones do 10 M bit/sec, the newer ones do 10/100 ...

73,
Carl - wa6vse

<c.c.tqbssz@HomeXEther.killspam.us.com> wrote in message
news:829v09$l48$1@samba.rahul.net...
> Carl R. Stevenson (wa6vse@fast.net) wrote:
> : -----BEGIN PGP SIGNED MESSAGE-----
> : Hash: SHA1
>
> : Although, I would submit that a somewhat "safer" approach is to use
> : the "thin coax" ethernet ... in addition to operating in a shielded cable
> : vs. unshielded twisted pair, it has the additional advantage that a
> : hub is not required.
>
> I thought about that but apparently it's even slower than 10baseT. I've
> haven't seen BNC's on recently manufactured equipment, certainly all of
> mine is just twisted pair, and much is 10/100 so I guess the good old days
> of thinnet and daisy chaining PC's are gone:-(
>
> Stephen
>

-----BEGIN PGP SIGNATURE-----
Version: PGP for Personal Privacy 5.5.3

iQA/AwUBOEln95e+N6+q84HiEQIzlACfTJYd1ZV39hkAN6yhXAORbetXNl4An21r
muhAqRTf2WFWMj3e63zpGqZh
=QLn7
-----END PGP SIGNATURE-----
```

4641. Re: UTC VM-4 Modulation Transformer Advice Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-04 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <eQf24.115321$y45.2163017@news4.giganews.com>
Source record: 65107

There are several factors which determine how much power a transformer can handle. First there is the issue of wire size. If you put a lot of current through a wire it will get hot; the temperature rise depends on the square of the current, the resistance, and the thermal transfer characteristics.

Second there is the issue of high voltage; in most cases you can neglect that if you aren't pushing it a whole lot above its ratings. Listen for arcing and look for erratic waveforms.

Duty cycle is another factor. If the transformer is rated for CCS (continuous commercial service) it will handle short peaks of much more than its rating, especially if it hasn't been operating at full rating. In other words, speech is much safer than music and steady tones are the worst, especially if they are closer to square wave than sinusoidal. And you can hit it with a very large peak if it hasn't been operating at full rating up to that time.

Core saturation can be a problem. If you limit the low frequency content in direct proportion to the power handled you can succeed there also. If you have a push pull driver, it's wise to balance currents carefully so that there is minimal dc component of current in the windings. An oscilloscope current probe on the primary winding can show you the point of saturation by the presence of a much higher peak current at one point of the wave. Most audio transformers are built with 'soft' iron that won't saturate abruptly so in general you won't have a major problem. But realize that the magnetizing current increases faster than the primary current, and while a core won't fail, the windings will.

You can't really tell how hot the interior of the transformer gets by measuring its temperature rise; there might be small points of very high temperature, depending on how well the unit has been impregnated after winding and how neatly it has been wound. Measuring winding resistance change has the same pitfall; a burnout occurs at a tiny hot spot that can't be identified from outside a sealed unit.

Most transformer ratings have a reasonable safety factor, maybe 10% or so. Also consider the ambient temperature; if it's rated at 40C and you keep the ambient at 30C or lower you can drive it harder. You can also cool the unit somehow: blow cool air over it, submerge it in low temperature oil, put it in a refrigerator, and so on.

And so the answer to your question is that there is no pat answer. You can try to overdrive it, noting the factors above, but there is the risk of burning out a winding. Once you do that, it's junk unless you want to disassemble it and repair it (which I have done). In many cases, a winding will fail near its termination but you never know.

Good luck, and tell me how you make out.

73, Bob K6DDX

P.S. Excuse the $25 answer to your $1 question....

4642. SSB home-brewing experts sought

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-04 00:00:00 UTC
From: MC 10kW Jesus <qsl27@hotmail.com>
Message-ID: <38498A66.ACE56852@hotmail.com>
Source record: 65108

Howdy,

I'm interested in building a squelch circuit for my SSB receiver that
employs speech recognition. I got the idea from this site
http://www.kachina-az.com/kc104.htm
I don't know if they are employing a DSP technology to accomplish this.
Any ideas on how to approach this task?

MC

4643. Re: WTB HP Signal Generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-04 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <384983C5.5DF3@pop.removethistomailme.net>
Source record: 65109

W8IRQ wrote:
>
> Would like something in the 8600 series,Let me know what you have and price.
> Nick W8IRQ

That covers a lot of territory. You want an 8640B/323 for $200, or an
8662A for $22,000?

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

4644. Re: RF Power Transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-04 00:00:00 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <0KlJOJYAfuV1Qz5nQfs1AaaICcf1@4ax.com>
Source record: 65110

LA8AK@online.no (J M Noeding)
shared these priceless pearls of wisdom:

->On Fri, 03 Dec 1999 10:51:08 -0800, Jim Weir <jim@rst-engr.com> wrote:
->
->>LA8AK@online.no (J M Noeding)
->>shared these priceless pearls of wisdom:
->>
->>->Haven't measured how much gain you get this way on 2m, but experienced
->>->that 2N6082, 2N6083, 2N6084 all have 19-20dB gain on 6m@20W RF with
->>->13VDC supply
->>
->>And these devices are made by....???
->>
->Motorola and many other

Many other maybe, Motorola definitely not. At least not according to their
website.

Could you point me to just ONE of the "many other"?

Jim

Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

4645. 32uF, 4500 Volt Oil Filled Cap FA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-04 00:00:00 UTC
From: jimsmith16 <jimsmith16@my-dejanews.com>
Message-ID: <wri24.2256$LK3.82328@nuq-read.news.verio.net>
Source record: 65111
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.homebrew,rec.radio.swap

New, never used. No PCBs.

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=208001879

Jim

4646. MEGAOHM DECADE RESISTOR UNIT FA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-04 00:00:00 UTC
From: jimsmith16 <jimsmith16@my-dejanews.com>
Message-ID: <Y7j24.2266$LK3.82263@nuq-read.news.verio.net>
Source record: 65112
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.homebrew,rec.radio.swap

Megaohm resistor unit. 0 to 10 megaohms in 1 megaohm steps. Add this to the Heathkit decade resistor I'm selling to increase the range.
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=210185588
Jim

4647. Coil Forms FA & FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-04 00:00:00 UTC
From: jimsmith16 <jimsmith16@my-dejanews.com>
Message-ID: <08j24.2272$LK3.82263@nuq-read.news.verio.net>
Source record: 65113
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.homebrew,rec.radio.swap

I've got some in the auction as well as lots more for sale.
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=211449156
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=211453050
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=211456713
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=211459752
Jim

4648. (2) NEW DOORKNOB CAPS-1000 pF, 5kV, CRL 858 FA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-04 00:00:00 UTC
From: jimsmith16 <jimsmith16@my-dejanews.com>
Message-ID: <yhj24.2278$LK3.82385@nuq-read.news.verio.net>
Source record: 65114
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.homebrew,rec.radio.swap

2 new doorknob capacitors. CRL 858, 1000pF, 5KV.
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=209967945
Jim

4649. (2) NEW DOORKNOB CAPS-100 pF, 5kV, CRL 850

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-04 00:00:00 UTC
From: jimsmith16 <jimsmith16@my-dejanews.com>
Message-ID: <zhj24.2279$LK3.82385@nuq-read.news.verio.net>
Source record: 65115
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.homebrew,rec.radio.swap

2 new doorknob capacitors. CRL 850, 100pF, 5KV.
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=209962723
Jim

4650. Re: RF Power Transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-04 00:00:00 UTC
From: larryc@northwest.com
Message-ID: <3849E5B1.5E0D@northwest.com>
Source record: 65116

Lighten up, people. Buy 'em anyway you can. OK?
==========

Jim Weir wrote:
>
> LA8AK@online.no (J M Noeding)
> shared these priceless pearls of wisdom:
>
> ->On Fri, 03 Dec 1999 10:51:08 -0800, Jim Weir <jim@rst-engr.com> wrote:
> ->
> ->>LA8AK@online.no (J M Noeding)
> ->>shared these priceless pearls of wisdom:
> ->>
> ->>->Haven't measured how much gain you get this way on 2m, but experienced
> ->>->that 2N6082, 2N6083, 2N6084 all have 19-20dB gain on 6m@20W RF with
> ->>->13VDC supply
> ->>
> ->>And these devices are made by....???
> ->>
> ->Motorola and many other
>
> Many other maybe, Motorola definitely not. At least not according to their
> website.
>
> Could you point me to just ONE of the "many other"?
>
> Jim
>
> Jim Weir, VP Eng. RST Eng. WX6RST
> A&P, CFI, and other good alphabet soup

4651. AC voltage and frequency in Shanghai, PRC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-04 00:00:00 UTC
From: larryc@northwest.com
Message-ID: <3849E68F.7888@northwest.com>
Source record: 65117

I'll be in Shanghai on biz for abt 2 wks. What kind of pwr is available there? Is it as simple as going to Rat Shack and buying the AC adapters for the laptop? What abt the fone connectors? Same deal?

Pls advise.

4652. Re: HW 18 Xtal Controlled Transciever Info Needed...Bad!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-04 00:00:00 UTC
From: blackm00@cam.org
Message-ID: <blackm00-0412992359540001@dialup-522.hip.cam.org>
Source record: 65118
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.homebrew

In article <3845D3D2.1184E6FE@erols.com>, "D. S. Platt" <jeepp@erols.com> wrote:

> The HW-18 will tune up on the 75 meter ham band and its possible to connect
> a VFO into one of the crystal sockets. You will be able to get about 50 kHz
> worth of spread before you have to go inside and re-tweak things (for best
> output, etc.) The HW-18 was designed to work, nominally, from 4-5 MHz, as I
> recall. The HW-18 was a spin-off from a Heath model that had a VFO and
> covered the entire 80/75 meter band. I think they (Heath) may have had one
> for 40 meters, too.
>
> redbone1@postoffice.swbell.net wrote:
>
> > Hello and Greetings:
> > I have a Heath Kit HW 18 Crystal Controlled Transciever. I would
> > like to know what the Frequency range for this unit is? Is there anyone
> > out there will to sale me a HeathKit assembly manual or a copy of the
> > manual. All that I have is the Mic , Power Supply, and the Radio
> > itself.
> > This unit was originally designed for M.A.R.S. and C.A.P. use...is there
> > anyway to convert it for amatuer use?
> >
> > Thanks in Advance.........

It always amazes me when I look for an old ad that I was sure was quite
common, how many magazines I have to look through before I find the ad
I need.

Anyway, QST for May 1968 has an ad for the HW-18, inside the back cover.

"200 watts PEP on 160 meters for $109.95
New Heathkit HW-18 series 2-channel SSB transceivers for
160 meters, MARS & CAP"

Some of the features listed include:
-200W PEP SSB
-25watts input with carrier for AM compatibility
-fixed tuned for easy PTT operation
-automatic level control
-clarifier control adjusts transceive frequency
-relayless transmit-receive switching
-local-distance switch prevents receiver overload
-12 tube circuit, 17 tube function
-operates mobile or fixed with HP-13 or HP-23 power supplies

HW-18-1
for CAP
4450 to 4650KHz
USB
clarifier range: +-100Hz
selectivity: 2.7KHz @6dB, 6KHz @ 50dB

HW-18-2
for MARS
4450 to 4650KHz
LSB or USB (but I guess this may be determined by the local oscillator)
clarifier range: nolisting
selectivity: 2.1KHz @6dB, 7KHz @ 60dB

HW-18-3
for 160meters
1800 to 2000KHz
LSB
clarifier range: +-250Hz
selectivity: 2.7KHz @6dB, 6KHz @ 50dB

Common specs
sensitivity: 1uV input provides at least 15dB signal to noise ratio
intermediate frequency: 3395KHz
image rejection: 100dB
IF rejection: 50dB
receiver audio output: 1Watt
unwanted sidband suppresion: 45dB min below peak output
carrier suppression: 45dB min below peak output

power requirements:
+800VDC @ 250mA
+250VDC @ 100mA
-130VDC @ 5mA
12,6VAC or 12.6VDC @ 3.75A

I remember one article in 73 where someone added a VFO, though I
can't remember which model; it was someone overseas, so either it
was the 160Meter version, or they were using one of the others on
80Meters. I thought he described an external one, but I also have
a picture of a multi-turn dial where the clarifier control went, so
he must have also tried a built-in VFO.

Any old Handbook will show you how to apply a VFO signal to a crystal
oscillator. I don't remember ever seeing a schematic or block diagram,
so I can't be sure, but considering the low cost, I'd bet that it's
only a single conversion transceiver. So the signal frequency plus
or minus the IF will tell you where the crystal or VFO needs to be.

Michael VE2BVW

4653. FS: 4CX250FG w/ Sockets, chims, and Fil Xfmr

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-04 00:00:00 UTC
From: Bob <bmiller@calweb.com>
Message-ID: <384a0073_2@news.calweb.com>
Source record: 65119
Cross-posted to: rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

For Sale: A pair of tested pulls, 4CX250FGs, (26 volt fil type) with two air system sockets withe built in screen bypass caps, 2 chimneys with plate clamp assembly, and a compact 26.2VAC filament transformer. $75 for the works. post paid conus

tnx for the read.

Bob Miller, KE6F

4654. Re: Idea to use Peltier cooler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-04 00:00:00 UTC
From: douglas dwyer <doug@ddwyer.demon.co.uk>
Message-ID: <I1WibGA0BUS4EwvQ@ddwyer.demon.co.uk>
Source record: 65120
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,uk.radio.amateur

In article <825oa1$a74$1@lure.pipex.net>, Gary Peach
<xcg34@dial.pipex.com> writes
>If you can keep the mass to be cooled very small and an efficient Dewar
>constructed to house that mass then perhaps not such a problem as you
>discribe.
The problem with a peltier cooler is that though heat is pumped with
modest efficiency they are lousy insulators therefore if there is no
temperature difference quite a lot of heat is pumped with out too much
current .
The only way to get a low temp is with cascaded junctions this increases
insulation and reduces temperature difference per stage.
Cascaded junctions are available commercially and look like little
pyramids.
Your GaAs chip can sit on top of the top pyramid and can run at -10 but
not at -100C.

Clearly with such a bad insulator theres no point in a dewar flask.

--
douglas dwyer

4655. Re: Home Ethernet?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-05 00:00:00 UTC
From: "David M. Brodbeck" <dmbrodbe@mtu.edu>
Message-ID: <82cjfl$a16$2@campus3.mtu.edu>
Source record: 65121

c.c.tqbssz@HomeXEther.killspam.us.com wrote:
> I thought about that but apparently it's even slower than 10baseT. I've
> haven't seen BNC's on recently manufactured equipment, certainly all of
> mine is just twisted pair, and much is 10/100 so I guess the good old days
> of thinnet and daisy chaining PC's are gone:-(

--> I think it's the same speed as 10baseT, but slower than 100baseT of course. There is no such thing as 100base2.

When setting up a 10base2 network, remember that the daisy chain must be terminated at each end, and the shield should be grounded at one AND ONLY ONE end. The cable connectors on the cards float, they aren't grounded.

You may be interested to know that there's shielded CAT5 cable available for added RFI protection in 10baseT and 100baseT networks. The shield of this should probably also be grounded at one and only one end, to avoid ground loops.

David Brodbeck, N8SRE dmbrodbe@mtu.edu
finger gull@cyberspace.org for my public key block.

"When the car is redlining and the engine is humming and the muscles of your face have frozen into the rictus death mask of a maniac and you're barreling down a road surrounded by utter nothingness, then you feel like you're touching God." -- Malachi Kenney

4656. NEWSLINE 1164-12/03/99

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-05 00:00:00 UTC
From: "William M. Pasternak" <newsline@ix.netcom.com>
Message-ID: <82d4j1$2nt$1@nntp3.atl.mindspring.net>
Source record: 65122

NEWSLINE 1164

Newsline report number 1164 for release on Friday, December 3rd, 1999 to follow in

5-4-3-2-1.

The following is a Q-S-T. The F-C-C refuses to expand the scope of P-R-B One, enforcement action steps up once again and guess
where most of the hams in the U-S-A live. These stories and more on Newsline report number 1164 coming your way right now!

(Billboard Cart Here)

**

FCC TO ARRL: NO EXPANSION OF PRB-1

If you live in a condominium or other housing with deed restrictions, you will not be getting any assistance from the F-C-C that will let
you put an antenna on the roof. This as the regulatory agency turns down a bid from the American Radio Relay League to expand
the scope of federal preemption over Amateur Radio operations. Newslines David Black, K-B-4-K-C-H, has the details from our South
East bureau:

The FCC hands the A-double-R-L a setback. The League had
wanted the Commission to strengthen PRB-1. That's the federal
pre-emption over state and local ordinances which restricts amateur
radio towers.

The League wanted the FCC to in effect declare any restrictions
Limiting amateur radio antennas to heights below 70 feet as
Unreasonable. The only exceptions would have been if the state
Or local authority could show that the restrictions were necessary
For health, safety or aesthetic reasons.

But the Commission says NO to the League's request, saying its
existing policy with PRB-1 is sound. And, the agency says, it would
be neither prudent nor appropriate to set a height standard
for amateur radio antennas and towers. The FCC also says it does not
want to impose specific rules that local governments must include in
zoning ordinances.

The League had also asked the FCC to clarify that local governments
should accommodate ham antennas, rather than balance local
interests against federal interests involving effective public service
amateur radio communications. And, A-double-R-L wanted the

Commission to pre-empt what it called overly burdensome conditions and high costs that localities might require involving amateur radio antenna installations.

The Commission says its previously set standards have worked relatively well.

>From Birmingham, Alabama, David Black, KB4KCH, for Newsline.

The ARRL Executive Committee was scheduled to review this FCC order at its December 4 th meeting to determine what further
action is appropriate. That meeting should be taking place about the time that this newscast goes to air. (From ARRL Bulletin)

**

THE NUMBERS ARE IN

Over one sixth of all United States ham radio operators reside in a single state. According to the latest statistics published by Fred
Maia in this W-5-Y-I Report, California now plays host 103,365 of the nations 676,737 licensed radio amateurs.

But that's not all. California is also the home of the largest concentration of code-free Technician class hams to be found anywhere in
the continental United States or its possessions. That number is 37,157 with another 20,172 holding the 5 word per minute
Technician Plus ticket.

And would you believe that California also has a larger number of Novice class operators than it has Extra class? The number of
Novices stands at 10, 019 while the Extra class is only 8,826. 13,649 Advanced class operators round out the states total.

Not surprisingly, the place with the second largest ham radio population is Texas. Some 40,915 people hold licenses in the Lone
Star State. And again the most popular license is the code free Technician class with 12,391 holders of that ticket. That's followed
by 7790 Technician Plus holders, 6,960 Advanced class, 6,581 Generals, 4,994 Extra's and 2,199 Novice licensees.

Third place goes to Florida with its 39,941 hams, followed by New York with 32,820 license holders and Ohio with 30,063. The
lowest ham radio population in the 48 contiguous states turns out to be Delaware with only 1,389 but even that's quite a bit compared
with the District of Columbia. There only 414 citizens hold licenses of which 101 are General class.

The smallest ham population in a United States administered territory is the U-S Virgin Islands with a ham radio population of 301.
And for those of you wondering about the far North-West, the state of Alaska is holding its own with 3,169 hams. (W5YI Report)

**

ALASKA RESCUE

And from Alaska, word that three fishermen are alive in part do to ham radio. According to news reports, a Coast Guard helicopter
plucked two brothers and another person from the Gulf of Alaska after their boat sank.

The Coast Guard got its first report of the incident from an unidentified ham radio operator. Soon afterward, the distress beacon from
the fifty-two foot vessel was picked up by the Coast Guard stations at Juneau and Sitka

About 90 minutes later, a helicopter found the three fishermen in the icy water. All were wearing survival suits but were suffering from
mild hypothermia. By that time their vessel had sunk in twenty-five foot high seas in a fishing area about 70 miles southeast of
Yakutat. This is a region known for its fierce winter storms. No other information was given regarding the part played by Amateur
Radio in this rescue at sea. (Published news report)

**

BREAK 1

This is Newsline, heard on bulletin stations around the world, including the W-B-5-R-A-P repeater serving Purcell Oklahoma.

(5 sec pause here)

**

ANOTHER WIDE SIGNAL WARNING ISSUED

For the second time in as many weeks, the F-C-C has told a ham that he is transmtting an excessively wide signal. In a November 2
nd letter to Charles Schwartzbard, A-F-2-Y, of Clifton New Jersey, the F-C-C says its monitoring information indicates that he has
apparently been operating his station in a manner that causes it to emit an unusually wide signal, one that is over-power, or both.

Specifically, the F-C-C alleges that instances of these violation occurred on November 17 and 18 th in the frequency range of 14.315
to 14.318 MHz. The Commission also says that its Information further indicates that Schwartzbard ignored requests from other
licensees operating on adjacent frequencies to correct his transmitter emissions in accordance with good Amateur practice.

The Commission has directed Schwartzbard to answer--- in detail ---several technical questions pertaining to the way he operates his
Amateur station. A-F-2-Y was also cautioned that airing personal conflicts with other licensees on the Amateur bands, or slander or
deliberate interference to other licensees will result in the loss of Schwartzbard's Amateur license. (FCC)

**

HOLLINGSWORTH TO SPEAK IN DAYTON

And while on the subject of Amateur Radio enforcement, the Dayton Amateur Radio Association has announced that the nations top
ham radio rules enforcer will be the featured speaker at Hamvention 2000. According to DARA, F-C-C Special Coulsel for Amateur
Radio Enforcement Riley Hollingsworth, K4ZDH, has accepted an invitation to keynote the combined 2000 Dayton Hamvention and
ARRL National Convention Grand Awards Banquet next May 20th. (DARA)

**

VIRGINIA MAN INDICTED FOR OPERATING AN UNLICENSED FM STATION

A Virginia man has been indicted for running an unlicensed broadcast station. According to Bob Gonsett's C-G-C Communicator
newsletter, The FCC Enforcement Bureau announced that on November 16, a grand jury serving the U.S. District Court in Richmond
had indicted Khalid Kubweza, on four counts of operation of an unlicensed FM broadcast. Kubweza is accused of transmitting on
91.7 MHz from his Richmond home. (CGC Communicator, FCC)

**

RMARC REPEATERS TEMPORARILY DOWN

If you are traveling into the North-East, some repeaters that you may rely on will not be there for a while. This with word that the
Ramapo Mountain Amateur Radio Club's repeaters on 146.49 and 446.175 MHz and the club's A-P-R-S digipeater on 144.39 MHz,
are temporarily off the air.

According to Joseph Jack, WB2WAB, the machines were turned off on November 15th for maintenance and repair. No date has
been announced for when they will be returned to service, but full operation will resume as soon as possible. The packet digipeater
on 145.01 MHz is not affected and will remain in operation. (Hudson Loop)

**

THE LOW COST HAM AID BOX

Repeater owners and trustees might want to take note of a very intriguing article by Bob Bruninga, WB4APR that appears in the Fall
1999 issue of Amateur Television Quarterly magazine. Its called the Ham Aid Box and Bruninga says that it's a way to distribute text
messages using an off the shelf piece of consumer electronic gear..

According to WB4APR, the caller I-D units that many of us have in our homes use the same 1200 baud ASCII and Bell 202
standards as used on packet radio. He goes on to say that a caller I-D unit hooked to the speaker of a mobile or base ham radio
station can display up to four lines of text messaging. Since all caller I-D units have memories, multiple messages can be stored.

The text message would have been generated by any ASCII capable T-N-C connected to the repeater. Bruninga says that this could
make it possible to implement a universal and low cost amateur radio text distribution system -- almost overnight. (WB4APR Internet
Posting)

**

REPEATER SITES: WHAT HAMS ARE DOING

A few weeks ago we told you of the problem of retaining sites for ham radio repeaters in light of consolidations in the tower
management business. As more and more radio sites come under the management of a small number of mega-corporations, free --
or low price radio sites for hams are quickly disappearing. And there have been reports of the mega owners doing all within their
power to keep experimenters like hams off hilltops and roofs that they share with other site administrators. As a result some ham
radio repeater operators have taken the extreme alternative of buying property and putting up their own sites. In part two of our series
on the repeater site crunch, Newsline producer Bill Pasternak had the chance to chat with a ham who has done just that:

I first met Frosty Oden, N6ENV, almost two decades ago. Along with Roy Neal, K6DUE, Frosty and I were the
people who brought you the video about Owen Garriott's first ever ham radio mission into space -- Amateur Radio's
Newest Frontier. By that time, Frosty had his first repeater on the air and he has been involved in V-H-F and U-H
F relay communications ever since. But unlike most other ham radio system owners, Frosty Oden is also the owner
of the site that hosts his systems. We asked him why he decided to make such a large investment for a hobby:

SOT:

In-Q: When you are a tennant...
Out-Q: ... look on their face.

Oden says that these were among the reasons that he decided to cut through the red tape and invest in a
mountaintop home for his repeaters. He also realizes that not every ham can afford the luxiary of site ownership.
His advice: Take a lesson from the professional two-way people and consolidate:

In-Q: If a group of Amateurs...
Out-Q: ... vault space for the Amateurs.

We asked Oden what he sees for ham repeater owners in the future. He admits that he is far from optomistic:

In-Q: The big problem is ...
Out-Q: ... out of luck.

Oden says that the best way for hams to survive the coming repeater site crunch is begin pooling our resources
and learning to share.

> For Newsline, I'm Bill Pasternak, WA6ITF

-----
unfortunately, more and more hams are now finding that the same mega-managers that evicted them from where they had been are
also filing in opposition to building permits and even challenging land sales. They don't want hams near their sites for fear of
interference from Amateur Station equipment and the possibility that some ham radio clubs might decide to rent their excess space
to commercial customers. We will deal with this part of the story in a future Newsline report. (Newsline)

**

BREAK 2

Serving you 52 weeks a year since 1977, this is Newsline, with links to the world at www.arnewsline.org.

(5 sec pause here)

**

SOLAR MAXIMUM COULD ZAP POWER GRIDS

Communications satellites and power grids could be disrupted for the next three years because of intense solar activity associated
with the upcoming Solar Maximum. Newsline's Bill Burnett, KT4SB, reports from Miami:

According to a report on the program This Week in Amateur Radio that in tuirn quotes other published news
reports, starting in the year 2000, space storms, radiation showers and their affects on power grids are all
expected during the upcoming maximum, which is expected to last about three years. And, according to
administrators at the National Oceanographic and Atmospheric Administration, the United States is especially
vulnerable because of its increasing dependence on satellites.

National Ocenaographic and Atmospheric Administration officials say that these storms act to alter the Earth's
magnetic field. Because of this, they may send strong enough electrical impulses that could

overwhelm vulnerable power grids.

One of the strongest impacts occurred during the last solar cycle in 1989. Thats when the entire Province of
Quebec in Canada went dark because a geomagnetic storm caused a power grid overload.

To prepare for the possibility of a more widespread problem, NOAA scientists are using state-of-the-art scales
designed to depict the severity and impact of upcoming solar storms on public safety and vital services.

And while amateur radio operators await the solar maximum hoping for improved conditions on all High Frequency
and V-H-F band conditions others are at work in another important area. They are getting their emergency
communications equipmment and back-up power systems ready -- just in case.

>From Miami, I'm Bill Burnett, KT4SB, reporting for Newsline.

By the way -- a quick note concerning the This Week in Amateur Radio program. Word that it is moving to a new C-Band domestic
satellite effective as of Saturday, December 4th. Look for the program on T-V-R-O Net on G-E Americom Spacenet 4, transponder
16 Horizontal. The program audio will be on the satellites 5 point 8 MHz wideband analog subcarrier. (TWIAR, NOAA)

**

ARIANE 5 LAUNCH DATE ANNOUNCED

And with another kind of satellite news, Arianespace has now scheduled the first commercial launch of its new Ariane 5 heavy lifter
for December 10th. According to a report from the Amsat News Service, this Ariane flight will carry a European Space Agency
scientific satellite to orbit. W8GUS says that the rocket has been moved to the launch location and a rehearsal has been completed.
(ANS, W8GUS)

**

SUNSAT AWARD

There is a new worldwide ham radio award for using a satellite that is already in orbit. Jeramy Boot, G-4-N-J-H, reports from
Nottingham in the U-K.

PKG Here

Again that address is the Southern Africa Amsat, Post Office Box 1842, Hillcrest, 3650, South Africa. (G4NJH, S. AFRICA AMSAT)

**

FIRST IRISH ATV REPEATER

The Republic of Ireland has it very first fast scan amateur television repeater and a sightless ham is responsible for making it happen.
Roy Neal, K-6-D-U-E, has more:

The Cork Amateur Television Group has been granted the first Fast Scan TV repeater license in the Republic of
Ireland. The callsign of the new TV Repeater is EI2TVR and it operates in the 23cm band.

What is unique about this project is that it was put together and set up by a blind operator, Aedan O'Meara,
EI3EG. It was only in the last year that Aedan became interested in this mode and set about getting all the
necessary information both from Ireland and the U-K. The transmitter was designed by the West Sussex ATV
group. The frequencies in use are 1250MHz for the input and 1293MHz for the output.The repeater is presently
located on Spur Hill in Cork, which also houses the Cork 70 cm voice repeater.

> Roy Neal, K6DUE.

According to reports, the EI2TVR repeater is fast becoming a popular meeting spot for hams interested in fast scan A-T-V.

**

DX

In D-X, keep an ear open for Malawi as ZS5BBO will arriving on or about December 19 th. He will be there until December 26 th and
plans to be active from the shores of Lake Malawi, signing 7-Q-7B-O. Listen for Edwin on 10, 20, 15 and 6 meters. All QSL cards
must be accompanied by an S-A-S-E Edwin Musto, P.O. Box 211032, Bluff, 4036, South Africa. (OPDX)

And the DX News Letter says that DL7FER, is expected to be in Sri Lanka until Christmas. He will operate CW and SSB on 40
through 10 meters including the W-A-R-C bands. His Q-S-L go direct or via the bureau to DL7FER. (OPDX)

Lastly, Panamanian amateurs will be allowed to use the special prefix 3-F between the 1st of December 1999 and the 5th of January
2000 This, to celebrate the Republic of Panama's acquisition of the Panama Canal. HP1AC will be active on C-W as 3F1AC, and
QSL's should go to P-O Box 0860-00144, Villa Lucre, Panama. (OPDX)

**

THANK YOU CHUCK MARTIN, KD6NUJ

And finally, It is no secret that volunteerism is one activity that binds the Amateur Community together. It's central to Newsline's
existence.

In the more than 20-years Newsline has been on the air, volunteers -- often without our knowledge -- have contributed to our success.
During the first station break in each Newsline report, you hear us acknowledge bulletin stations by name, that feature our Amateur
news service.

This week, as we conclude our 1164th newscast, we want to pause to recognize a Ham: Chuck Martin, KD6NUJ. Chuck is the
individual who recorded and encoded our weekly QSTs in Real Network's streaming audio format. He then posted them on Tucson
Amateur Packet Radio's web site -- each week -- since report #962 on January 21, 1996.

As we approach the new millennium, we would recognize Chuck's contributions
for nearly four years of service. Unfortunately, Chuck's home and Ham Shack suffered severe flood damage last September when
Hurricane Floyd struck the Eastern Seaboard. Although KD6NUJ has attempted to keep his personal commitment to Newsline's
Internet listeners, he comes to the realization that this IS only a hobby and he needs to focus on returning his life and his lifestyle
back to normal.

So we at Newsline want to pause and say thank you Chuck. Thank you for your volunteerism and your dedication, and wish you the
best "73."

TAPR's webmaster Greg Jones, WD5IVD, assures us that Tucson Amateur Packet Radio remains ready provide a streaming audio
home for Newsline, but that it may be a bit spotty until we get someone to assume the duty on a regular basis. In the meantime, a
downloadable version of each weeks Real Audio file will continue to be available at Hank Armstrongs F-T-P site which can be reached
from a hot-link on our website at www.arnewsline.org.

**

CLOSE

With thanks to the ARRL, the C-G-C Communicator, the F-C-C, the Hudson Loop, the Radio Society of Great Britain, This Week in
Amateur Radio and Australia's Q-News, that's all from the Amateur Radio Newsline. Our web page is at www dot a r newsline dot org
and our e-mail address is newsline at a r newsline dot org. The address for the Newsline support fund is Newsline, Post Office Box
660937 in Arcadia California. The zipcode is 91066.

For now, with Bill Pasternak WA6ITF at our editor's desk, Im Mert Garlick, N6AWE, saying 73 and we thank you for listening.
Newsline is copyright 1999 and all rights are reserved.

4657. Re: Home Ethernet?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-05 00:00:00 UTC
From: "Laszlo I. Morocz" <kf4pv@SPAMMENOTlmorocz.com>
Message-ID: <sHt24.2713$Jh3.7008@jump.innerx.net>
Source record: 65123

Hi Steve,

My setup is a Pentium running 95 and a 486-50 running 95 or Linux. I did the following steps:

1. After the cards and cables were physically installed, booted into DOS and used the setup/diagnostics that came with the cards. For the Pentium I left the card in plug & play mode, for the 486 I disabled plug & play and used the suggested port and IRQ settings from the setup/diagnostics program.

2. Ran the DOS-based diagnostics to verify that packets could be successfully passed.

3. Now that I knew that the physical stuff worked, I booted both machines into 95. The Pentium successfully detected and installed the plug & play card with no intervention on my part. For the 486 I ran the hardware installation applet and specifically told it that I had an NE2000 card. Once it was installed, I had a hardware conflict, so I got into the device manager and changed the resource properties for the card so that it matched the ones assigned by the DOS-based setup/diagnostics.

4. Finally, I rebooted and logged into both machines. The network neighborhood showed the current machine on each one, and after about 30 seconds the remote machines showed up.

So, my suggestions are:

Disable plug & play for the troublesome machine if you can.

Use the DOS-based diagnostics if you have them to verify that everything works before you get into OS issues.

Use the 95 help file's "Troubleshooting" section to try and figure out why you get the startup message. Most probably a configuration problem with a conflicting IRQ in my experience. Good luck,

73 de KF4PV/3, Laszlo

--
To reply, remove the text SPAMMENOT from the e-mail address.
Steve Carlisle wrote in message <384969c7.48492251@news.cr.island.net>...
>
>
>Laszlo, I am having problems setting up file sharing between a Win 95
>and Win 311, with the machines having E2000 boards installed. The
>Win 95 machine has a plug and play board, but I am having dificulty
>getting the driver installed on that machine. Also the other machine
>accepts the driver, but get messages at startup that the board is not

>working properly. Do you have any suggestions or site references that
>may help me with this quest. Thanks for your time.
>
>Steve Carlisle VE7AHL
>
>
>

4658. Re: SSB home-brewing experts sought

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-05 00:00:00 UTC
From: waward@attglobal.net
Message-ID: <384A719B.11C64D43@attglobal.net>
Source record: 65124

You might try researching 73 magzines during the eighties.I remember the articles that even had the board fotr it.If I find the article,I will reply back.De n4blr

MC 10kW Jesus wrote:

> Howdy,
>
> I'm interested in building a squelch circuit for my SSB receiver that
> employs speech recognition. I got the idea from this site
> http://www.kachina-az.com/kc104.htm
> I don't know if they are employing a DSP technology to accomplish this.
> Any ideas on how to approach this task?
>
> MC

4659. SN76660N FM detector chip

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-05 00:00:00 UTC
From: John Cunningham <john.jc@virgin.net>
Message-ID: <82e0am$d64$1@nclient11-gui.server.virgin.net>
Source record: 65125

Im looking for any info on this chip. Please email to john.jc@virgin.net if you can help.

4660. Silver Mica caps

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-05 00:00:00 UTC
From: Harold Johnson <w4zcb@earthlink.net>
Message-ID: <82e341$q5o$1@birch.prod.itd.earthlink.net>
Source record: 65126

OK, let me try again. Looking for some silver mica caps, 500 volt rating, and values in the range of 100 to 2000 pF. These are physically 5/8 by 1/2 inch in the higher values of capacity.

W4ZCB

4661. Re: AC voltage and frequency in Shanghai, PRC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-05 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <s4l5hqcoqeg47@corp.supernews.com>
Source record: 65127

-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

<larryc@northwest.com> wrote in message news:3849E68F.7888@northwest.com...
> I'll be in Shanghai on biz for abt 2 wks. What kind of pwr is available
> there? Is it as simple as going to Rat Shack and buying the AC adapters
> for the laptop? What abt the fone connectors? Same deal?
>
> Pls advise.

I was in Shanghai recently. The power is 220VAC 50 Hz. If you're
traveling with a late-model notebook computer, its power adaptor
is probably good for 90-250VAC 50/60 Hz ... (my 4 year old
Toshiba Tecra 700CT worked fine.) The plugs in the hotel
fit my standard 2-prong plug on the notebook's adaptor.

As far as telephone is concerned, I found standard RJ modular
jacks ... in fact, in the hotel, the phone on the desk in my room
had a data/fax jack.

However, don't expect 56k ... the best connections I got were
24k ... 19.2 was not uncommon ... the lines leave something
to be desired.

Have a nice trip ... enjoy the food.

73,

Carl - wa6vse
- --
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
Director, No Code International
Fellow, Radio Club of America
Senior Member, IEEE
Member, TAPR
Member, ARRL
- --
Join No Code International! Hams for the 21st Century.
Help assure the future survival of amateur radio.
http://www.nocode.org

-----BEGIN PGP SIGNATURE-----
Version: PGP for Personal Privacy 5.5.3

iQA/AwUBOEqWEpe+N6+q84HiEQJnTACeItMOnSfujprYP6EvUxNhNqsXzjIAn0WE
lVfPsa32ElnsXUTZBhKXP+IE

```
=iZXH
-----END PGP SIGNATURE-----
```

4662. Re: SSB home-brewing experts sought

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-05 00:00:00 UTC
From: MC 10kW Jesus <qsl27@hotmail.com>
Message-ID: <384A9751.6E2BB261@hotmail.com>
Source record: 65128

Thanks for the lead. I don't subscribe to 73, but I'll keep it in mind. If if was in the 70's, I don't think DSP enters into this. :->

MC

waward@attglobal.net wrote:

> You might try researching 73 magzines during the eighties.I remember the
> articles that even had the board fotr it.If I find the article,I will reply
> back.De n4blr
>
> MC 10kW Jesus wrote:
>
> > Howdy,
> >
> > I'm interested in building a squelch circuit for my SSB receiver that
> > employs speech recognition. I got the idea from this site
> > http://www.kachina-az.com/kc104.htm
> > I don't know if they are employing a DSP technology to accomplish this.
> > Any ideas on how to approach this task?
> >
> > MC

4663. Replacement for old dual/tripple capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-05 00:00:00 UTC
From: Gregg Schwabauer <griggy@cyberhighway.net>
Message-ID: <384A9C93.3D2E78AF@cyberhighway.net>
Source record: 65129
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

I am starting to replace the electrolytic caps in my Hammarlund HQ110 and HX50. Are there any direct replacements for the mostly Sprague double and triple caps used in these things or should I just use modern single value parts?

Thanks for your help!

GAS
KB7WWD

4664. FS: 1983-1990 HAM RADIO Magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-05 00:00:00 UTC
From: Jan Robbins <swanman@cfu.net>
Message-ID: <384A9A69.F72FDAFA@cfu.net>
Source record: 65130
Cross-posted to: alt.ham-radio.marketplace,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchor,rec.radio.amateur.equipment,rec.radio.amateur.dx,rec.radio.amateur.digital,misc

Scarce HAM RADIO issues. All prices, add shipping via USPS to your ZIP

FULL Years, $30 each
1986
1987
1988
1989

PART Years--

1990 (only 6 issues this year; last year of pub.) $15.00

1985 (all except July), $27.00

1984 (April thru December) $21

1983 (Only April and October) $5.00

Tks es 73! Jan N0JR

4665. FS: JPS NIR-12 Noise Reduction Unit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-05 00:00:00 UTC
From: Marc Lamphier <mlamphier@yawho.com>
Message-ID: <384AABA9.75959DA5@yawho.com>
Source record: 65131

Bidding starts at $140, auction ends 12/11/99

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=214275156

thanks, Marc

4666. Re: Silver Mica caps

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-05 00:00:00 UTC
From: "Thomas C. Sefranek" <tcs@cmcorp.com>
Message-ID: <384AAD0A.DA388827@cmcorp.com>
Source record: 65132

Harold Johnson wrote:

> OK, let me try again. Looking for some silver mica caps, 500 volt rating,
> and values in the range of 100 to 2000 pF. These are physically 5/8 by 1/2
> inch in the higher values of capacity.
>
> W4ZCB

Hi Harold,

I have some, what values are you looking for?

--
Thomas C. Sefranek WA1RHP
ARRL Instructor, Technical Specialist, VE Contact.
http://www.harvardrepeater.org
http://hamradio.cmcorp.com/inventory/Inventory.html

4667. testing wireless circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-05 00:00:00 UTC
From: Fred Smith <fsmith555@yahoo.com>
Message-ID: <ulvqkk1P$GA.327@cpmsnbbsa04>
Source record: 65133
Cross-posted to: alt.radio.pirate,news.admin.radio.amateur.digital.misc,news.admin.radio.amateur.equipment,news.groups.radio.shortwave,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I'm still a little confused on the topic of building radio noise (for testing wireless circuits). Is there a book that describes how to build a 'noise' circuit (otherwise known as a jammer). Thanks.

4668. FS: HEAT DIP HD-1250(unbuilt) &HEWLETT PACKARD volt\omhmeter.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-05 00:00:00 UTC
From: erpi@junction.net
Message-ID: <82eh23$u0k$2@news.junction.net>
Source record: 65134

Hello, I have the following meters for sale:

(one) dipmeter heatkit HD-1250 unbuilt in is box
Asking: $125.00 plus shipping

also have a volt/ohm meter HEWLETT PACKARD mod: 427A
in very good condition.Asking $100.00 plus shipping.

If interested please email me....Thanks
Net-Tamer V 1.11.2 - Test Drive

4669. Re: Idea to use Peltier cooler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-05 00:00:00 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <82elgv$i7s$3@lure.pipex.net>
Source record: 65135
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,uk.radio.amateur

douglas dwyer <doug@ddwyer.demon.co.uk> wrote in message
news:l1WibGA0BUS4EwvQ@ddwyer.demon.co.uk...
> In article <825oa1$a74$1@lure.pipex.net>, Gary Peach
> <xcg34@dial.pipex.com> writes
> >If you can keep the mass to be cooled very small and an efficient Dewar
> >constructed to house that mass then perhaps not such a problem as you
> >discribe.
> The problem with a peltier cooler is that though heat is pumped with
> modest efficiency they are lousy insulators therefore if there is no
> temperature difference quite a lot of heat is pumped with out too much
> current .

The whole factor about Peltier devices is the geometry.
I envision a device buit directly onto a peltier cool with a concentric
spheres type of construction the cooling current being run in series perhaps
if the physics permits. Reversing the current turns the device into a good
heater.

> The only way to get a low temp is with cascaded junctions this increases
> insulation and reduces temperature difference per stage.
> Cascaded junctions are available commercially and look like little
> pyramids.

I think that they should be concentric spheres.

> Your GaAs chip can sit on top of the top pyramid and can run at -10 but
> not at -100C.
>
> Clearly with such a bad insulator theres no point in a dewar flask.

I think it is the bad geometry of a pyramid that is to blame here.
Even so if heat from te room is prevented from entering the zone to be
cooled that is work the the Peltier device does not have to do.

The old symbol for Current was 'C' just substitute I and you will readily
recognise Joule heating due to I^2 R in the following:
Extract from "Magnetism and Electricity for Students" H E Hadley BSc
(London) Associate of The Royal College of Science London, Headmaster of The
School of Science, Kidderminster, Publisher Macmillan & Co. Limited St
Martins Street London 1908
==========
The Peltier Effect
When one junction of an antimony/ bismuth couple is heated, the current
flows through the hot junction from bismuth to antimony (Fig. 261). Peltier
observed, in 1834, that if both junctions are at the same temperature, and

if a battery is included in the circuit so as to send a current in the same direction as before, then heat is absorbed at the junction T, and generated at the junction t. Also, these heat effects are reversed when the direction of the current is reversed. This is termed the Peltier Effect. It is quite independent of the heat generated according to Joule's Law, which is equal to C2Rt:

It can therefore be most readily observed by using thick bars of metal in which the Joule effect will be a minimum. Fig. 262 represents the method adopted by Peltier to observe the effect, in which two rods of antimony and bismuth (11 cms. long and 16 sq. mms. cross-section) are soldered together to form a cross. If a current is sent across the junction in the direction of the arrow, the deflection of the galvanometer needle will indicate a thermo-current across the junction from antimony to bismuth, showing that the junction is cooled.

EXPERIMENT 75 -- Connect together, as shown in Fig, 263, a battery B, commutator C (with diagonal wires removed), thermo-pile TP, and a low?resistance galvanometer G. Pass a current through TP for a short time, and quickly reverse the commutator so as to cut out the battery and complete the circuit through G and TP. The observed deflection will indicate a current through TP in a reverse direction. By varying the strength of current from the battery it may be shown that the tbermo-current is approximately proportional to the battery current.

The Peltier effect may be explained if we assume that there is, at a junction of two metals, a sudden change of potential which is independent of the potential changes due to the battery. Thus, if a current traverses the junction represented in Fig. 264 from left to right, heat will be generated at the junction since the current will do work in traversing a fall of potential. If the direction of the current is reversed beat will be absorbed to an amount equivalent to the work done in overcoming the rise in potential. The mechanical equivalent of the heat generated or absorbed by a current of strength C in 1 second is given by the equation

JH = (V1 - V2) Ct = PCt.

The Peltier coefficient P Is defined as the energy generated or absorbed at a junction of two metals traversed by unit current for unit time.

(JH)=C2Rt+PCt

In any portion of a circuit, of resistance R, which includes a single thermo-junction, the total energy generated when the current is in one direction; but if the current is reversed the total energy

(JH') = C2Rt - PCt

The value of the coefficient P is determined by measuring the difference between the above quantities, thus

P= J (H - H')/Ct

Le Roux adopted the method of Fig. 265 in order to measure the Peltier coefficient. A and B are two antimony/bismuth couples, the shaded elements being antimony, immersed in water contained in two calorimeters.

On passing a current of known strength through the circuit for a given time, the heat developed in the calorimeters is given by the equations

Hl = w1t1, and H2 = w2t2

(where w1 and w2 are the water equivalents of the calorimeters and contents,

t1 and t2 the observed rise of temperature).
If Q1 and Q2 represent the heat due to the Joule effect in the two cases, also P1 and P2 the Peltier heat effect, then
H1 = Q1 + P1, and H2 = Q2 - P2.
If a current of the same strength is now passed in the reverse direction for the same time, then
H1'= Q1 - P1, and H2' = Q2 + P2
Hence Pl = (H1 - H1') / 2, and P2 = (H2' - H2) / 2
But Pl = P2, therefore P = (H1 - H1' + H2' - H2) / 4
Le Roux found that the value of P for any couple is proportional to the thermo-electric power of the couple, and also that the value increased with increase of temperature.
More accurate results have been obtained by Jahn (1888) by measuring the heat developed when the junction is enclosed in a Bunsen ice-calorimeter. The Joule effect was eliminated by repeating the observation when the current was reversed.
Thermodynamics of the Peltier Effect
Consider the case of a single antimony/bismuth couple, with the junctions at 100°C. and 0°C. Heat is absorbed at the hot junction, and is generated at the cold junction; moreover, these effects are reversible. The current which is generated will also develop in the circuit a quantity of heat proportional to C2Rt: this is independent of the direction of the current and is therefore irreversible. The whole cycle of operations is therefore not reversible. But if we assume the circuit to have so low a resistance that the Joule effect is negligible, and that the circuit includes some mechanism, such as a perfect motor, which will convert all the electrical energy into mechanical work, then the cycle of operations may be regarded as completely reversible ; for, if the junctions are initially at the same temperature, and if the motor is rotated in the opposite direction, a reverse current will be generated which will produce reversed heat effects at the junctions. With this assumption the circuit is comparable to a perfect heal engine,' in which the ratio of the heat absorbed to the heat given up to the condenser is equal to the ratio of the absolute temperature of the source of heat to that of the condenser. Hence, if P1 and P2 are the mechanical equivalents of the heat absorbed and liberated at the hot and cold junctions respectively when unit quantity traverses the circuit, P2 / P1 = T2 / T1, where T2 and T1 are the absolute temperatures of the junctions ; or,
(P2 - P1) / P1 = (T2 - T1) / T1, or E = (T2 - T1) P1 / T1
According to this result, the E. M. F. would be directly proportional to the difference of temperature of the Junctions, which is contrary to observed facts. This process of reasoning led Lord Kelvin, in 1851, to predict the existence of reversible heat effects in other parts of the circuit besides the junctions. He afterwards demonstrated, when a current flowed through unequally heated conductors, that heat was generated in some cases, but absorbed in others; thus, a current through iron from a hotter to a colder part is accompanied by absorption of heat, while. the same conditions in copper are accompanied by generation of heat. This is known as the Thomson Effect.

==========

As you can see the physics is not exactly new just the technology that still has a little way to go.

Gary7SLL

4670. Crystal Oscillator Circuit ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-05 00:00:00 UTC
From: jayedie11@aol.com
Message-ID: <19991205162933.25460.00000901@ng-cl1.aol.com>
Source record: 65136

just have a few questions about crystal oscillators i hope you guys could help out with:
1.were could i find a basic schematic of a crystal oscillator?
2.how do i use components to alter frequncy of oscillator (Ex.tripling)?
3.were could i find crystal to use for a crystal oscillator?

Thanx from a newbie, Jayedie11@aol.com

4671. Re: pic programming

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-05 00:00:00 UTC
From: Tate Jackson <tatejackson@mindspring.com>
Message-ID: <82eqgb$u5o$1@nntp2.atl.mindspring.net>
Source record: 65137

http://www.amazon.com/exec/obidos/ASIN/0965416208/o/qid=944434076/sr=8-1/002
-9018381-4825829

monte zuma <montezuma4@earthlink.net> wrote in message
news:829h2u$n2g$1@oak.prod.itd.earthlink.net...
> wishing to learn to program PIC
> whats a good way to start?
> Recommended reading?
>
>
>

4672. Re: Silver Mica Caps.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-05 00:00:00 UTC
From: Jim Adney <jadney@vwtype3.org>
Message-ID: <yp5KOIuhn6rbnsLxDR2WoY2WytI3@4ax.com>
Source record: 65138

"Harold Johnson" <w4zcb@earthlink.net> wrote:

>I need quite a few DM19 size Silver Mica's to make some transmit low pass
>filters. Anyone have a stash they'd care to sell? They all go on PC boards,
>short leads are no particular problem.

What values do you need? I have quite a few of the old "postage stamp"
style, how big is the DM19 package? I may have something that will
work.

Jim

-

Jim Adney jadney@vwtype3.org
Madison,Wisconsin USA

4673. Re: Replacement for old dual/tripple capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-05 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <3SD24.77463$5W2.2179362@news6.giganews.com>
Source record: 65139
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

I have a box of electrolytic capacitors, many multiples. NOS I guess you'd call them. Let me know the values you need and I'll see how close I can come.

73, Bob K6DDX

4674. Re: Replacement for old dual/tripple capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-05 00:00:00 UTC
From: Gregg Schwabauer <griggy@cyberhighway.net>
Message-ID: <384B1C7C.81245F9E@cyberhighway.net>
Source record: 65140
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Thanks. I'll let you know.

I'd be a little concerned with their age, same as the one currently in the radio.

GAS
KB7WWD

Bob wrote:

> I have a box of electrolytic capacitors, many multiples. NOS I guess you'd
> call them. Let me know the values you need and I'll see how close I can
> come.
>
> 73, Bob K6DDX

4675. Re: Replacement for old dual/tripple capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-05 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <4LI24.89605$7I4.2201016@news5.giganews.com>
Source record: 65141
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

I wouldn't worry about their age. If they work, use them. If they fail, replace them. I would test any capacitor prior to shipping it to you.

73, Bob

4676. Wiring a Relay????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-06 00:00:00 UTC
From: jayedie11@aol.com
Message-ID: <19991206002502.04635.00000944@ng-fd1.aol.com>
Source record: 65043

is there any specific way to wire a relay?do all relays follow the same wiring princables?i have an spdt relay that has pinout like this:

_____
* 1 could somone explain how to wire a relay
like this?
* 1
1
1
1
_* *__________*__1 jayedie11@aol.com

4677. Need RF designer for part time projects

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-06 00:00:00 UTC
From: Leonard Marshall <lmca@mediaone.net>
Message-ID: <384B668C.C1AA3959@mediaone.net>
Source record: 65044
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

LA, CA co. would like to find RF designer to improve front end of 2Ghz
>miniature audio and video receivers for broadcast trucks. Also require
>someone to design miniature high gain antenna for same freq.
>
>Send interest or resume to:
>
>Nathan Mrodukhay
>lmca@mediaone.net
fax 310-836-5327

>

r

4678. Re: Crystal Oscillator Circuit ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-06 00:00:00 UTC
From: monte zuma <montezuma4@earthlink.net>
Message-ID: <82gkpa$t0s$1@fir.prod.itd.earthlink.net>
Source record: 65045

1. Schematic from ARRL handbook
2. Freq change is covered in above book
3. Xtals available from FRY'S, HSC, Jan crystals, DAns small parts

Good Luck
monte

Jayedie11 wrote in message <19991205162933.25460.00000901@ng-cl1.aol.com>...
>just have a few questions about crystal oscillators i hope you guys could
help
>out with:
>1.were could i find a basic schematic of a crystal oscillator?
>2.how do i use components to alter frequncy of oscillator (Ex.tripling)?
>3.were could i find crystal to use for a crystal oscillator?
>
>Thanx from a newbie, Jayedie11@aol.com

4679. Re: testing wireless circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-06 00:00:00 UTC
From: Fred Smith <fsmith555@yahoo.com>
Message-ID: <OYvUiEBQ$GA.315@cpmsnbbsa04>
Source record: 65046
Cross-posted to: alt.radio.pirate,news.admin.radio.amateur.digital.misc,news.admin.radio.amateur.equipment,news.groups.radio.shortwave,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

O.K. Thanks.

JW <jdwalton@home.com> wrote in message news:384B4826.E98E3750@home.com...
> Here's a great noise circuit
>
> Purchase a spark gap generator, a.k.a. Model T ignition coil, mount a 10
penny
> nail on an insulator inside a coffee tin, at right angles to the base of
the
> can. Connect spark generator to nail, ground to tin. Generate spark and
> watch the mcw RFI!
>
> Guaranteed to knock out X and K band radar units, will probably wreak
havoc
> with cell phones too.
>
> This, by the way, is in the spirit of jest, and probably apocryphal
legend.
>
> Fred Smith wrote:
>
> > I'm still a little confused on the topic of building radio noise (for
> > testing wireless circuits). Is there a book that describes how to build
a
> > 'noise' circuit (otherwise known as a jammer). Thanks.
>

4680. Re: Silver Mica caps

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-06 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <384C2248.AE86A81D@midwestmicro-tek.com>
Source record: 65047

Try www.alltronics.com. That's where I get mine.

Rick KC0GIX

Harold Johnson wrote:

> OK, let me try again. Looking for some silver mica caps, 500 volt rating,
> and values in the range of 100 to 2000 pF. These are physically 5/8 by 1/2
> inch in the higher values of capacity.
>
> W4ZCB

4681. Re: Crystal Oscillator Circuit ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-06 00:00:00 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <944518068.1626484294@news.indigo.ie>
Source record: 65048

On Sun, 05 Dec 1999, Jayedie11 wrote:
>just have a few questions about crystal oscillators i hope you guys could help
>out with:
>1.were could i find a basic schematic of a crystal oscillator?
>2.how do i use components to alter frequncy of oscillator (Ex.tripling)?
>3.were could i find crystal to use for a crystal oscillator?
>
>Thanx from a newbie, Jayedie11@aol.com

Simple crystal oscillator at:
http: //www.qsl.net/ei9gq/tx_circ.html#Oscillators

Solid State Design for the Radio Amateur and
The ARRL Handbook, both published by the
ARRL, for information about oscillators and
frequency multipliers.

Ed. EI9GQ

--

EI9GQ homebrew radio page
http://www.qsl.net/ei9hq

Remove 'X' to reply.

Linux 2.2.5-15

4682. Test

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-06 00:00:00 UTC
From: Tony & Prue <tokarz@netnitco.net>
Message-ID: <384C4D4B.CBB64E31@netnitco.net>
Source record: 65049

XXXX

4683. RF Amp Builder's Parts for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-06 00:00:00 UTC
From: RB <wa9eka@worldnet.att.net>
Message-ID: <82hll0$5r6$1@bgtnsc01.worldnet.att.net>
Source record: 65050

```
I have the following RF Amplifier parts to sell;
================================================
4-1000 Tube with finned Aluminum Plate Cap $100
------------------------------------------------
Oil Filled Capacitors;
[QTY 1] 53 MFD @ 3.5 KV $30
[QTY 2] 8 MFD @ 4 KV $15 ea.
[QTY 3] 2 MFD @ 3 KV $10 ea. (NEW!)
[QTY 2] 24 MFD @ 1 KV $10 ea. (NEW!)
[QTY 1] 4 MFD @ 600 V $5 (NEW!)
[qty 2] 2 MFD @ 600 V $5 ea. (NEW!)
*Take all the above for $100
------------------------------------------------
Brand New Peter Dahl 30AMP Filament Choke $25
------------------------------------------------
Sangamo Type GLB Ceramic Mica DC Blocking Caps;
(Big Commercial type with cast aluminum flanges)
(they have 20AMP RF rating at 1000KC)
Have (3) .01 @ 4 KV, .016 @ 3 KV, & .02 @ 3 KV.
$20 ea. or take all 3 for $50 and I'll ship (48)
------------------------------------------------
National Neutralizing Capacitor (1 7/8" dia.)
(~1/16-1" adj.) has venier drive with lock. $20
------------------------------------------------
Blower 115VAC - 2960RPM - 3" ID round air inlet.
2 1/2" Sq. Outlet w/3"BoltCtr flange mount. $30
------------------------------------------------
19" Rack Panel Cabinet has 35 1/8" total front
Panel opening space. Cabinet is overall 23" Wide,
44" High, 24" Deep, has front and rear mtg rails,
Removable rear door by just lifting up when open,
Custom made bolt-on White Formica Top, Nice cond.
Removable wheels and level adjusters. $100
------------------------------------------------
ALL ITEMS PLUS SHIPPING (at cost) K9RB@arrl.net
Roger Borowski-K9RB (near Jacksonville, Florida)
================================================
```

4684. Polarized cap??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-06 00:00:00 UTC
From: Matt Erickson <kk5dr@hotmail.com>
Message-ID: <384C6A92.21E6B2D5@hotmail.com>
Source record: 65051

I have a oil filled cap, with two insulated posts, and no polarity marks anywhere.
Do these units have polarity, or are they non-polarized?

4685. Re: Polarized cap??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-06 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.991206181627.12052B-100000@oso.slonet.org>
Source record: 65052

NO!

On Mon, 6 Dec 1999, Matt Erickson wrote:

> I have a oil filled cap, with two insulated posts, and no polarity marks
> anywhere.
> Do these units have polarity, or are they non-polarized?
>
>
>

4686. FA: Scarce Issues of HAM RADIO Magazine

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-06 00:00:00 UTC
From: Jan Robbins <swanman@cfu.net>
Message-ID: <384C9A93.79AE49FE@cfu.net>
Source record: 65053
Cross-posted to: alt.ham-radio.marketplace,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchor,rec.radio.amateur.homebrew,rec.radio.amateur.dx

HAM RADIO Magazine, 1984-1990, many full years. SEE--

1984 http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=214819565

1985 http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=214812548

1986 http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=214795504

1987 http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=214798194

1988 http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=214799637

1989 http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=215514674

1990 http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=214815759

Tks es 73!

4687. Re: testing wireless circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-06 00:00:00 UTC
From: JW <jdwalton@home.com>
Message-ID: <384B4826.E98E3750@home.com>
Source record: 65142
Cross-posted to: alt.radio.pirate,news.admin.radio.amateur.digital.misc,news.admin.radio.amateur.equipment,news.groups.radio.shortwave,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Here's a great noise circuit

Purchase a spark gap generator, a.k.a. Model T ignition coil, mount a 10 penny nail on an insulator inside a coffee tin, at right angles to the base of the can. Connect spark generator to nail, ground to tin. Generate spark and watch the mcw RFI!

Guaranteed to knock out X and K band radar units, will probably wreak havoc with cell phones too.

This, by the way, is in the spirit of jest, and probably apocryphal legend.

Fred Smith wrote:

> I'm still a little confused on the topic of building radio noise (for
> testing wireless circuits). Is there a book that describes how to build a
> 'noise' circuit (otherwise known as a jammer). Thanks.

4688. Re: Wiring a Relay????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-07 00:00:00 UTC
From: dr.dongle@juno.com
Message-ID: <82hqttcuq1@nnrp1.deja.com>
Source record: 65054

In article <19991206002502.04635.00000944@ng-fd1.aol.com>,
jayedie11@aol.com (Jayedie11) wrote:
> is there any specific way to wire a relay?do all relays follow the
same wiring
> princables?i have an spdt relay that has pinout like this:
>
> ___________________
> * 1 could somone explain how to
wire a relay
> like this?
> * 1
> 1
> 1
> 1
> _* *___________*__1 jayedie11@aol.com
>
>
There is no simple answer as there are many types of relays and
similar types often have different pinouts. What kind do you have and
what are you wanting to do with it?
dr.d
--
Kiss Technologys
The more complicated the plumbing
the easer it is to stop up the pipes M. Scott

Sent via Deja.com http://www.deja.com/
Before you buy.

4689. Wanted 40 + 5 Years of HF mobileering

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-07 00:00:00 UTC
From: ve7ggt@pacificcoast.net
Message-ID: <82i90dmfe1@nnrp1.deja.com>
Source record: 65055

Hi, I am looking for a copy of Don Johnson's book 40 + 5 years of HF mobileering. I have tried World Radio and Big DK Publishing but to no avail. Can any one help? I have made 2 of the screwdriver antennas and they work great. I'm going for a 160 meter version next! Many Thanks
Trace VE7GGT

Sent via Deja.com http://www.deja.com/
Before you buy.

4690. Re: Wiring a Relay????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-07 00:00:00 UTC
From: MC 10kW Jesus <qsl27@hotmail.com>
Message-ID: <384C4F8B.758E6110@hotmail.com>
Source record: 65056

I don't believe there is any standard to relay pinouts.

It should be easy enough to figure out with a multimeter. The coil will exhibit a resistance, which an Ohmeter should be able to find. As for the NC, NO and COM. Well, you can find the COM and NC easily enough so just energize the relay and find the COM and NO.

MC

Jayedie11 wrote:

> is there any specific way to wire a relay?do all relays follow the same wiring
> princables?i have an spdt relay that has pinout like this:
>
> _____
> * 1 could somone explain how to wire a relay
> like this?
> * 1
> 1
> 1
> 1
> _* *_____*__1 jayedie11@aol.com

4691. ICOM PCR-1000

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-07 00:00:00 UTC
From: Jeff Cameron <ve6jhc@telusplanet.net>
Message-ID: <Q7334.25549$n3.380856@news1.telusplanet.net>
Source record: 65057

Anybody try this rec. out? Looks interesting.

--
Jeff Cameron VE6JHC
Vulcan, Alberta
Canada
E Mail ve6jhc@telusplanet.net

4692. Re: ICOM PCR-1000

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-07 00:00:00 UTC
From: Mike <m.j.willis@rl.ac.uk>
Message-ID: <82igjh$jd8@newton.cc.rl.ac.uk>
Source record: 65058

Jeff Cameron <ve6jhc@telusplanet.net> wrote in message
news:Q7334.25549$n3.380856@news1.telusplanet.net...
> Anybody try this rec. out? Looks interesting.

Have I hit a time warp ? It was an excellent receiver when it came out about
3 years ago. The performance is excellent for the price. The software is
even less useful than windows 98 but there are alternatives.

4693. Re: other than 60, 50 & 400 Hz transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-07 00:00:00 UTC
From: marc_k@walrus.com
Message-ID: <82j2gi$ci1$2@alice.walrus.com>
Source record: 65059

Dave Martindale (davem@groucho.cs.ubc.ca) wrote:
: Jim Adney <jadney@vwtype3.org> writes:

: >>Lighting operated from 25 Hz power
: >>flickers at 50 Hz, which is visible.

: >A flicker rate of 50 Hz is commonly spoken of as being annoying, but
: >it is well above that of modern theater projectors, which I believe
: >run at 16 frames/sec, projecting each frame twice for a flicker rate
: >of 32/sec. I haven't run into anyone yet who is annoyed by the flicker
: >rate of a modern movie.

: 16 and 18 FPS were used for movies in the silent period, but sound
: movies run at a standardized 24 FPS. With the usual double-flash
: projector, this results in a 48 Hz on-screen flash rate. The eye's
: sensitivity to flicker depends on lighting levels, and at the relatively
: low light levels in movie theatres within the image areas, 48 Hz flicker
: is *usually* not visible.

: However, the eye is more sensitive to flicker in its peripheral vision
: than it is in the central area (fovea), and movies sometimes have
: large areas. that are significantly brighter than the
: average image level. When all of these factors combine, for example
: if there are bright clouds in the sky but you're looking at something in
: the foreground, audiences sometimes *do* see flicker in standard movies.

: To avoid this, triple-flash movie projectors have been built; the 72 Hz
: flash rate *is* invisible regardless of scene content.

: Computer displays are much brighter than movie screens, so they
: have to be operated at higher frequencies to avoid flicker - as high
: as 72 Hz in some cases. 48 Hz flicker on a CRT is definitely visible
: at normal room light levels.

: Now, light bulbs are even brighter than CRT displays, and are also
: more often in the peripheral vision, so this is probably the worst
: possible case for seeing flicker.

: >In addition, incandescent bulbs have enough thermal mass that they
: >really don't cool down that much each cycle, so there really isn't
: >much flicker to them.

: Have you ever seen a light bulb driven by 25 Hz? I haven't myself,
: but I have heard of the flicker.

: In addition, I've measured the flicker produced by a 200 W 12 V halogen
: lamp running from 60 Hz. This is a nice heavy tungsten filament, and

: the ripple in the light output is still a few percent - not enough to
: see flicker, but enough to screw up a CCD scanner. So I'll readily
: believe that a thin 120V filament running at 25 Hz would have much more
: ripple in light output, enough to see.

: >I suspect that the move to higher line frequencies was motivated by
: >the reduction in iron (and consequently weight and size) in generators
: >and transformers.

: I'll agree with you there. It may have also come about because better
: transformer steel became available. Plain iron has losses that increase
: dramatically with higher frequency, so perhaps using higher than 25 Hz
: would have resulted in inefficient transformers. Then silicon steel
: was developed for transformer cores, allowing 60 Hz operation while
: keeping losses low. But I'm too young to have been around at the
: time, so this is speculation.

: Dave
I've seen incandesant bulbs running on 40 Hz...the flicker is quite
noticeable, but not as bad as 25 would be.
On a aside, I walked into a friends bathroom some years back, turned on
the light over the sink, and noticed a distinct flicker....I discoveres
that he had installed "bulb savers" in the sockets(a silicon diode in a
rubber disc that presses into the socket, under the base of the bulb).
So I guess those bulbs were running at 30 Hz(actually, not really-the
"off" period is longer this way).

4694. Re: Wiring a Relay????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-07 00:00:00 UTC
From: "Laszlo I. Morocz" <kf4pv@SPAMMENOTlmorocz.com>
Message-ID: <pv834.2722$Jh3.7740@jump.innerx.net>
Source record: 65060

Love to give you a hand, but that diagram is totally meaningless. Folks should be aware that because of all the different possible settings for fonts, line truncations, etc. (some of which are not controlled by the recipients), diagrams done with character graphics are almost always garbage. Some good alternatives are to use your favorite drawing program (even lowly old Paint will work) to draw a simple image, or to draw the diagram by hand and scan it in. If you're scanning, use a black & white line art mode, not color or gray scale or you may get megabyte-sized files.

Do the world a favor, though, and do not send diagrams as attachments. If you absolutely must attach, use JPEG or zip a BMP. The best solution would be to put the diagram on your web page and just post your question with a URL to the image. If you don't have a web page, another option would be to offer to e-mail the image to anyone willing to help. That way only the interested parties need to download it. And if all else fails, the good old US Postal Service will get a paper copy anywhere in the continental USA in 3 days or less for only 33 cents.

Then there's the other alternative, the detailed verbal description. A relay could be described, for example, as:

Manufacturer's markings are ... (insert numbers and stuff here, maybe describe any logos), size is 3/4 inch long, 0.4 inch wide, .5 inch high, opaque light blue plastic on the bottom half, translucent blue plastic on the top, 4 pins on each long side grouped as 3 close together at one end and a single one at the opposite end, spacings are 0.1, 0.1 and 0.4 inches between the pins.

This kind of description would convey a lot more information than scrambled characters and would be properly displayed by any e-mail program. It would also let some of us notice that it's in a 14-pin DIP package, probably DPDT with the coil being the 2 single pins at one end. And with a good set of manufacturer's markings, it could be possible to go right to a catalogue or the manufacturer's web site and get an actual data sheet.

So, if you haven't gotten your answer yet, use one of these alternatives and repost and I'm sure you'll get a lot more help.

73 de KF4PV/3, Laszlo

--
To reply, remove the text SPAMMENOT from the e-mail address.
Jayedie11 wrote in message <19991206002502.04635.00000944@ng-fd1.aol.com>...
>is there any specific way to wire a relay?do all relays follow the same wiring
>princables?i have an spdt relay that has pinout like this:

>
>_____
> * 1 could somone explain how to wire a
relay
>like this?
>* 1
> 1
> 1
> 1
>_* *_____*__1 jayedie11@aol.com
>

4695. Re: ICOM PCR-1000

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-07 00:00:00 UTC
From: Mark Fraser <mfraser@helix.net>
Message-ID: <384D1610.53415D26@helix.net>
Source record: 65061

Buy it in Canada (Com West here in Vancouver, for one store) and
when you get tired of it, sell it at a profit to one of our US
friends - their models have the cellular channels blocked, but
Icom sell the unblocked one here.... / mark

Jeff Cameron wrote:
>
> Anybody try this rec. out? Looks interesting.
>
> --
> Jeff Cameron VE6JHC
> Vulcan, Alberta
> Canada
> E Mail ve6jhc@telusplanet.net

4696. Re: other than 60, 50 & 400 Hz transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-07 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <384D2882.167E@eece.maine.edu>
Source record: 65062

marc_k wrote:
> I've seen incandesant bulbs running on 40 Hz...the flicker is quite
> noticeable, but not as bad as 25 would be.
> On a aside, I walked into a friends bathroom some years back, turned on
> the light over the sink, and noticed a distinct flicker....I discoveres
> that he had installed "bulb savers" in the sockets(a silicon diode in a
> rubber disc that presses into the socket, under the base of the bulb).
> So I guess those bulbs were running at 30 Hz(actually, not really-the
> "off" period is longer this way).

Would that really extend the life of the light bulb? I thought it was
the intial surge of current through the filament (until the filament
heats up and changes resistance) that eventually leads to failure.
--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

4697. Re: Polarized cap??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-07 00:00:00 UTC
From: Rod Stringer <stringerr@nospam.logica.com>
Message-ID: <01bf40cc$c94c7380$0a11ea9e@P014224.LOGICA.CO.UK>
Source record: 65063

Clifford Buttschardt <cbuttsch@slonet.org> wrote in article
<Pine.GSO.3.95.991206181627.12052B-100000@oso.slonet.org>...
> NO!
>
>
> On Mon, 6 Dec 1999, Matt Erickson wrote:
>
> > I have a oil filled cap, with two insulated posts, and no polarity
marks
> > anywhere.
> > Do these units have polarity, or are they non-polarized?

is that NO! they have polarity
or NO! they are non-polarised ! :)

--
Rod Stringer
DISCLAIMER

All views expressed are my own and not those of Logica

4698. Re: FA: Scarce Issues of HAM RADIO Magazine

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-07 00:00:00 UTC
From: rick@area.com
Message-ID: <82jcuh$dm3$1@vax.area.com>
Source record: 65064
Cross-posted to: alt.ham-radio.marketplace,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchor,rec.radio.amateur.homebrew,rec.radio.amateur.dx

Scarce? I picked up those issues at a flea market for nothing.
The guy couldn't give 'em away. If you get real money on ebay,
it will prove the effectiveness of ebay (not the scarity of
old radio mags). I bet you do just fine! Maybe I'll put mine
on there too.

Rick N6RK

In article <384C9A93.79AE49FE@cfu.net>, Jan Robbins <swanman@cfu.net> wrote:
>HAM RADIO Magazine, 1984-1990, many full years. SEE--
>
>1984 http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=214819565
>
>1985 http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=214812548
>
>1986 http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=214795504
>
>1987 http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=214798194
>
>1988 http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=214799637
>
>1989 http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=215514674
>
>1990 http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=214815759
>
>Tks es 73!
>

4699. Radio Design Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-07 00:00:00 UTC
From: Jason Hissong <jhisson1@columbus.rr.com>
Message-ID: <82jir0$r26$1@ssauraab-i-1.production.compuserve.com>
Source record: 65065

Greetings everyone,

Since getting my Advanced over the weekend, my interest of radio design is growing (due to the theory that you have to learn to pass it). I am still a beginner than understands the basics, but I would like to experiment a little more. I saw that the ARRL has a nice program that does this, however, I am not willing to pay that much for it at this time. (I wish there was a demo of it to see what it is like.) Does anyone know of any freeware/shareware radio design packages that are available that I can download and try out? Something that would allow me to build a circuit and tweak the components. i.e., what happens when I remove this resistor here? What happens when I change the capacitance here? etc etc. I think this will help me learn more about why a circuit works the way it does.

Thanks es 73
Jason Hissong
KC8HYI

4700. Re: Polarized cap??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-07 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <lud34.80619$5W2.2266073@news6.giganews.com>
Source record: 65066

There is no polarization on an oil filled capacitor. Only electrolytic capacitors are polarized.

73, Bob K6DDX

4701. Re: other than 60, 50 & 400 Hz transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-07 00:00:00 UTC
From: davem@groucho.cs.ubc.ca
Message-ID: <82jqac$hu0@groucho.cs.ubc.ca>
Source record: 65067

marc_k@walrus.com (marc_k) writes:

>On a aside, I walked into a friends bathroom some years back, turned on
>the light over the sink, and noticed a distinct flicker....I discoveres
>that he had installed "bulb savers" in the sockets(a silicon diode in a
>rubber disc that presses into the socket, under the base of the bulb).
>So I guess those bulbs were running at 30 Hz(actually, not really-the
>"off" period is longer this way).

Using a series diode causes a lamp running on 60 Hz power to flicker
at 60 Hz - instead of the 120Hz that is usually the case. To get 30 Hz,
it would have to pass only every second half-cycle.

Dave

4702. Re: Radio Design Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-07 00:00:00 UTC
From: basil <basil@isoplethics5.free-online.co.uk>
Message-ID: <Pye34.665$N5.10285@wards>
Source record: 65068

Jason Hissong <jhisson1@columbus.rr.com> wrote in message
news:82jir0$r26$1@ssauraab-i-1.production.compuserve.com...
> Greetings everyone,
>
> Since getting my Advanced over the weekend, my interest of radio design is
> growing (due to the theory that you have to learn to pass it). I am still
a
> beginner than understands the basics, but I would like to experiment a
> little more. I saw that the ARRL has a nice program that does this,
> however, I am not willing to pay that much for it at this time. (I wish
> there was a demo of it to see what it is like.) Does anyone know of any
> freeware/shareware radio design packages that are available that I can
> download and try out? Something that would allow me to build a circuit
and
> tweak the components. i.e., what happens when I remove this resistor
here?
> What happens when I change the capacitance here? etc etc. I think this
> will help me learn more about why a circuit works the way it does.
>
> Thanks es 73
> Jason Hissong
> KC8HYI
>
> Try regen detector modelling. I have -1-2-3 and Supercalc models that
work!

Tim

4703. High frequency oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-07 00:00:00 UTC
From: Andr&#65533; Silva <andre_m_silva@yahoo.com>
Message-ID: <82ju55$8da$1@duke.telepac.pt>
Source record: 65069

Hi,

I'm looking for a schematic of an oscillator which would be variable between 98 and 118MHz. It would be used for a local oscillator of an FM receiver with a IF of 10.7 MHz. I would appreciate if someone could get me or tell me where to get that schematic. Thank you

Andre M. S.

4704. Re: High frequency oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-07 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <sli34.80900$5W2.2280818@news6.giganews.com>
Source record: 65070

There are many sources of what you seek. Many millions of homes have such oscillators in everything from a jogging radio to a full blown stereo receiver, and of course car radios.

If you want a diagram, pick any unit and get the service information. Hartley and Colpitts oscillators are commonly used. See any handbook for discussion of principles of operation.

These days, tuners are digital, and so these oscillators are controlled by phase locked loops or even have the frequencies synthesized in the more expensive units.

73, Bob K6DDX

4705. Re: FA: Scarce Issues of HAM RADIO Magazine

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-07 00:00:00 UTC
From: blackm00@cam.org
Message-ID: <blackm00-0712992038560001@dialup-607.hip.cam.org>
Source record: 65071
Cross-posted to: alt.ham-radio.marketplace,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchor,rec.radio.amateur.homebrew,rec.radio.amateur.dx

In article <384d9d18.24885839@news.azstarnet.com>, n7ws@arrl.net (Wes Stewart) wrote:

> On Mon, 06 Dec 1999 23:26:43 -0600, Jan Robbins <swanman@cfu.net> wrote:
>
> >HAM RADIO Magazine, 1984-1990, many full years. SEE--
>
> ARRL has bought the rights to republish *all* of the issues of hr on CDROM.
>
>
> N7WS
>
Now that is exciting news.

I have a fairly complete collection up till shortly after Jim Fisk died but then it shifted a bit, I shifted a bit, and for much of the last decade it wasn't readily available here. I've been tempted by the microfiche version, to fill in the missing issues and get things nice and neat. Other magazines, one could take out the "good" articles and discard the rest, but there never seemed to be much filler in Ham Radio. But the microfiche does require that you buy it all at one time, and I've never felt like spending that much for the whole set.

When Ham Radio shut down, and CQ bought the remains, they made a big deal of selling off the back issues. But I also remember that they carried a steep cover price, which is okay to fill in an occasional issue but not conducive to filling in complete years at one time. A while later, I contacted CQ to see if back issues were still available, and I was told that much of what was left had been discarded.
Judging from the price of QST on CD-ROM, I assume Ham Radio on CDROM will be more affordable, if for no other reason than one could buy it in stages.

Michael VE2BVW

>
> >
> >1984 http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=214819565
> >
> >1985 http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=214812548
> >
> >1986 http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=214795504
> >
> >1987 http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=214798194

> >
> >1988 http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=214799637
> >
> >1989 http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=215514674
> >
> >1990 http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=214815759
> >
> >Tks es 73!
> >

4706. Re: **Big Time Ametuer Needs.. A Little Help?**

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-07 00:00:00 UTC
From: Tom Bruhns <tom_bruhns@agilent.com>
Message-ID: <384DBD34.DB61F411@agilent.com>
Source record: 65072

Jeff...it's probably not trivial to make changes like that. The power gain of a stage with much lower power supply voltage will most likely be much lower. You might consider instead building an inverter power supply that will step your 3v up to 5v and 12v. If you're willing to have a transmitter that puts out way less than 5 watts, it might be practical to use the circuit you have as a starting point.

Cheers,
Tom

CalJeff21 wrote:
>
> Hello Everyone (anyone?),
>
> I have a schematic for a 5w transmitter that I want to make changes on. It has
> a 5v & 12v power sources that I want to make more like 3v each. I can email
> you what I have. Please help before I pull all my hair out.
>
> Thanks!!!
>
> Jeff

4707. Re: Polarized cap??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-07 00:00:00 UTC
From: Tom Bruhns <tom_bruhns@agilent.com>
Message-ID: <384DBDB7.39C109D6@agilent.com>
Source record: 65073

He didn't. Tantalums are electrolytics too. There are aluminum
electrolytics, and tantalum electrolytics. Tantalum electrolytics can
be had with liquid electrolyte and with solid electrolyte.

Cheers,
Tom

MC 10kW Jesus wrote:
>
> Ahem.....don't forget tantalum....:->
>
> MC
>
> Bob wrote:
>
> > There is no polarization on an oil filled capacitor. Only electrolytic
> > capacitors are polarized.
> >
> > 73, Bob K6DDX

4708. Re: other than 60, 50 & 400 Hz transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-07 00:00:00 UTC
From: Jim Adney <jadney@vwtype3.org>
Message-ID: <S7tNOJEa=bpn6Jay31=hPOLFYSOg@4ax.com>
Source record: 65074

marc_k@walrus.com (marc_k) wrote:

>I've seen incandesant bulbs running on 40 Hz...the flicker is quite
>noticeable, but not as bad as 25 would be.

Don't know where you would come across 40 Hz, but the flicker rate
from this would be 80 Hz and I don't think anyone has suggested that
you should be able to see this.

>On a aside, I walked into a friends bathroom some years back, turned on
>the light over the sink, and noticed a distinct flicker....I discoveres
>that he had installed "bulb savers" in the sockets(a silicon diode in a
>rubber disc that presses into the socket, under the base of the bulb).
>So I guess those bulbs were running at 30 Hz(actually, not really-the
>"off" period is longer this way).

Actually the rate would then be 60 Hz, but at least there is a
significant OFF period between each flicker. Still, I'm surprised that
this can be seen.

Jim
-

Jim Adney jadney@vwtype3.org
Madison,Wisconsin USA

4709. Need Transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-07 00:00:00 UTC
From: JLG5224 <codster30NOcoSPAM@hotmail.com.invalid>
Message-ID: <0221c012.9c76dedd@usw-ex0108-058.remarq.com>
Source record: 65075

I am building a power supply and need to find a 25VAC at
12A transformer. I would like to get some ideas where i
might look for one in something used such as a tv or other
appliance. If anyone has any ideas please email me.

Thanks

KB0YFH

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4710. Re: Radio Design Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-08 00:00:00 UTC
From: Lee Scott <DownWithJunkMail@Spam.Net>
Message-ID: <82m67c$a2u@nnrp4.farm.idt.net>
Source record: 64994

Jason Hissong wrote in message
<82jir0$r26$1@ssauraab-i-1.production.compuserve.com>...
>Greetings everyone,
>
>Since getting my Advanced over the weekend, my interest of radio design is
>growing (due to the theory that you have to learn to pass it). I am still
a
>beginner than understands the basics, but I would like to experiment a
>little more

>Something that would allow me to build a circuit and
>tweak the components

Down load the Microcap 6 demo from the site below. The demo is a circuit
analysis program that will do what you want.

http://www.spectrum-soft.com/

Leland C. Scott
KC8LDO

--
"We learn in time that subjects are not controversial,
but how we communicate about them and the
elements of personal blame we add in anger. "

4711. Re: Radio Design Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-08 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <384EB7BD.49E2@ixpres.com>
Source record: 64995

> KC8HYI

Jason OM,

"Radio Designer" software, its name notwithstanding, does not "design radios"
for you. It enables you to enter a circuit description,
and run a circuit analysis of it, to provide you with
information about its operation. You still have to interpret that information.
It does not replace actually building a circuit and learning how to make
measurements on it. It cannot design the circuit for you. To learn how circuits
work, you first need to experiment with proven designs, hands-on. Using a
computer just gets in the way in my opinion.
The computer is most useful AFTER you've assembled and tested real hardware a
few times, so that you can recognize results that are real and possible, from
those that are not. The computer does not make such distinctions, and you will
use up a lot of time just learning how to be a USER of the program, before you
get anything back from it that is instructive for building real circuits.
Save your money for a few components and a VOM, and start with a simple
proven design such as a code practice oscillator or such
circuit from the many examples in ham radio handbooks and literature. I suggest
you NOT buy new handbooks; in my opinion they are very expensive (I would
say overpriced), and you can usually find one at a local library. Save your money
for hardware that is re-usable.
What you need to do first is get familiar with basic circuit operation. All you need is
a cheap volt-ohm-milliammeter (VOM) analog or digital, a couple of flashlight batteries
and a few components for starters. Save the (expensive) computer software for later
on after you have a few projects under your belt.

73 and GL,
Don, W6JL

4712. Re: Radio Design Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-08 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <384EC9E3.5FE77B62@mwci.net>
Source record: 64996

Don W6JL wrote:

> > KC8HYI
>
> "Radio Designer" software, its name notwithstanding, does not "design
> radios"

It is a "Design Aid" that helps to evaluate and refine a design by simulation. And if you learn to use the Circles Utility it can be used to perform a true design process on amplifiers and their impedance matching networks.

Bill W0IYH

4713. Re: Broadband VHF frequency doubler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-08 00:00:00 UTC
From: Tom Bruhns <tom_bruhns@agilent.com>
Message-ID: <384EC917.8D39BC63@agilent.com>
Source record: 64997

Rick K. posted good info on doing it with a DBM. If you don't have any spare DBM's around, you can also do it with what's essentially a full-wave rectifier. Feed your signal into a low-Q center-tapped tuned circuit, or even just a broadband transformer with center tapped secondary (or an "autotransformer", 1:1, so it has a center tap). Ground the center tap and connect diodes from each output to a DC load and a low-Q resonant circuit or bandpass filter to pick off the second harmonic, which will be quite strong. Use Schottky signal diodes; don't ask for TOO much power out of them. Account for their capacitance (keep the impedances reasonably low). Oh, and do NOT feed the transformer with a square wave: the output then would be full "high" all the time, with no (very little) AC component. I think this is the same as one of Rick's comments about the DBM, worded a little differently.

You can also do a decent job digitally...xor'ing the squared-up VCO output with a phase-shifted version of itself. Over your limited range, the phase shift should be OK as just a fixed delay, though there will be some rolloff away from the optimal frequency, and also generation of third and other harmonics. 74AC-series of ICs can handle 100MHz pretty nicely.

Assuming you are going to put some power amplification after it, there's an advantage in doubling: the output is less likely to get into the VCO and cause squirrely behavior. -- I trust you will use this responsibly and not muck up my (or others') FM listening pleasure.

Cheers,
Tom

Raw Power Radio wrote:
>
> While experimenting in my lab, I built a very stable (1kHz of drift)
> VCO that spans 43MHz to 55Mhz. Redesigning it for 88-108 resulted in a
> range of only 90-107MHz and degraded stability. Naturally, it occurs to
> me that doubling the output of the stable 43-55MHz VCO could be a
> useful approach for a simple 3-meter exciter. Any recommendations for a
> good doubler circuit, preferably of the "no-tune" variety and without
> excessive insertion loss? I have seen some application circuits for
> doublers using the LM/MC1496 balanced modulator, but I am skeptical of
> the capability of this device at FM broadcast frequencies. (The
> operating range is vaguely stated as "up to" 100MHz in the datasheets).
> I am also aware of the practice of feeding one signal to both inputs of
> a four-quadrant multiplier, but these devices are costly and the ones
> with which I'm familiar are not usable at hundreds of MHz.
>

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4714. Re: Need Transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-08 00:00:00 UTC
From: Bob Weiss <bweiss@carroll.com>
Message-ID: <384ECD35.9ECCB0E@carroll.com>
Source record: 64998

Only household items I can think of would be a automotive battery charger or one of those transformers used for outdoor low voltage landscape lighting. IIRC, those are 24 VAC, with a grounded CT.

Any good electrical suply house should have either a "buck-boost transformer" or a "control transformer" that should work. 24VAC is a common industrial control voltage.

Bob Weiss N2IXK

JLG5224 wrote:

> I am building a power supply and need to find a 25VAC at
> 12A transformer. I would like to get some ideas where i
> might look for one in something used such as a tv or other
> appliance. If anyone has any ideas please email me.
>
> Thanks
>
> KB0YFH
>
> * Sent from RemarQ http://www.remarq.com The Internet's Discussion Network *
> The fastest and easiest way to search and participate in Usenet - Free!

4715. Re: Radio Design Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-08 00:00:00 UTC
From: Xjshillw6ivw@earthlink.net
Message-ID: <384ecce3.13415872@news.earthlink.net>
Source record: 64999

On Tue, 7 Dec 1999 13:14:44 -0500, "Jason Hissong"
<jhisson1@columbus.rr.com> wrote:

>Greetings everyone,
>
>Since getting my Advanced over the weekend, my interest of radio design is
>growing (due to the theory that you have to learn to pass it). I am still a
>beginner than understands the basics, but I would like to experiment a
>little more. I saw that the ARRL has a nice program that does this,
>however, I am not willing to pay that much for it at this time. (I wish
>there was a demo of it to see what it is like.) Does anyone know of any
>freeware/shareware radio design packages that are available that I can
>download and try out? Something that would allow me to build a circuit and
>tweak the components. i.e., what happens when I remove this resistor here?
>What happens when I change the capacitance here? etc etc. I think this
>will help me learn more about why a circuit works the way it does.
>
>Thanks es 73
>Jason Hissong
>KC8HYI
>
>
Jason:
Commercial vendors offer evaluation copies of software design packages
from time to time, and often can be downloaded. These downloads are
watered down versions where only a few components can be used, etc.
These packages cannot be too good, or potential buyers would use the
freebes instead of spending big bucks. The watered down package are
usually ok for simpler circuits, but there is another problem.

Unless you are much sharper than me (which could be..), you probably
will find it really difficult to jump into one of these packages cold
and do some worthwhile evaluations.

About a year ago, I downloaded a demo electronic CAD program. It took
about an hour to download Sunday morning when I was receiving data
almost steadily. I ended up with a number of programs and files, and
wondered what to do. I tried this and that, and found one of the
programs seemed to be a good place to start. After a while, I just let
it go, taking up much hard disk space.

More recently, I received an offer through the mail to get Electronic
Workbench at a healthy discount, which I accepted. Once again, I
entered a circuit, and it didn't work. I read their manual and worked
through their examples (their manual provided much hand holding). When

I had big problems, I sent an email to tech support, and received help shortly afterwards. In fact, they even telephoned me. The program wasn't trouble free and tech support was a big help.

Now, that I have my feet wet, I'm going to try the other program again.

If you really want to get into computer aided design, you would be money ahead to start saving and buy something like the ARRL Circuit. Designer. Pricewise, it's a bargain and they don't assume you are a seasoned designer. I can't comment on their tech support, as I have not used it.
73's Jim
Delete the X before using my e-mail address.
The X was added to stop spam.

4716. Re: other than 60, 50 & 400 Hz transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-08 00:00:00 UTC
From: davem@groucho.cs.ubc.ca
Message-ID: <82mpo2$keh@groucho.cs.ubc.ca>
Source record: 65000

Jim Adney <jadney@vwtype3.org> writes:

>Actually the rate would then be 60 Hz, but at least there is a
>significant OFF period between each flicker. Still, I'm surprised that
>this can be seen.

The eye can see at least 70 Hz or so, if the source is bright enough.
It also helps for it to be off to one side - your peripheral vision
can see faster flicker than the central area.

That's why many PCs were seen to be flickering with VGA displays
running at 60 Hz, and why PC frame buffers and monitors are now usually
capable of at least 75 HZ - usually more.

Dave

4717. Re: Electret mics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-08 00:00:00 UTC
From: davem@groucho.cs.ubc.ca
Message-ID: <82mph4$kdn@groucho.cs.ubc.ca>
Source record: 65001

"Bob" <balbert@cnmnetwork.com> writes:
>An electret microphone is a 'condenser' microphone. They are basically a
>pair of electrodes, the capacitance between which changes with sound
>pressure.

So far, so good.

>In order to get an output, a microphone like this must have a bias potential
>applied, with a dropping resistor. The higher the potential, the better.
>To eliminate the need for an external power supply, this little capacitor
>microphone, made of plastic, is charged while heated. When cooled, it
>retians its charge because the material is too hard for the lttle dipoles to
>go back to their normal state. So we have a built in charge.

>The word electret means a permanently charged material.

You're confusing two different types of "bias" here.

The electret material itself does have a permanent electric bias built
into it, as you've described. This allows building a condenser mic
without any external source of bias voltage on the plates. Older
condenser mic designs used a power supply to provide a couple hundred
volts or so of bias between two metal electrodes. The electret eliminates
the need for this high-voltage bias.

But the signal coming from the membrane in a condenser mic (electret
or otherwise) is extremely high impedance - you can't draw any current
at all from it. So all condenser mics have a high-impedance to low-
impedance buffer amplifier built into them. These days, it's usually
a FET of some sort. This FET amplifier needs operating current, and
this is also called "bias". This bias current is supplied on the signal
wires by a resistor.

To drive these two-wire mics, you need a resistor connected to a
power source (typically several K ohms) to provide the amplifier bias
current, and a capacitor to pick off the audio signal while blocking
the DC voltage created by the bias current.

So, a classical condenser mic needs both a bias voltage for the microphone
capsule, plus a bias current (power supply) for the amplifier. The electret
mic gets rid of the need for the former, but not the latter.

Dave

4718. WANTED: AMPERITE 5NT150 8 PIN TUBE FOR DENTRON DTR-2000L AMP

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-08 00:00:00 UTC
From: Frank Dubec <frankdubec@earthlink.net>
Message-ID: <384EF021.17075449@earthlink.net>
Source record: 65002

GLASS TUBE TIMER, 8 PIN, OCTAL SOCKET...FOR OLD DENTRON DTR-2000L AMPLIFIER

USED FOR 3 MINUTE DELAY ON 8877 AMPLIFIER TUBE (FILAMENT WARM UP) 5 VAC

PLEASE EMAIL IF YOU HAVE ONE FOR SALE OR KNOW WHERE I CAN GET ONE CHEAP!

TNX...FRANK

4719. Re: Need Transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-08 00:00:00 UTC
From: Tom Bruhns <tom_bruhns@agilent.com>
Message-ID: <384EEE55.568DAD97@agilent.com>
Source record: 65003

These days, I think essentially all of the landscape lighting
"transformers" are really switching power supplies driving a much
cheaper high-frequency core, and generating lots of hash. They just
feed the secondary AC to the lights. But the control transformer idea
is a good one ('cept maybe for what the 'lectrical supply house will
charge for one).

I'd look for one at a surplus outfit like Surplus Center. I've gotten
things kind of like that from them.

Cheers,
Tom

Bob Weiss wrote:
>
> Only household items I can think of would be a automotive battery charger or one
> of those transformers used for outdoor low voltage landscape lighting. IIRC,
> those are 24 VAC, with a grounded CT.
>
> Any good electrical suply house should have either a "buck-boost transformer"
> or a "control transformer" that should work. 24VAC is a common industrial
> control voltage.
>
> Bob Weiss N2IXK
>
> JLG5224 wrote:
>
> > I am building a power supply and need to find a 25VAC at
> > 12A transformer. I would like to get some ideas where i
> > might look for one in something used such as a tv or other
> > appliance. If anyone has any ideas please email me.
> >
> > Thanks
> >
> > KB0YFH
> >
> > * Sent from RemarQ http://www.remarq.com The Internet's Discussion Network *
> > The fastest and easiest way to search and participate in Usenet - Free!

4720. Re: FA: Scarce Issues of HAM RADIO Magazine

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-08 00:00:00 UTC
From: n7ws@arrl.net
Message-ID: <384d9d18.24885839@news.azstarnet.com>
Source record: 65076
Cross-posted to: alt.ham-radio.marketplace,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchor,rec.radio.amateur.homebrew,rec.radio.amateur.dx

On Mon, 06 Dec 1999 23:26:43 -0600, Jan Robbins <swanman@cfu.net> wrote:

>HAM RADIO Magazine, 1984-1990, many full years. SEE--

ARRL has bought the rights to republish *all* of the issues of hr on CDROM.

N7WS

>
>1984 http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=214819565
>
>1985 http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=214812548
>
>1986 http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=214795504
>
>1987 http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=214798194
>
>1988 http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=214799637
>
>1989 http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=215514674
>
>1990 http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=214815759
>
>Tks es 73!
>

4721. Re: Polarized cap??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-08 00:00:00 UTC
From: MC 10kW Jesus <qsl27@hotmail.com>
Message-ID: <384DAE50.B9D9975A@hotmail.com>
Source record: 65077

Ahem.....don't forget tantalum....:->

MC

Bob wrote:

> There is no polarization on an oil filled capacitor. Only electrolytic
> capacitors are polarized.
>
> 73, Bob K6DDX

4722. **Big Time Ametuer Needs.. A Little Help?**

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-08 00:00:00 UTC
From: caljeff21@aol.com
Message-ID: <19991207203032.03905.00000538@ng-fk1.aol.com>
Source record: 65078

Hello Everyone (anyone?),

I have a schematic for a 5w transmitter that I want to make changes on. It has a 5v & 12v power sources that I want to make more like 3v each. I can email you what I have. Please help before I pull all my hair out.

Thanks!!!

Jeff

4723. Re: FA: Scarce Issues of HAM RADIO Magazine

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-08 00:00:00 UTC
From: k6mhe@arrl.net
Message-ID: <384ebda9.13821316@news.mcn.org>
Source record: 65079

On Wed, 08 Dec 1999 00:02:33 GMT, n7ws@arrl.net (Wes Stewart) wrote:

>On Mon, 06 Dec 1999 23:26:43 -0600, Jan Robbins <swanman@cfu.net> wrote:
>
>>HAM RADIO Magazine, 1984-1990, many full years. SEE--
>
>ARRL has bought the rights to republish *all* of the issues of hr on CDROM.
>
>
>N7WS
>
>
I don't think so.... CQ is the successor to Ham Radio Magazine..

K6MHE

4724. Re: FA: Scarce Issues of HAM RADIO Magazine

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-08 00:00:00 UTC
From: n7ws@arrl.net
Message-ID: <384dbebc.33498962@news.azstarnet.com>
Source record: 65080
Cross-posted to: alt.ham-radio.marketplace,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchor,rec.radio.amateur.homebrew,rec.radio.amateur.dx

On Tue, 07 Dec 1999 20:38:55 -0500, blackm00@cam.org (Michael Black) wrote:

>In article <384d9d18.24885839@news.azstarnet.com>, n7ws@arrl.net (Wes
>Stewart) wrote:
>
>> On Mon, 06 Dec 1999 23:26:43 -0600, Jan Robbins <swanman@cfu.net> wrote:
>>
>> >HAM RADIO Magazine, 1984-1990, many full years. SEE--
>>
>> ARRL has bought the rights to republish *all* of the issues of hr on CDROM.
>>
>>
>> N7WS
>>
>Now that is exciting news.
>
>I have a fairly complete collection up till shortly after Jim Fisk died
>but then it shifted a bit, I shifted a bit, and for much of the last
>decade it wasn't readily available here. I've been tempted by the
>microfiche version, to fill in the missing issues and get things nice
>and neat. Other magazines, one could take out the "good" articles and
>discard the rest, but there never seemed to be much filler in Ham Radio.
>But the microfiche does require that you buy it all at one time, and
>I've never felt like spending that much for the whole set.
>
>When Ham Radio shut down, and CQ bought the remains, they made a big
>deal of selling off the back issues. But I also remember that they
>carried a steep cover price, which is okay to fill in an occasional
>issue but not conducive to filling in complete years at one time. A
>while later, I contacted CQ to see if back issues were still available,
>and I was told that much of what was left had been discarded.
>Judging from the price of QST on CD-ROM, I assume Ham Radio on CDROM
>will be more affordable, if for no other reason than one could buy it
>in stages.
>
> Michael VE2BVW
>
I was a big fan of hr and was even published twice in it. Some months ago,
someone at CQ put out a request for a few back issues that they were missing. I
had them and offered them up, but they found them elsewhere.

I assumed at that time that they were going to do a CDROM. However, I was in
Newington in September and talked with one of the editors that was working on a

piece I did for the latest Antenna Compendium and he mentioned that they were doing the CD. That's all I know it, but I too look forward to having everything in one place. I can use the room!

73,

Wes

4725. Re: Electret mics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-08 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <Ono34.81319$5W2.2296762@news6.giganews.com>
Source record: 65081

An electret microphone is a 'condenser' microphone. They are basically a pair of electrodes, the capacitance between which changes with sound pressure.

In order to get an output, a microphone like this must have a bias potential applied, with a dropping resistor. The higher the potential, the better. To eliminate the need for an external power supply, this little capacitor microphone, made of plastic, is charged while heated. When cooled, it retians its charge because the material is too hard for the lttle dipoles to go back to their normal state. So we have a built in charge.

The word electret means a permanently charged material.

73, Bob K6DDX

4726. Re: other than 60, 50 & 400 Hz transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-08 00:00:00 UTC
From: marc_k@walrus.com
Message-ID: <82la04ljq1@alice.walrus.com>
Source record: 65082

Shawn Upton (supton@eece.maine.edu) wrote:
: marc_k wrote:
: > I've seen incandesant bulbs running on 40 Hz...the flicker is quite
: > noticeable, but not as bad as 25 would be.
: > On a aside, I walked into a friends bathroom some years back, turned on
: > the light over the sink, and noticed a distinct flicker....I discoveres
: > that he had installed "bulb savers" in the sockets(a silicon diode in a
: > rubber disc that presses into the socket, under the base of the bulb).
: > So I guess those bulbs were running at 30 Hz(actually, not really-the
: > "off" period is longer this way).

: Would that really extend the life of the light bulb? I thought it was
: the intial surge of current through the filament (until the filament
: heats up and changes resistance) that eventually leads to failure.
: --
: **
: Shawn Upton
: Electrical Engineering Student
: University of Maine at Orono
: webpage: http://www.eece.maine.edu/~supton/
: mail: supton@eece.maine.edu
: KB1CKT Tech Plus
: **

I suspect that they do help a bit, but that the benifits are probably
limited.
OTOH, there used to be a different type of "bulb saver" that was using a
thermistor in a rubber ring, that again, pressed into the socket.
The bulb would "come up" slowly.
This DID work(at least on the turn-on surge anyway).
And no extra flicker(the bulb DID end up a bit dimmer though).

4727. FS: 500watt 23cm amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-08 00:00:00 UTC
From: David Sparvell <sparvell@*nospam*rftechnology.co.uk>
Message-ID: <82lnv9$2fp$1@gxsn.com>
Source record: 65083
Cross-posted to: alt.ham-radio.eme,alt.ham-radio.marketplace,alt.ham-radio.uwave,alt.ham-radio.vhf-uhf,rec.radio.amateur.homebrew,uk.radio.amateur

23cm amplifiers for sale.

500 watt 23 cm amplifier to OZ9CR design with 6 x 2C39A tubes.
10dB gain

Requires 1600V at 750mA.
Offers

Also FS a single 2C39A amp suitable as a driver for the above.

G4FTC - Camberley Surrey

Please remove *nospam* before replying

4728. Source for Crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-08 00:00:00 UTC
From: Jack <Adryheat2@ayahooa.com>
Message-ID: <384E67E1.D0DE38DD@ayahooa.com>
Source record: 65084

Hi all!

Can anyone point me to a source for crystals. I'm converting a CB rig over to ham. I did the same conversion 10 years ago and got my crystals from JAN. They still grind 'em but they are pricey at $10 each. Just looking for a little better deal if anyone can help.

They are HC-18U type with solder-in leads.

Thanks!

Jack

To private email remove all the a's from my address above.

4729. Broadband VHF frequency doubler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-08 00:00:00 UTC
From: Raw Power Radio <rawpowerradioNOraSPAM@go.com.invalid>
Message-ID: <01906254.c564dbcb@usw-ex0102-013.remarq.com>
Source record: 65085

While experimenting in my lab, I built a very stable (1kHz of drift) VCO that spans 43MHz to 55Mhz. Redesigning it for 88-108 resulted in a range of only 90-107MHz and degraded stability. Naturally, it occurs to me that doubling the output of the stable 43-55MHz VCO could be a useful approach for a simple 3-meter exciter. Any recommendations for a good doubler circuit, preferably of the "no-tune" variety and without excessive insertion loss? I have seen some application circuits for doublers using the LM/MC1496 balanced modulator, but I am skeptical of the capability of this device at FM broadcast frequencies. (The operating range is vaguely stated as "up to" 100MHz in the datasheets). I am also aware of the practice of feeding one signal to both inputs of a four-quadrant multiplier, but these devices are costly and the ones with which I'm familiar are not usable at hundreds of MHz.

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4730. Re: Broadband VHF frequency doubler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-08 00:00:00 UTC
From: rick@area.com
Message-ID: <82lr0a$jj5$1@vax.area.com>
Source record: 65086

In article <01906254.c564dbcb@usw-ex0102-013.remarq.com>,
Raw Power Radio <rawpowerradioNOraSPAM@go.com.invalid> wrote:
>good doubler circuit, preferably of the "no-tune" variety and without
>excessive insertion loss? I have seen some application circuits for

Get any general purpose mixer, such as the MiniCircuits ASK-1 or equivalent
and connect the LO and RF ports in series. Drive them with 5 mW at the
fundamental. Shunt the IF port with an RF choke and couple out the
second harmonic from there. Tip: use a low pass filter with series
inductors at the input/output between the source and the LO/RF input.
Not essential, but improves performance.

Rick Karlquist N6RK
rick@area.com

4731. Re: High frequency oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-08 00:00:00 UTC
From: Raw Power Radio <rawpowerradioNOraSPAM@go.com.invalid>
Message-ID: <004aa0e3.c936f0c0@usw-ex0102-013.remarq.com>
Source record: 65087

Andre,

If you do a web search on terms like "pirate radio", "LPFM" and "hobby broadcasting", you will find a number of sites that offer schematics for VFOs operating in the 88-108MHz broadcast band. Shifting the range of these oscillators up by 10MHz is usually a simple matter of adjusting coil turns spacing. The circuits you will find on these sites range from simple single-transistor "bugs" to fairly sophisticated push-pull self-doubling oscillators. Don't expect world-beating performance in terms of stability from any free-running oscillator in the 100MHz range, however. Professional broadcast equipment and even much of the "pirate" gear nowadays is PLL-synthesized.

For a simple and relatively inexpensive ($16) one-chip solution, I suggest the POS-150 VCO module from Mini-Circuits. This module spans 75-150MHz and operates off a 12V supply. You can run it from a maximum of +15V for higher output (10mW). By impressing audio on the tuning voltage, you can even use it as a nifty little FM exciter... a great little hobby project or mini radio station for the kids. Stability is pretty good as long as the tuning voltage has a low source impedance. (I'm not sure why this is, but it was mentioned to me by another hobbyist and verified by my own experiments).

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4732. Re: RF Power Transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-08 00:00:00 UTC
From: Raw Power Radio <rawpowerradioNOraSPAM@go.com.invalid>
Message-ID: <283beef1.cb9d3ede@usw-ex0102-013.remarq.com>
Source record: 65088

I don't know about 10W devices, but there's the 2SC1971, which will do 6W output at 400mW input with a 12V supply, and is relatively inexpensive (about $7). It comes in a plastic T0-3P package with the "tab" connected to the emitter, so you can bolt it right to your heatsink without insulation. I used the NTE equivalent in a 6 watt amp for the FM broadcast band. (I think it's NTE342, but don't hold me to that).

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4733. Re: Radio Design Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-08 00:00:00 UTC
From: "Charles H. Reichert" <reichert@cig.mot.com>
Message-ID: <384E7874.D89CE147@cig.mot.com>
Source record: 65089

Try http://www.mbn.net/kd9jq/hamradio

for some freeware programs.

Chuck KD9JQ

Jason Hissong wrote:
>
> Greetings everyone,
>
> Since getting my Advanced over the weekend, my interest of radio design is
> growing (due to the theory that you have to learn to pass it). I am still a
> beginner than understands the basics, but I would like to experiment a
> little more. I saw that the ARRL has a nice program that does this,
> however, I am not willing to pay that much for it at this time. (I wish
> there was a demo of it to see what it is like.) Does anyone know of any
> freeware/shareware radio design packages that are available that I can
> download and try out? Something that would allow me to build a circuit and
> tweak the components. i.e., what happens when I remove this resistor here?
> What happens when I change the capacitance here? etc etc. I think this
> will help me learn more about why a circuit works the way it does.
>
> Thanks es 73
> Jason Hissong
> KC8HYI

4734. Need help AC to DC Welding Machine Conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-08 00:00:00 UTC
From: oldgear@aol.com
Message-ID: <19991208121416.28795.00000050@ng-fm1.aol.com>
Source record: 65090

I have a lincoln 225 AMP AC welding machine. I have some 300 AMP Diods and would like to build a DC conversion box to plug into the machine when DC current is needed to burn certain welding rods. Does anyone have a schematic for such a project or can you tell me what else may be required.

Thanks

4735. Re: Need Transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-08 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <5yw34.81504$5W2.2311149@news6.giganews.com>
Source record: 65091

Nope, not in a TV set. You might have better luck with a battery charger.

73, Bob K6DDX

4736. Re: Need help AC to DC Welding Machine Conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-08 00:00:00 UTC
From: Lee Scott <DownWithJunkMail@Spam.Net>
Message-ID: <82m5id$9uq@nnrp4.farm.idt.net>
Source record: 65092

OLD GEAR wrote in message <19991208121416.28795.00000050@ng-fm1.aol.com>...
>I have a lincoln 225 AMP AC welding machine. I have some 300 AMP Diods and
>would like to build a DC conversion box to plug into the machine when DC
>current is needed to burn certain welding rods. Does anyone have a
schematic
>for such a project or can you tell me what else may be required.

Just make sure that you use a FULL BRIDGE RECTIFIER on the secondary! If you don't the high DC current, due to a half bridge rectifier, through the transformer secondary winding will saturate the core. You will also need a good heatsink for the diodes and a snubber network, series RC, across each diode to control spikes from diode recovery effects.

Leland C. Scott
KC8LDO

--
"We learn in time that subjects are not controversial,
but how we communicate about them and the
elements of personal blame we add in anger. "

4737. CB radios transformation

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-09 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <82o5d0tae1@nnrp1.deja.com>
Source record: 65004

Due the odd frequency distribution of the CB channels, normally the channel switch is very complex. So, when we try to transform/convert those radios to ham bands, the 10KHz (ideal) steps are not got (there are some 20KHz steps and channel 24 and 25 have lower frequencies than channel 23).
To overcome this problem I've used with success an EPROM or ROM (this is smaller) between the switch and the PLL divider, transforming that odd frequency distribution into a well behaved 10KHz steps band.
The ROM must have its address inputs connected to the switch and its data outputs connected to the divider inputs. The ROM must be programmed in such way that the bits are rearranged to get a normal frequency sequence.

--
Greetings,

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Before you buy.

4738. Re: Broadband VHF frequency doubler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-09 00:00:00 UTC
From: yvon roy <soj@sympatico.ca>
Message-ID: <384F34B0.528FAC81@sympatico.ca>
Source record: 65005

Hello! If two transistors were used in class B instead of diodes, with the two collectors
tied to a resonant circuit; would it be possible to get gain out of this kind of doubler circuit? Regards! Yvon VE2AUC

Tom Bruhns wrote:

> Rick K. posted good info on doing it with a DBM. If you don't have any
> spare DBM's around, you can also do it with what's essentially a
> full-wave rectifier. Feed your signal into a low-Q center-tapped tuned
> circuit, or even just a broadband transformer with center tapped
> secondary (or an "autotransformer", 1:1, so it has a center tap).
> Ground the center tap and connect diodes from each output to a DC load
> and a low-Q resonant circuit or bandpass filter to pick off the second
> harmonic, which will be quite strong. Use Schottky signal diodes; don't
> ask for TOO much power out of them. Account for their capacitance (keep
> the impedances reasonably low). Oh, and do NOT feed the transformer
> with a square wave: the output then would be full "high" all the time,
> with no (very little) AC component. I think this is the same as one of
> Rick's comments about the DBM, worded a little differently.
>
> You can also do a decent job digitally...xor'ing the squared-up VCO
> output with a phase-shifted version of itself. Over your limited range,
> the phase shift should be OK as just a fixed delay, though there will be
> some rolloff away from the optimal frequency, and also generation of
> third and other harmonics. 74AC-series of ICs can handle 100MHz pretty
> nicely.
>
> Assuming you are going to put some power amplification after it, there's
> an advantage in doubling: the output is less likely to get into the VCO
> and cause squirrely behavior. -- I trust you will use this responsibly
> and not muck up my (or others') FM listening pleasure.
>
> Cheers,
> Tom
>
> Raw Power Radio wrote:
> >
> > While experimenting in my lab, I built a very stable (1kHz of drift)
> > VCO that spans 43MHz to 55Mhz. Redesigning it for 88-108 resulted in a
> > range of only 90-107MHz and degraded stability. Naturally, it occurs to
> > me that doubling the output of the stable 43-55MHz VCO could be a
> > useful approach for a simple 3-meter exciter. Any recommendations for a
> > good doubler circuit, preferably of the "no-tune" variety and without
> > excessive insertion loss? I have seen some application circuits for

> > doublers using the LM/MC1496 balanced modulator, but I am skeptical of
> > the capability of this device at FM broadcast frequencies. (The
> > operating range is vaguely stated as "up to" 100MHz in the datasheets).
> > I am also aware of the practice of feeding one signal to both inputs of
> > a four-quadrant multiplier, but these devices are costly and the ones
> > with which I'm familiar are not usable at hundreds of MHz.
> >
> > * Sent from RemarQ http://www.remarq.com The Internet's Discussion Network *
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4739. Re: WTB: CLC520 Variable Gain RF AMP IC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-09 00:00:00 UTC
From: yvon roy <soj@sympatico.ca>
Message-ID: <384F38F4.71537851@sympatico.ca>
Source record: 65006

Try DIGI-KEY! Regards

py1ll@my-deja.com wrote:

> In article <%fj_3.818$tk4.19863@typhoon-sf.snfc21.pbi.net>,
> "Norman Gillaspie" <pcseng@pacbell.net> wrote:
> > I am looking for a few pieces of a National Semiconductor
> > CLC520 AGC IC.
> >
> > norman@pcseng.com
> >
> >
>
> Contact Pioneer-Standarsd Electronics at www.pios.com
> --
> Greetings,
>
> Luiz - PY1LL
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

4740. Re: IC IF amp & detector for AM????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-09 00:00:00 UTC
From: yvon roy <soj@sympatico.ca>
Message-ID: <384F3BBC.414D3C61@sympatico.ca>
Source record: 65007

You can use a FM detector IC for AM demodulation by splitting the signal into two paths; one path goes to the limiter input and the second path is connected to the "multiplier" input (Also called product detector) This is equivalent to synchronous detection which is very linear.You will have to experiment with the input level and phase to the multiplier input. Such a circuit was published in RF Design magazine a number of years ago. Regards! VE2AUC

Martin wrote:

> I'm building an aircraft receiver using the NE602 as the front end. This
> goes really well- andI can feed into my communications receiver as the front
> end. My question is: does anyone have a 'pet' linear IC for the IF amp and
> detector? I could use a ZN414 or a MC1350P I guess, but is there anything
> better out there for AM? (theres heaps of FM IC's but I am looking for AM)

4741. Re: Radio Design Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-09 00:00:00 UTC
From: William 'die rote casa' Gates <wegates@prodigy.net>
Message-ID: <384F37B6.5D44E861@prodigy.net>
Source record: 65008

i used electronic workbench in high school...it's good stuff once you learn it

4742. Re: Need help AC to DC Welding Machine Conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-09 00:00:00 UTC
From: William 'die rote casa' Gates <wegates@prodigy.net>
Message-ID: <384F3817.B2125A4F@prodigy.net>
Source record: 65009

don't forget to fuse it at both ends! arc welders can spike in crazy
ways that you just don't see in other circuits

Lee Scott wrote:
>
> OLD GEAR wrote in message <19991208121416.28795.00000050@ng-fm1.aol.com>...
> >I have a lincoln 225 AMP AC welding machine. I have some 300 AMP Diods and
> >would like to build a DC conversion box to plug into the machine when DC
> >current is needed to burn certain welding rods. Does anyone have a
> schematic
> >for such a project or can you tell me what else may be required.
>
> Just make sure that you use a FULL BRIDGE RECTIFIER on the secondary! If you
> don't the high DC current, due to a half bridge rectifier, through the
> transformer secondary winding will saturate the core. You will also need a
> good heatsink for the diodes and a snubber network, series RC, across each
> diode to control spikes from diode recovery effects.
>
> Leland C. Scott
> KC8LDO
>
> --
> "We learn in time that subjects are not controversial,
> but how we communicate about them and the
> elements of personal blame we add in anger. "

4743. IR control Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-09 00:00:00 UTC
From: daren@powerup.com.au
Message-ID: <384f7cfd.524094@nntp.powerup.com.au>
Source record: 65010

I have an idea of constructing a single function IR control switch
that has variable frequency so that I can use it for many different
devices other than a TV or a VCR by using a programmable IR remote
control I could incorporate all these functions including the TV/VCR
into one controller.

Could someone help me out by way of a scan of a schematic of a single
function remote switch to see if I can use it to modify it's frequency
so i can make mutiple versions all operating on different frequencies
so I can control many different appliances ????

Any suggestions would be of great help

Daren

4744. IR transmission to pager??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-09 00:00:00 UTC
From: johnbernstein_99@yahoo.com.au
Message-ID: <384f924d.15164056@syd-news.tpg.com.au>
Source record: 65011

I know that some of the later pagers are set up using IR
Can data be transmitted to the pager using IR techniques?
Thanks

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4745. Re: Broadband VHF frequency doubler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-09 00:00:00 UTC
From: Raw Power Radio <rawpowerradioNOraSPAM@go.com.invalid>
Message-ID: <28bc935d.532732a3@usw-ex0102-013.remarq.com>
Source record: 65012

In article <384EC917.8D39BC63@agilent.com>, Tom Bruhns
<tom_bruhns@agilent.com> wrote:
> Assuming you are going to put some power amplification after it,
> there's
> an advantage in doubling: the output is less likely to get into
> the VCO
> and cause squirrely behavior. -- I trust you will use this
> responsibly
> and not muck up my (or others') FM listening pleasure.

No need to worry... I'm not building a jamming device :)

Thanks to all for the excellent replies. I'm impressed by the level of
knowledge on this newsgroup, and I think I'll hang around for a while.

Incidentally, I posted the same message on another group and the
suggestions offered included a single transistor amplifier, biased into
the nonlinear region with the collector tuned to the second harmonic,
and a push-pull pair of class-B biased transistors driven 180 degrees
out of phase with the collectors tied together.

I was back in the lab last night, and I did manage to build a VCO that
will work well across 88-108...provided it was not loaded whatsoever.
As soon as I loaded it even very lightly with an amplifier or even a
buffer, the performance and tuning range degraded.

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4746. Re: Electret mics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-09 00:00:00 UTC
From: blackm00@cam.org
Message-ID: <blackm00-0912991258370001@dialup-651.hip.cam.org>
Source record: 65013

In article <82mph4$kdn@groucho.cs.ubc.ca>, davem@groucho.cs.ubc.ca (Dave Martindale) wrote:

> "Bob" <balbert@cnmnetwork.com> writes:
> >An electret microphone is a 'condenser' microphone. They are basically a
> >pair of electrodes, the capacitance between which changes with sound
> >pressure.
>
> So far, so good.
>
> >In order to get an output, a microphone like this must have a bias potential
> >applied, with a dropping resistor. The higher the potential, the better.
> >To eliminate the need for an external power supply, this little capacitor
> >microphone, made of plastic, is charged while heated. When cooled, it
> >retians its charge because the material is too hard for the lttle dipoles to
> >go back to their normal state. So we have a built in charge.
>
> >The word electret means a permanently charged material.
>
> You're confusing two different types of "bias" here.
>
> The electret material itself does have a permanent electric bias built
> into it, as you've described. This allows building a condenser mic
> without any external source of bias voltage on the plates. Older
> condenser mic designs used a power supply to provide a couple hundred
> volts or so of bias between two metal electrodes. The electret eliminates
> the need for this high-voltage bias.
>
> But the signal coming from the membrane in a condenser mic (electret
> or otherwise) is extremely high impedance - you can't draw any current
> at all from it. So all condenser mics have a high-impedance to low-
> impedance buffer amplifier built into them. These days, it's usually
> a FET of some sort. This FET amplifier needs operating current, and
> this is also called "bias". This bias current is supplied on the signal
> wires by a resistor.
>
> To drive these two-wire mics, you need a resistor connected to a
> power source (typically several K ohms) to provide the amplifier bias
> current, and a capacitor to pick off the audio signal while blocking
> the DC voltage created by the bias current.
>
> So, a classical condenser mic needs both a bias voltage for the microphone
> capsule, plus a bias current (power supply) for the amplifier. The electret
> mic gets rid of the need for the former, but not the latter.

>
> Dave

Considering how cheap they are, the curious might well buy an electret element, or take one out of a junk piece of equipment, and take it apart. I'd seen diagrams, but a few months ago I actually took one apart when a similar question appeared elsewhere. I had assumed that the FET would be some tiny non-standard package, but the one I opened was a regular plastic encased FET, which could be used elsewhere. Most of the electret package is indeed taken up with the FET and the resistor or two.

Michael VE2BVW

4747. Re: IC IF amp & detector for AM????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-09 00:00:00 UTC
From: Jake Brodsky <frussle@erols.com>
Message-ID: <vrtv4soa350kkqse2irvamturvr4kgogh0@4ax.com>
Source record: 65014

On Thu, 09 Dec 1999 02:10:33 GMT, yvon roy <soj@sympatico.ca> wrote:

>You can use a FM detector IC for AM demodulation by splitting the signal into
>two paths; one path goes to the limiter input and the second path is connected
>to the "multiplier" input (Also called product detector) This is equivalent to
>synchronous detection which is very linear.You will have to experiment with the
>input level and phase to the multiplier input. Such a circuit was published in
>RF Design magazine a number of years ago. Regards! VE2AUC

It looks synchronous, it "feels" like synchronous --but it's not.
It's called quasi-synchronous. Why? Because if you were to feed it a
true DSBSC AM signal, it wouldn't be able to capture the signal.

What you need is an IF splitter, one path to a product detector, one
path to a X2 multiplier and limiter. Then you divide the doubled and
limited carrier back down to your carrier frequency, make adjustments
to the phase, and THEN you will have a synchronous detector.

The reason for the frequency doubler is because with a true DSB
signal, merely limiting it will give you a messy, wide signal --not
the carrier. The only way you can get the carrier to emerge from the
limiter is there was already a strong carrier to begin with.

Doubling a DSB signal, will give you only a carrier with
(theoretically) no sidebands. Dividing the doubled carrier by two
will recover a DSB carrier on frequency. Naturally by the time you
propagate through all this, you'll need to tinker with the phase.

73,

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

4748. FS: EEV C1111/715C valve

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-09 00:00:00 UTC
From: arnoldg@sf.telia.no
Message-ID: <38502850.50149696@news.telia.no>
Source record: 65015

Hi,

I have one EEV (English Electric Valves) C1111 valve for sale. This is
the same as 715C. The valve is in its original packing and unused.
Very nice and in mint condition. Top quality.
Best offer.

Regards,

Arnold Goks�yr

DEMOSTENES - N6899 Balestrand, Norway
Tlf. +47 5769 1340 Fax +47 5769 1267

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4749. Re: Broadband VHF frequency doubler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-09 00:00:00 UTC
From: Tom Bruhns <tom_bruhns@agilent.com>
Message-ID: <385025A5.D4582E33@agilent.com>
Source record: 65016

Yes; if you look in some older ARRL VHF manuals, at least, and probably
in newer ones too, you'll find just such a circuit. Drive the inputs
push-pull and connect the collectors together. Again, avoid driving
with a square wave, because then either one or the other transistor is
on all the time! (You can do pretty well if you just drive each with a
short pulse...class C works better, I believe, than class B.)

Cheers,
Tom

yvon roy wrote:
>
> Hello! If two transistors were used in class B instead of diodes, with the two
> collectors
> tied to a resonant circuit; would it be possible to get gain out of this kind of
> doubler circuit? Regards! Yvon VE2AUC

(diode doubler description deleted)

4750. Re: SN76660N FM detector chip

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-09 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <384c470b.19424575@news.online.no>
Source record: 65017

On Sun, 5 Dec 1999 15:27:18 -0000, "John Cunningham"
<john.jc@virgin.net> wrote:

>Im looking for any info on this chip. Please email to john.jc@virgin.net if
>you can help.
>
>
>
TI SN76660N =TBA120

I have some detailed circuit for it somewhere, mentioned in Radcom
1975(?), can scan it if you need it
only problem I remember, is that it draws substantially amount of
current, 25-30mA whether you use 6 or 11V supply, SO41P was an
improvement in saving current, but this is also obsolete for some
years

Have used the IC for FM-quadrature demodulators on 455 kc and 10.7Mc,
as well as audio mixer/oscillator, AM/SSB-demodulator and
phasedetector

73 jan-martin LA8AK

4751. tunable bpf 100-300 and 300-1000kHz?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-09 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <384c5a1e.24308497@news.online.no>
Source record: 65018

need a tunable two-inductor bandpassfilter 100-300 and 300-1000kHz,
have 2x455��F variable capacitor, but cannot find a suitable design

any suggestions from somebody who have already made similar filter?

Examined two car-radioes for possible slug-tuned coils, one had small
inductors, two of which were almost equal value, but low Q (30-50),
while the other has no equal coils (suppose it has no RF amplifier)

73 jan-martin LA8AK

4752. Re: DRAKE 2B Knobs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-09 00:00:00 UTC
From: Simon Robinson <nomis@euphony.net>
Message-ID: <82pfkb$2cj1$1@quince.news.easynet.net>
Source record: 65019
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap,uk.radio.amateur

A couple of weeks ago I posted a message asking for two of the smaller knobs for the front of my Drake 2B. It has had some dreadful 'wronguns' on since I got it.

The first guy to reply ceased contact when he found I was in the U.K. The second guy to reply KNEW I was in the UK, said he'd sent them and now he won't even reply to my e-mails. I've offered him money too!

I am more than willing to PAY for a couple of knobs if someone will just help.

In an earlier posting another amateur offered to send me details for my RME69. I sent him $10 as agreed and I got a great set of copied info. and can now rebuild my radio.

ANYONE have a couple of knobs?

73

Simon (in the UK)

4753. Re: IC IF amp & detector for AM????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-10 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <38503c03.326226@news.online.no>
Source record: 65020

On Thu, 09 Dec 1999 02:10:33 GMT, yvon roy <soj@sympatico.ca> wrote:

>You can use a FM detector IC for AM demodulation by splitting the signal into
>two paths; one path goes to the limiter input and the second path is connected
>to the "multiplier" input (Also called product detector) This is equivalent to
>synchronous detection which is very linear.You will have to experiment with the
>input level and phase to the multiplier input. Such a circuit was published in
>RF Design magazine a number of years ago. Regards! VE2AUC
>
>Martin wrote:
>
>> I'm building an aircraft receiver using the NE602 as the front end. This
>> goes really well- andI can feed into my communications receiver as the front
>> end. My question is: does anyone have a 'pet' linear IC for the IF amp and
>> detector? I could use a ZN414 or a MC1350P I guess, but is there anything
>> better out there for AM? (theres heaps of FM IC's but I am looking for AM)
>
see my message above - posted two weeks ago

4754. Re: IR control Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-10 00:00:00 UTC
From: JW <jdwalton@home.com>
Message-ID: <38507F4D.CECB1B86@home.com>
Source record: 65021

There have been a couple good IR control programs associated with the new BasicX microcontrollers from Netmedia. You have to go to the "onelist" bulletin board - www.onelist.com/community/basicx and search under IR controls.

Microchip (www.microchcip.com) also has a IR control program somewhere in their app notes.

Daren wrote:

> I have an idea of constructing a single function IR control switch
> that has variable frequency so that I can use it for many different
> devices other than a TV or a VCR by using a programmable IR remote
> control I could incorporate all these functions including the TV/VCR
> into one controller.
>
> Could someone help me out by way of a scan of a schematic of a single
> function remote switch to see if I can use it to modify it's frequency
> so i can make mutiple versions all operating on different frequencies
> so I can control many different appliances ????
>
> Any suggestions would be of great help
>
> Daren

4755. Re: IC IF amp & detector for AM????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-10 00:00:00 UTC
From: jos <soj@sympatico.ca>
Message-ID: <3850A4CE.8DE5571A@sympatico.ca>
Source record: 65022

Hello! I cannot understand how a frequency doubler can remove the sidebands of an AM modulated carrier! When the carrier is 100% modulated, the envelope is going through a
zero signal value and if fed to a frequency doubler should also give zero. I am very interested in this idea and would appreciate reading on the subject. I have seen the mention of quasi-synchronous before for a TV detector in which the carrier is regenerated by limiting which is easy because TV modulation modulates to 87.5% only leaving a risidual carrier of 12.5%. The results were not good because of the VSB nature of the TV signal. In television professional demodulators, a true synchronous detector is one with a regenerated carrier using a VCO and PLL in which there is no AM or PM sidebands. In the article of RF Design magazine, I think that the signal fed to the limiter was first filtered with a very narrow crystal filter. Regards!

Jake Brodsky wrote:

> On Thu, 09 Dec 1999 02:10:33 GMT, yvon roy <soj@sympatico.ca> wrote:
>
> >You can use a FM detector IC for AM demodulation by splitting the signal into
> >two paths; one path goes to the limiter input and the second path is connected
> >to the "multiplier" input (Also called product detector) This is equivalent to
> >synchronous detection which is very linear.You will have to experiment with the
> >input level and phase to the multiplier input. Such a circuit was published in
> >RF Design magazine a number of years ago. Regards! VE2AUC
>
> It looks synchronous, it "feels" like synchronous --but it's not.
> It's called quasi-synchronous. Why? Because if you were to feed it a
> true DSBSC AM signal, it wouldn't be able to capture the signal.
>
> What you need is an IF splitter, one path to a product detector, one
> path to a X2 multiplier and limiter. Then you divide the doubled and
> limited carrier back down to your carrier frequency, make adjustments
> to the phase, and THEN you will have a synchronous detector.
>
> The reason for the frequency doubler is because with a true DSB
> signal, merely limiting it will give you a messy, wide signal --not
> the carrier. The only way you can get the carrier to emerge from the
> limiter is there was already a strong carrier to begin with.
>
> Doubling a DSB signal, will give you only a carrier with
> (theoretically) no sidebands. Dividing the doubled carrier by two
> will recover a DSB carrier on frequency. Naturally by the time you
> propagate through all this, you'll need to tinker with the phase.
>
> 73,
>

> Jake Brodsky, AB3A mailto:frussle@erols.com
> "Beware of the massive impossible!"

4756. tube tx

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-10 00:00:00 UTC
From: frank@sirius.ccii.unipi.it
Message-ID: <82qke1$fl0$1@pisanino.unipi.it>
Source record: 65023

Hi all,
I'm looking for schematics of tube cw transmitters, for VHF (50 and 144 MHz).
I'd like to start understanding how they work and trying building some.
I've plenty of old radio/tv tubes many of them still in the original
enclosure (never used).
Thanks in advance; please reply also by e-mail

Francesco IW8QPI

4757. Audio CW Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-10 00:00:00 UTC
From: Luis Antonio Albergaria Pacheco <luis.a.albergaria@telecom.pt>
Message-ID: <82ql3gsds1@pthp35.telecom.pt>
Source record: 65024

Hello dr OM's

I am looking for solutions on building an simple audio cw filter. As far as I have seen there are two simple solution (excluding DSP):

One or several cascades of band-pass filters (I am bilding one based on a tl084 4 ampop)

One simple bandpass filter, drivind a pll, driving a audio oscilator. When the pll locks into the receiving signal, it would activate the audio oscilator, giving a qrm free signal.

Anyone has tried one of these last "pll filters"?

Thank you

Luis, CU2IJ

4758. Antenna Feedpoint Z ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-10 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <82qr61$gi2$3@neptunium.btinternet.com>
Source record: 65025

NEW PROGRAM ZL_ZIN.exe

COMPUTE LOAD IMPEDANCE, RL + jXL,
FROM LINE INPUT IMPEDANCE, Rin + jXin,
FOR GIVEN Zo, LENGTH, LOSS & VF of LINE.

This program allows your new hand-held R + jX bridge to be used with a long test lead without great loss of measuring accuracy. An obvious application is determination of antenna drive-point impedance when measurements can be made only at the transmitter end of the feedline. Not only is the true SWR on the line itself computed - the reason for it being there becomes apparent. There are other professional applications.

It handles Zo from 20 to 800 ohms, at frequencies from 0.1 to 1000 MHz

Zin can be entered in two forms:- parallel or series R and X. On entering one form the other equivalent form is immediately displayed.

Zload is computed in 3 forms:- parallel, series and magnitude + angle.

Exact transmission line formulae are incorporated in the program. It is convenient, fast and accurate. No doubt with some regret, you will never return to the Smith chart.

ZL_ZIN complements programs such as RJELINE3 and COAXPAIR which compute (amongst a variety of other things) input impedance for a given terminating impedance.

Download program ZL_ZIN in a few seconds. One file only. Not zipped up. Run immediately.

==========
Season's Greetings, Reg, G4FGQ
Get your software Xmas presents from :-
http://www.btinternet.com/~g4fgq.regp
==========

4759. WTB: Triand HSM transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-10 00:00:00 UTC
From: "Bob.Obo" <bobobo@dowco.com>
Message-ID: <385110c8_1@news.vphos.net>
Source record: 65026

Looking for 2 - 4 Triad HSM filament transformers
2.5v @ 10A or 2.5V @ 5A

email with details
TIA
Bob.Obo

4760. FS: JPS NIR-12 Noise Reduction Unit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-10 00:00:00 UTC
From: lamphier@my-deja.com
Message-ID: <82rjktbgi1@nnrp1.deja.com>
Source record: 65027
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.dx,rec.radio.amateur.equipment

Auction ends Saturday, 12/11/99

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=214275156

thanks, Marc

Sent via Deja.com http://www.deja.com/
Before you buy.

4761. Re: Audio CW Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-10 00:00:00 UTC
From: "Laszlo I. Morocz" <kf4pv@SPAMMENOTlmorocz.com>
Message-ID: <2O844.2743$Jh3.8922@jump.innerx.net>
Source record: 65028

I've always heard them called "CW Regenerators" and I tried a couple of simple ones (one based on a 567 and one on an EXAR chip, if I remember correctly) about 10 years ago. They worked well for strong, clear signals, but for weak, noisy signals the analogue filters (or ears) were better. I don't know how well more modern chips would work.

73 de KF4PV/3, Laszlo

--
To reply, remove the text SPAMMENOT from the e-mail address.
Luis Antonio Albergaria Pacheco wrote in message
<82ql3gsds1@pthp35.telecom.pt>...
>Hello dr OM's
>
>I am looking for solutions on building an simple audio cw filter. As far as
>I have seen there are two simple solution (excluding DSP):
>
>One or several cascades of band-pass filters (I am bilding one based on a
>tl084 4 ampop)
>
>One simple bandpass filter, drivind a pll, driving a audio oscilator. When
>the pll locks into the receiving signal, it would activate the audio
>oscilator, giving a qrm free signal.
>
>Anyone has tried one of these last "pll filters"?
>
>Thank you
>
>Luis, CU2IJ
>
>

4762. FS;HEATKIT HF STATION...!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-10 00:00:00 UTC
From: erpi@junction.net
Message-ID: <82r9g1$7ut$2@news.junction.net>
Source record: 65029

Hi! I have for sale a heatkit HF station,SB-401 & SB-303
with all the cables and manuels.The transceiver SB-401 needs
repairs,I turned it on a few days ago and I saw smoke coming
out from under the chassie,since then it does not transmit.
I didn't really try to fix it because my electronic skills
are very poor.The receiver SB-303 works really good.
Both pieces are very clean.I bouth them last year and
paid $450.00 for them,I will sell them for $200.00 obo...
If interested,email me direct...Thanks...Eric....73

Net-Tamer V 1.11.2 - Test Drive

4763. FS: variable caps, coils, HV parts, and much more

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-10 00:00:00 UTC
From: bw201@torfree.net
Message-ID: <FMJ8s5.Az6.0.queen@torfree.net>
Source record: 65030
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,sci.electronics.components,alt.ham-radio.marketplace

If you are looking for RF components such as variable capacitors and inductors, High Voltage capacitors, rectifiers, vacuum relays, Xenon Flashtubes, PhotoFlash capacitors, Ferrite cores and beads, transformers, noise diodes, professional quality knobs, industrial limit (Micro) switches, and lots of other stuff, please check out my 28 year's worth of accumulation I am selling at

http://www3.sympatico.ca/aquariusr/sale1.htm

Thanks

Bob Levitt

4764. CAT for the FRG-100

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-10 00:00:00 UTC
From: mario cordina <mario_cordina@hotmail.com>
Message-ID: <82r6rf$j55$1@news.maltanet.net>
Source record: 65031

Hiya!
Is there anybody who knows of a source how to build the CAT interface for the YEAESU FRG-100??...If there is anyone which can help me pls e-mail me mario_cordina@hotmail.com...Information including computer program to control the FRG-100 is also required
Thanks
Mario (9H5MR)

4765. FS: EEV C1111/715C valve

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-10 00:00:00 UTC
From: arnoldg@sf.telia.no
Message-ID: <38512cf9.1105086@news.telia.no>
Source record: 65032
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Hi,

I have one EEV (English Electric Valves) C1111 valve for sale. This is
the same as 715C. The valve is in its original packing and unused.
Very nice and in mint condition. Top quality.
Best offer.

Regards,

Arnold Goks�yr

DEMOSTENES - N6899 Balestrand, Norway
Tlf. +47 5769 1340 Fax +47 5769 1267

Valves, sockets, transformers, books and components
Good stock on all types. We ship worldwide.

4766. FA: Lambda Triple Voltage Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-10 00:00:00 UTC
From: Joe Schreiber <jschreiber@adelphia.net>
Message-ID: <Zga44.3098$E4.309896@server2.news.adelphia.net>
Source record: 65033
Cross-posted to: misc.industry.electronics.marketplace,rec.radio.amateur.homebrew,rec.radio.swap,sci.electronics.equipment

Output 1 is 5 Volts at 4.0 Amps. Output 2 is 12 Volts at 3.0 Amps. Output 3 is -5 Volts at 0.3 Amps. Input is 83 to 132 VAC, 47 to 440 Hz. I have tested this power supply and it works great.

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=213028432

4767. FA: 15 Turn Calibrated Dial - NEW

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-10 00:00:00 UTC
From: Joe Schreiber <jschreiber@adelphia.net>
Message-ID: <Jua44.3105$E4.310113@server2.news.adelphia.net>
Source record: 65034
Cross-posted to: misc.industry.electronics.marketplace,rec.radio.amateur.homebrew

15 Turn Calibrated Dial - NEW

This precision dial has a 0-100 scale around its circumference, and a turns counter from 0 to 14. It will keep track of 15 turns from 000 to 1499. There is a lever on the side for locking the knob in position. It attaches to a 1/4 dia. shaft. Overall diameter is about 2 inches. I have several more of these if you need more than one piece.

No Reserve

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=217742568

4768. FA: Electric Elapsed Hour Odometer Counter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-10 00:00:00 UTC
From: Joe Schreiber <jschreiber@adelphia.net>
Message-ID: <Vsa44.3104$E4.310096@server2.news.adelphia.net>
Source record: 65035
Cross-posted to: misc.industry.electronics.marketplace,rec.radio.amateur.homebrew

Electric Elapsed Hour Odometer Counter

Ideal for keeping track of how long a piece of equipment is being used. Simply connect to 115VAC via screw terminals on rear, and counter will run, showing total elapsed running time. Resolution is 1/10 hr. Maximum is 99999.9 hours. Has been used for 13.7 hours. Mnufactured by Stewart Warner. Can be panel mounted. Guaranteed to work. Looks like new condition.

No Reserve

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=217712874

4769. FA: RACAL RF Amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-10 00:00:00 UTC
From: Joe Schreiber <jschreiber@adelphia.net>
Message-ID: <Rwa44.3106$E4.310090@server2.news.adelphia.net>
Source record: 65036
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

RACAL RF Amplifier

This is the RF amplifier from a RACAL 6217E receiver. It will amplify HF signals from 500 kHz to 30mHz. It is powered by -16 VDC, and has an RF in connection and an RF out connection. There is also a connection for AGC, if AGC control of the RF amplifier is desired. It was working fine when it was removed from the radio. I do not have a schematic, but I do have a description of the circuit from the "Theory of Operation" section of the manual and a block diagram of the receiver showing how this RF amplifier was wired into the circuit. The connections are also marked on the circuit board.

No Reserve

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=217757818

4770. WTB Bird Meter Movements and Dual Sampler or singles

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-10 00:00:00 UTC
From: robert.piland@msfc.nasa.gov
Message-ID: <robert.piland-1012991247070001@128.158.105.209>
Source record: 65037

WTB Bird Meter Movements and Dual Sampler or singles

KE4TFL

Robert Piland

4771. WTB Service manual

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-10 00:00:00 UTC
From: rjac302069@aol.com
Message-ID: <19991210143210.17378.00000243@ng-fd1.aol.com>
Source record: 65038

Need service manual for Standard C-5718 DA.Thanks for assistance/referrals.
Rick.

4772. Re: IC IF amp & detector for AM????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-10 00:00:00 UTC
From: jos <soj@sympatico.ca>
Message-ID: <3851A6F6.E0E7BC15@sympatico.ca>
Source record: 65039

Hello! I have tried the CA3189 or LM3189 FM detector as an AM detector and I can get results!

Martin wrote:

> I'm building an aircraft receiver using the NE602 as the front end. This
> goes really well- andI can feed into my communications receiver as the front
> end. My question is: does anyone have a 'pet' linear IC for the IF amp and
> detector? I could use a ZN414 or a MC1350P I guess, but is there anything
> better out there for AM? (theres heaps of FM IC's but I am looking for AM)

4773. Newbie - Variable Resistors (POTs)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-10 00:00:00 UTC
From: Rob <NoEmail@NoWay.com>
Message-ID: <f0g44.197326$5r2.491807@tor-nn1.netcom.ca>
Source record: 65040

I would like to replace a resistor in a circuit with a variable resistor (or POT). I am confused. Why does a POT have three terminals for connecting wires??

One of them must be for the input to the POT, One of them must be for the output of the POT but what is the third terminal for??

73's

Rob

4774. FS: MMICs and more for builders

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-10 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <3851A9AE.1C5@pop.valley.net>
Source record: 65041

Hello-- Revised 12/10/99

I'm offering homebrew builders oddball, offbeat and hard-to-find NOS RF components, including...
***
Hewlett-Packard MSA-0786 MMICs ($1.00 each, $5.00 for 6, $10.00 for 15, or $25.00 for 50 pieces); DC-2 GHz. These are taped and reeled and have leads configured for surface-mounted applications. Specs are available at(or with order)...
http://www.hp.com/HP-COMP/index.html
***
1N5711 Schottky diodes, full-length leads, taped and reeled, $1.00 for 10
pieces
***
1N5821 Schottky rectifiers, full-length leads, bulk packed, $1.00 for 8 pieces
***
PIN diodes, no other specs available; full-length axial-leaded packages; individually serialized in sealed-foil envelopes. $1.00 each.
***
JAN 1N748A Zener diodes: individually sealed in mil-spec foil packets for your protection<g> in 1983.
$1.00 for 6 pieces.
***
SD-201 Signetics DC-2 GHz DMOS single-gate FETs four-lead TO-72 can (like TO-18 w/shield lead). A conductive-rubber antistatic "O" ring encircles
all four leads. Specs (available on request and with purchase) include S parameter plots. $1.00 each, $3.00 for 6, $5.00 for 12 pieces.
***
TN-2219A National Semiconductor NPN general-purpose NPN transistor:
100 < hFE < 300 at Ic= 150 mA; BVcbo = 75 V min.; BVceo = 40 V min.;
Icbo = 10 nA max. at Vcb= 60 V; Cob = 8 pf max.; Ft = 60 MHz min.
at Ic = 20 mA. NF 4 dB (max.)
In TO-237 metal-tabbed plastic package (similar to TO-92); this package reduces thermal resistance from 125 C per watt for a TO-92 to 50 C per watt for the TO-237.
Ideal for building a QRP rig around a single device!
$1.00 for 20 pieces; $5.00 for 120 pieces

***
Minicircuits T1-1T (1:1 turns ratio (center-tapped)) broadband RF transformers (80 KHz to 200 MHz); leads are formed for surface mounting but you can rebend for DIP insertion. Visit www.minicircuits.com for

full specs via their catalog.
$1.00 for 3
***
Minicircuits PSCQ-2-400 90-degree, 2-way power divider, 0.9 dB insertion loss, 225-400 MHz; $1.00 each
***
Fair-Rite cores (both type 43 mix):

2643023002 (a long-cored toroid) $1.00 for 10 pieces
2843002402 (binocular (balun) core) $1.00 for 20 pieces
***
Coilcraft p/n 142-07J08 single-winding adjustable inductors.
330 nH min./ 378 nH nom. /427 nH max.; 307 nH with tuning slug removed. Q is 112 min. at 40 MHz; 7.5 turn winding on 10 mm molded form.

$1.00 for 5 pieces; $5.00 for 35 pieces.
***
Pulse Engineering PE-53190 toroidal inductor for switched-mode power supplies.
Inductance = 12. 2 microhenries at zero DC; 8.7 microhenries at 2.5 A DC.

Price: $1.00 for 6
***
SAW-stabilized oscillators; intended for ECL circuits, but also reportedly usable as LOs. All are packaged in metal DIP cans.
$4.00 each, or three assorted for $10.00

Frequencies available are:
222.222 MHz (RF Monolithics HC1279; proprietary p/n marking)
350.000 MHZ (RF Monolithics HC1301)
366.667 MHz
400.000 MHz ($2.00 ea. but not NOS; removed from PC boards)
733.333 MHz
***
Teflon- and diallyl-pthalate insulated single-point turret lugs at $12.00 per 100 (many styles available-- e-mail a request for information and a jpg image showing various types).
***
Feedthrough capacitors: Spectrum Control 100 pf nominal (threaded bushing mount, hardware included). Attenuation is specified as -10 dB at 300 MHz, and -20 dB at 1 GHz.
$.50 each, $1.00 for 3 pieces. ***ONLY 36 PIECES REMAINING***
***
Air-variable capacitors manufactured by Cardwell (their part no. PL6348).
NOS surplus, m'fd. sometime in the 1950s.
--Configuration: consists of two plates separated by 0.1";
--Estimated capacitance range: 1-5 pf.
The adjustment shaft is 0.25" dia. by 0.5 inches long; bushing or

isolated mounting; easily disassembled for capacitance vs. frequency
modification, etc. A more-detailed description is available on request.

Price: $3.00 each, $10.00 for 5 pieces, $20.00 for 12 pieces.
***
Caddock MS281N NONINDUCTIVE resistors:

10 ohm +/- 5 per cent tolerance, 8 watt noninductive power film
resistors
Tinned axial leads (0.75 inches long) are formed for PC-board
insertion on 1.2-inch centers. These are NOS, bulk-packed parts.
Note: these measure well within tolerance at +/- 0.2 ohms typical. Full
specs are available in PDF format on Caddock's web site
(www.caddock.com)
but highlights are:
--Temperature coefficient of resistance: 50 ppm;
--Power rating: 8 watts at 25 C, derating to 4 watts at 150 C and
0 watts at 275 C;
--Noninductive design: serpentine film layout cancels magnetic field-
equivalent inductance of a straight piece of wire of the
resistor's body plus lead length.

Applications include:
--Current sampling;
--Cathode bias;
--Dummy loads for audio and RF applications.

Price: $1.00 each ($10.00 for 12 pieces); only 70 pieces available
****
Six-lug terminal strips, like Keystone p/n 825: six isolated, tinned
steel lugs mounted on a brown phenolic insulating strip, arranged in
groups of three on either side of a central mounting bracket. There's
no center grounding lug, but you can add a jumper to an adjacent lug
or two as required. Tie-point strips work well for breadboarding if
you use unetched-copper PC board laminate as a ground plane.

The lugs are spaced on 0.375-inch centers; mounting bracket has a
0.140-inch hole (use a 6-32 screw for chassis mounting).

I've sold thousands of these, but my supply is running low. Buy a batch
now before they all go to good homes<g>. ***DEFINITELY THE LAST CALL!
ONLY A FEW HUNDRED REMAIN***

Prices: $.15 each, or $6.00 per 50 pieces, $10.00 per 100 pieces.

****
* NOS Warranty policy *
****
Scanned images or digital photos of components are available on request.

If you purchase NOS tubes or components and find them unsatisfactory
upon your inspection, notify me within seven days and return items in
as-received condition for a full refund or replacement (if available).

This material is subject to prior sale and is supplied as-is, as
new-old-stock (NOS) merchandise, with all responsibility for safe and
successful application residing solely with the purchaser.

If you're searching for oddball components of any vintage, don't
hesitate to inquire about availability.

****
* Shipping per order: *
****
Postage:

Add $3.20 for priority-mail shipment (U.S. only).
Foreign purchasers: please inquire for shipping charges.

Please contact me to confirm availability and reserve components before
sending payments.

I accept payment via personal or cashier's check or money order drawn in
U.S. dollars and made payable to "Brad Thompson".

**************************Available from:**********************
Brad Thompson, AA1IP
P.O. Box 307, 202 Whitaker Rd.
Meriden, NH 03770-0307
Voice:(603) 469-3351
Fax: (603) 469-3917
E-mail: brad.thompson@valley.net

4775. CHEROKEE CBS-1000 FOR SALE!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-10 00:00:00 UTC
From: chocalatejay@webtv.net
Message-ID: <22141-3851C1A7-202@storefull-214.iap.bryant.webtv.net>
Source record: 65042

FRIEND GAVE IT TO ME AS A GIFT NEVER BEEN OUT THE BOX ASKING $165 EMAIL ME IF YOU ARE INTERESTED.I WILL PAY FOR SHIPPING AND INSURANCE.

dirty south

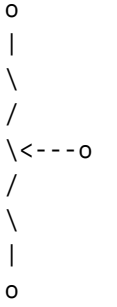
4776. Re: Newbie - Variable Resistors (POTs)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-11 00:00:00 UTC
From: "David M. Brodbeck" <dmbrodbe@mtu.edu>
Message-ID: <82seh7fbq2@campus3.mtu.edu>
Source record: 64944

Rob <NoEmail@NoWay.com> wrote:
> I would like to replace a resistor in a circuit with a variable resistor (or
> POT). I am confused. Why does a POT have three terminals for connecting
> wires??

> One of them must be for the input to the POT, One of them must be for the
> output of the POT but what is the third terminal for??

--> A potentiometer's terminals are connected like this:



The two outer terminals are connected to the ends of the resistance
element, the center one is the adjustable 'wiper'. The reason it's
designed this way is so it can be used as an adjustable voltage
divider. For use as a simple adjustable resistor, use the wiper
and one outer terminal, and leave the other unconnected.

David Brodbeck, N8SRE dmbrodbe@mtu.edu
finger gull@cyberspace.org for my public key block.

"If you miss out on television as a child, you may not be properly
programmed into a consumer, convinced that happiness can not be had
without the proper supporting products. By having a will of your own,
you are doomed to alienation from all human societies and thus chronic
depression." -- Dekk

4777. Synchros, Selsyns: how to interface to a PC?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-11 00:00:00 UTC
From: Angel Vilaseca <avilaseca@popmail.smis.ch>
Message-ID: <3851F787.882D3255@popmail.smis.ch>
Source record: 64945

Hi, all

I just was given an old dish from a meteo radar. The az-el mount uses synchros as a position control. I want to track satellites from my PC. Is there a way to digitize the output from a selsyn, (or synchro, resolver) and to feed it to a computer?

tnx de Angel Vilaseca HB9SLV
Geneva, Switzerland

4778. "PC-Radio" WINRADIO?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-11 00:00:00 UTC
From: Peter Bolch <nc_bolchpe@netcologne.de>
Message-ID: <82t3lt$88h$1@news.netcologne.de>
Source record: 64946

Hi

I think of buying an external "PC-Radio" like WINRADIO and want to use it not only as a receiver but also as a simple spectrum analyzer. In principle it should be possible to correct the frequency response and the lineartity of the RSSI signal by software.

Does anybody here know whether the control codes sent to the receiver via RS232 and the structure of data telegrams sent to the PC are documented? And are there lots of birdies and other artefacts with the receiver mentioned?

Peter

4779. Wanted help with IR control circuit - detector.pdf (0/1)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-11 00:00:00 UTC
From: daren@powerup.com.au
Message-ID: <38523454.38282@nntp.powerup.com.au>
Source record: 64947

I have an idea of constructing a single function IR control switch
that has an alterable PCM possibly by some dip switch configuration so
that it can be used for many different devices other than for a
TV/ VCR
by making it a single function unit it could easilly be used in
modular form ie it could be housed in a box holding any number of
similar IR switches but all sharing the same power supply.
by using a programmable IR remote control it would relieve the need
to construct one and it could incorporate all the functions of the
various IR switches including the TV/VCR into one controller
.if the IR reciever switch could be designed to have a built in IR led
to emit the PCM needed to trigger the reciever , it would alleviate
the agro we all have of when you lose the remote,and the switch
becomes useless and would enable fast changing of the PCM to avoid
conflicts OR by arranging to have the same PCM for the same devices in
different rooms etc and it would cut down the number of buttons on the
remote needed to control everything and as programmable IR remotes are
programmed buy recieving IR pulse codes it would streamline the
setting up of the remote controller simply setting the PCM on the
reciever press a button to emit that PCM into the programmable
controller and it's all set

I have enclosed a schematic of a typical IR reciever but I'm affraid
it's a bit beyond me, and I was hoping that somebody might have a look
at the schematic for me and suggest how I might be able to alter it to
include the functions I mentioned.

Any suggestions would be of great help

Daren

4780. EI9GQ Homebrew radio page

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-11 00:00:00 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <944915857.1638493234@news.indigo.ie>
Source record: 64948

Recent update.

Single transistor regenerative RX for SSB, CW, AM.

Update to the QE08/200 linear amp.

Some new pictures.

73, Ed.

http://www.qsl.net/ei9gq

--

Remove 'X' to reply.

Linux 2.2.5-15

4781. WTB: 3CX3000 chimney

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-11 00:00:00 UTC
From: Bob <dxcc@shentel.net>
Message-ID: <dIt44.306$W2.56656@typ11.nn.bcandid.com>
Source record: 64949

Will pay cash or trade other high-power items for chimney for the 3CX3000 series of triodes. Thanks.

4782. Re: Newbie - Variable Resistors (POTs)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-11 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <82tq6o$qv9$1@autumn.news.rcn.net>
Source record: 64950

> For use as a simple adjustable resistor, use the wiper
> and one outer terminal, and leave the other unconnected.
>
Common practice is to connect the "unused" end terminal back to the
wiper terminal. This prevents the resistance from jumping to infinity
if the wiper arm momentarily looses contact.

4783. Re: Newbie - Variable Resistors (POTs)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-11 00:00:00 UTC
From: Rob <NoEmail@NoWay.com>
Message-ID: <X4u44.197410$5r2.492216@tor-nn1.netcom.ca>
Source record: 64951

Many thanks for the tip. I assume the wiper terminal is the middle one??

Rob

"Bob Lewis" <aa4pb@erols.com> wrote in message
news:82tq6o$qv9$1@autumn.news.rcn.net...
> > For use as a simple adjustable resistor, use the wiper
> > and one outer terminal, and leave the other unconnected.
> >
> Common practice is to connect the "unused" end terminal back to the
> wiper terminal. This prevents the resistance from jumping to infinity
> if the wiper arm momentarily looses contact.
>
>
>

4784. S: Manufacturer of headset with "larynx-micro"

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-11 00:00:00 UTC
From: Martin Kuschewski <Martin.Kuschewski@t-online.de>
Message-ID: <82ts5e$qd1$7@news00.btx.dtag.de>
Source record: 64952

Hello Reader,

does anyone know a manufacturer of a headset with "larynx-micro" (translated from German :-)). I know several distributors of it, but i am interested in a manufacturer.

Thanks for any answer.

Greetings from Bavaria

Martin, DL5MFT

4785. Blocking Cap for computer Mic Jack

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-11 00:00:00 UTC
From: Rob <NoEmail@NoWay.com>
Message-ID: <QIu44.197417$5r2.493524@tor-nn1.netcom.ca>
Source record: 64953

I understand that on most computers, the computer mic jack also has DC for powering some computer microphones.

I would like to connect my audio out from my radio to the computer's mic in jack for SSTV, RTTY etc. I would also like to use an audio isolation transformer to break up any ground loops. But the audio isolation transformer would ground DC on the mic jack (and may cause problems!)

I would like to be safe than sorry.

Considering the impediance of the audio isolation transformer (600-900 ohms) and considering that I would like to pass 400 Hz to 3000 Hz audio signals from my Rig to the mic input jack of the computer, WHAT Value should the blocking cap be??

1 Micro farad? 10 Micro Farads? 100 MicroFarads?? (I may have to use an electrolytic cap??)

Any ideas??

73'
Rob

4786. Info needed on BB409 varactor diode

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-11 00:00:00 UTC
From: Raw Power Radio <rawpowerradioNOraSPAM@go.com.invalid>
Message-ID: <04e9bbf8.0eb5f137@usw-ex0101-003.remarq.com>
Source record: 64954

A 'net friend sent me a bag of these diodes, and I've designed a couple of neat little VCO circuits around them. But it seems that this is not a readily available part, and I would like to know its characteristics or a direct equivalent part number so that I can specify a more readily available part. I've looked everywhere I can think of, and I can't find ANY info on the BB409. Any info will be much appreciated.

* Sent from RemarQ http://www.remarq.com The Internet's Discussion Network *
The fastest and easiest way to search and participate in Usenet - Free!

4787. Re: Synchros, Selsyns: how to interface to a PC?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-11 00:00:00 UTC
From: quatsein@island.net
Message-ID: <38529130.132875936@news.cr.island.net>
Source record: 64955

Yes, there are ways to interface to PC's, all very expensive,
Computer Concepts, Inc. , Control Sciences, Inc. offer PC
boards and also convertors. Analog Devices makes a
interface chip also.

Steve Carlisle VE7AHL

On Sat, 11 Dec 1999 08:04:39 +0100, Angel Vilaseca
<avilaseca@popmail.smis.ch> wrote:

>Hi, all
>
>I just was given an old dish from a meteo radar. The az-el mount uses
>synchros as a position control. I want to track satellites from my PC.
>Is there a way to digitize the output from a selsyn, (or synchro,
>resolver) and to feed it to a computer?
>
>tnx de Angel Vilaseca HB9SLV
>Geneva, Switzerland

4788. Re: Newbie - Variable Resistors (POTs)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-11 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <82u1bddcd1@autumn.news.rcn.net>
Source record: 64956

> Many thanks for the tip. I assume the wiper terminal is the middle one??

True in most cases. You can verify it with an ohmmeter.

4789. Re: Newbie - Variable Resistors (POTs)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-11 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <38520F46.9467F228@bellsouth.net>
Source record: 64957

Rob wrote:
> I would like to replace a resistor in a circuit with a variable resistor (or
> POT). I am confused. Why does a POT have three terminals for connecting
> wires??

A pot is a fixed resistor with a movable tap. The position of the tap
depends on the setting of the knob. So if you have a 10,000 ohm pot,
the resistance between the two outside terminals is always 10,000 ohms.
But the resistance between the center terminal and either outside
terminal varies. If the resistance between the center and the "left"
end is 2,000 ohms, then the resistance between the center and the
"right" end must be 8,000 ohms; if the resistance to the left is 6,000
ohms then that to the right must be 4,000.

For what you're doing, use the center terminal and either end terminal.
Which one you use depends on which way you want the knob to work. (do
you want the resistance to increase, or decrease, when you turn the knob
clockwise) If you're only going to adjust it once, it really doesn't
matter.
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

4790. 50 MHz home brew info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-11 00:00:00 UTC
From: "Roger W. Horne" <g4hba@6mdx.eurobell.co.uk>
Message-ID: <bHocGHAeOlU4Ewq9@6mdx.eurobell.co.uk>
Source record: 64958

I have updated my web pages with info on how to convert the Heathkit SB200 to work on 6 metres. This, and lots of other home-brew data can be found at http://www.6mdx.eurobell.co.uk/index.html

If you have visited the site before, refresh the index page to see what has been added.

Seasons greetings to all.

Roger.
http://www.6mdx.eurobell.co.uk/index.html
g4hba@6mdx.eurobell.co.uk
UKSMG #262

4791. Re: Info needed on BB409 varactor diode

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-11 00:00:00 UTC
From: NANCY GIANAKOPOULOS <n.gianakopoulos@worldnet.att.net>
Message-ID: <82u53q$cc8$1@bgtnsc03.worldnet.att.net>
Source record: 64959

The specs for the BB409 are as follows: Vt = 4 to 30V
Q @
4V = 270
Q @
30V = 600
Cmin
= 4pF
Cmax
= 33pF

Pete Gianakopoulos
Cedar Rapids, Iowa

Raw Power Radio <rawpowerradioNOraSPAM@go.com.invalid> wrote in message
news:04e9bbf8.0eb5f137@usw-ex0101-003.remarq.com...
> A 'net friend sent me a bag of these diodes, and I've designed a couple
> of neat little VCO circuits around them. But it seems that this is not
> a readily available part, and I would like to know its characteristics
> or a direct equivalent part number so that I can specify a more readily
> available part. I've looked everywhere I can think of, and I can't find
> ANY info on the BB409. Any info will be much appreciated.
>
>
> * Sent from RemarQ http://www.remarq.com The Internet's Discussion Network
*
> The fastest and easiest way to search and participate in Usenet - Free!
>

4792. Re: Info needed on BB409 varactor diode

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-11 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <82udgg$5ko$1@nnrp1.deja.com>
Source record: 64960

In article <04e9bbf8.0eb5f137@usw-ex0101-003.remarq.com>,
Raw Power Radio <rawpowerradioNOraSPAM@go.com.invalid> wrote:
> A 'net friend sent me a bag of these diodes, and I've designed a
couple
> of neat little VCO circuits around them. But it seems that this is not
> a readily available part, and I would like to know its characteristics
> or a direct equivalent part number so that I can specify a more
readily
> available part. I've looked everywhere I can think of, and I can't
find
> ANY info on the BB409. Any info will be much appreciated.
>
> * Sent from RemarQ http://www.remarq.com The Internet's Discussion
Network *
> The fastest and easiest way to search and participate in Usenet -
Free!
>
>

Enter Partminer homepage at www.partminerclient.com; they have the
complete datasheet for this varicap.
--
Greetings,

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Before you buy.

4793. Sigma AF-250L Manual wanted. Amateur Wholesale Electronics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-11 00:00:00 UTC
From: Randy and Cara Randall <crrandal@seidata.com>
Message-ID: <3852B835.2754E8A6@seidata.com>
Source record: 64961
Cross-posted to: rec.radio.shortwave,rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Hello. I have a AM/FM analyzer model AF-250L made by Sigma
in the 70's and sold by
Amateur Wholesale Electronics. Do any of you out there have
a manual?

Thanks,
Randy KB8ASO Milan IN.

--

"Chains shall he break for the slave is our brother. And in
His name all oppression shall cease..."--Oh Holy Night

URL to Cara's Stitchcraft and Randy's Radio Pages:
http//members.spree.com/family/happygal

4794. FS Amp parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-11 00:00:00 UTC
From: Matt Erickson <kk5dr@hotmail.com>
Message-ID: <3852B975.367EB699@hotmail.com>
Source record: 64962

Filament transformer 7.5 vac @ 21A, w/CT, hipot tested, 120/240v primary

$40 shipped
Kilovac KM-14 vacuum relay, dpdt, 12kv @ 10A. 12vdc coil, NEW, never
used or installed.
$100 shipped

4795. WTB Vac vari cap

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-11 00:00:00 UTC
From: Matt Erickson <kk5dr@hotmail.com>
Message-ID: <3852B9AF.3D463C57@hotmail.com>
Source record: 64963

```
1500-2000pf @ 3kv or better.
reasonably priced (NOT Neb. surplus price!)
```

4796. MRF-485s - Pair Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-11 00:00:00 UTC
From: wb0poz@prodigy.net
Message-ID: <82uk7g$29k0$1@newssvr03-int.news.prodigy.com>
Source record: 64964

Anyone know of a source of these for less than $25 a pop? Anyone have a pair in their junkbox?

The bias supply in a friend's Scrapwood 930 decided to put a full 12V on the bases in the final board - and I even got yelled at by my wife for stinking up the house when they fried.

Appreciate any leads.

73 John

4797. NEW G.E. 32uF, 4500VOLT OIL FILLED CAPACITOR FA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-11 00:00:00 UTC
From: KQ6UV <kq6uv@hamsnet.net>
Message-ID: <KRB44.2842$LK3.102167@nuq-read.news.verio.net>
Source record: 64965
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.homebrew,rec.radio.swap

New G.E. 32 microfarad, 4500 volt oil filled capacitor with no PCBs.
Approximately 9 1/2" tall, 4 1/2" wide, and 3 3/4" deep.
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=215107401
Jim Smith, KQ6UV

4798. Re: WANTED: AMPERITE 5NT150 8 PIN TUBE FOR DENTRON DTR-2000L AMP

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-11 00:00:00 UTC
From: Chris Fox <ni4l@bellsouth.net>
Message-ID: <3852F0B4.8BCB37FD@bellsouth.net>
Source record: 64966

Forget about that just go ahead and get your self the grid protection/timer board for the Ameritron AL-1500 that is what i put in mine works like a charm plus you get the grid protection it is about 40.00 you can order it directly from ameritron.

Frank Dubec wrote:

> GLASS TUBE TIMER, 8 PIN, OCTAL SOCKET...FOR OLD DENTRON DTR-2000L
> AMPLIFIER
>
> USED FOR 3 MINUTE DELAY ON 8877 AMPLIFIER TUBE (FILAMENT WARM UP) 5 VAC
>
> PLEASE EMAIL IF YOU HAVE ONE FOR SALE OR KNOW WHERE I CAN GET ONE CHEAP!
>
> TNX...FRANK

4799. Re: Blocking Cap for computer Mic Jack

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-11 00:00:00 UTC
From: Rob <NoEmail@NoWay.com>
Message-ID: <MxD44.197495$5r2.494209@tor-nn1.netcom.ca>
Source record: 64967

Unfortunately, my line input jack does not work.

So I will have to use the mic jack, isolation transformer and a blocking capacitor.

What value should I use for a DC blocking Capacitor?? Perhaps 1 or 10 microFarads?

Rob

"Nick" <maad65@dial.pipex.com> wrote in message news:ua755sk7nhdqhf36c908gcjole6l88bmbg@4ax.com...
> On Sat, 11 Dec 1999 11:07:52 -0500, "Rob" <NoEmail@NoWay.com> wrote:
>
> >I understand that on most computers, the computer mic jack also has DC for
> >powering some computer microphones.
>
>
> Tru but you would probably be better off connecting the computer to the LINE
> input that most sound cards have.
>
> Nick

4800. Re: ARRL RADIO RESIGNER (ARD) problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-11 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <38532DF0.F7581C10@mwci.net>
Source record: 64968

Don Winn wrote:

> I have been able to get the program to run again by adding an additional IDE
> harddrive on the second IDE cable in my computer. If I remove the drive and
> restart the program, it hangs again at the opening window and I get the
> vertical bar in the lower left. This was all found by accident but for me, it
> works everytime. I run WIN95, S3 PCI Video card and a Cyrix 300MKII
> processor.

There is a probably a conflict between ARD and other applications. Suggest do a complete "uninstall" operation (not just "delete") on various applications, one at a time, such as printers, word processors and anything else that you can "reinstall" later. After each uninstall, reboot the computer and try to run ARD. Uninstall and re-install ARD and try again. Finally, re-install Win95 files from the 95 CD. If ARD starts running, then reinstall the applications, one at a time, and test ARD after each step.

Bill W0IYH

4801. Re: ARRL RADIO RESIGNER (ARD) problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-11 00:00:00 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <7CxTOJuGPvPA5VvQXgTslLDrTiE3@4ax.com>
Source record: 64969

af4z@palmnet.net@somehost.somedomain (Don Winn)
shared these priceless pearls of wisdom:

->Has anyone made any progress at a fix for the problem. It's a nice program if

->you can get it to run!

I couldn't get it to play for about three months. I shoved it over in a corner of my engineering programs window and let it sit for a while. I probably fiddled with this and that, probably had to reload windoze due to crashes, did some other hard disk manipulation like cleaning and stuff.

Fired it up one day while I was bored and bingo. It loaded and played just fine. I don't know what fixed it, probably never will. And like you, the "company" had absolutely no help for me.

Some day when I "fix" the original problem back, it will go tango uniform again, and when it does, I'll be back in the same "what the hell did I do now" mode. Until then, it seems to work just fine. But I'm not putting anything into it that I depend on for the business.

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

4802. Re: ARRL RADIO RESIGNER (ARD) problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-11 00:00:00 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <sThTOC3yulwEZ9nOMwzyS8HZRZpl@4ax.com>
Source record: 64970

Jim Weir <jim@rst-engr.com>
shared these priceless pearls of wisdom:

->Some day when I "fix" the original problem back, it will go tango uniform
again,
->and when it does, I'll be back in the same "what the hell did I do now" mode.
->Until then, it seems to work just fine. But I'm not putting anything into it
->that I depend on for the business.

Having said that, of course, I went to "play" with it again. Guess what.
BURRRRP. Belly up again. I've seen advice that says "uninstall this and
unistall that and see what the conflict is". The conflict is that ARD is about
the most unstable Windoze program I've got. Look at it crosseyed and it goes
away.

Sigh.

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

4803. Re: Blocking Cap for computer Mic Jack

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-11 00:00:00 UTC
From: John Buck <kh7t@arrl.net>
Message-ID: <38535DDC.33265940@arrl.net>
Source record: 64971

Tantalum capacitors are a form of electrolytic cap.
They are best used in low impedance applications because
microshorts may show up in high impedance applications.

4804. Re: MRF-485s - Pair Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <830r3g$oa8$1@nnrp1.deja.com>
Source record: 64894

In article <82uk7g$29k0$1@newssvr03-int.news.prodigy.com>,
<wb0poz@prodigy.net> wrote:
>
> Anyone know of a source of these for less than $25 a pop? Anyone have
a
> pair in their junkbox?
>
> The bias supply in a friend's Scrapwood 930 decided to put a full 12V
on the
> bases in the final board - and I even got yelled at by my wife for
stinking
> up the house when they fried.
>
> Appreciate any leads.
>
> 73 John
>
>

For US$ 22.95 each you can get them with Ocean State Electronics at
http://www.oselectronics.com/ose_p46.htm
--
Greetings,

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Before you buy.

4805. Re: Stinkin, leakin alkaline batteries!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: William Sommerwerck <williams@nwlink.com>
Message-ID: <3853EA3F.16DB2658@nwlink.com>
Source record: 64895
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.antiques.radio+phono

I've been using alkaline batteries for over 30 years, and I have _never_ seen an alkaline cell that "leaked" or had an odor. (I'm old enough to remember when the _only_ consumer batteries were zinc-carbon cells -- which are still made! -- and they _often_ leaked, severely corroding the equipment in which they were installed.)

The most-common problem with alkaline cells is the appearance of a white deposit on the negative terminal. This stuff often gets on the equipment contacts as well. If the contact contains copper, you might see a bluish-green deposit, too. These deposits can be cleaned with household ammonia, followed by a flush with isopropyl alcohol.

If your cells are leaking or giving off odors, you are most likely storing them incorrectly or "abusing" them in some way.

4806. Re: Replacement for old dual/tripple capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: dialcover@webtv.net
Message-ID: <2904-3853F42F-97@storefull-128.iap.bryant.webtv.net>
Source record: 64896

I CAN CUT THE OLD CAPS OPEN ABOVE THE RIDGE AND INSTALL NEW SINGLE SECTIONS, SEAL THE CUT AND THEY WILL BE NEW IN THE SAME CAN. $20.00 EACH.

disregard caps, visual problem
Bill Turner WA0ABI
1117 Pike Street
Saint Charles, MO 63301
636-949-2210

4807. Re: other than 60, 50 & 400 Hz transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: dialcover@webtv.net
Message-ID: <2904-3853F1F4-96@storefull-128.iap.bryant.webtv.net>
Source record: 64897

THERE ARE 60 + AND 60 - HALF Hz,PER MINUTE. HE WAS RUNNING THEM ON 60 Hz DC, AS I DO WITHOUT ANY FLICKERING WHATEVER.

disregard caps, visual problem
Bill Turner WA0ABI
1117 Pike Street
Saint Charles, MO 63301
636-949-2210

4808. Re: Stinkin, leakin alkaline batteries!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: JW <jdwalton@home.com>
Message-ID: <38541C09.9194E647@home.com>
Source record: 64898
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.antiques.radio+phono

EverReady did repair a flashlight which used a 6V lantern battery that leaked. Of course, this was in the mid 1950's! I still have the flashlight.

Randy and Cara Randall wrote:

> Hello all. I have I feel more than my share of leaking
> alkaline batteries.
> I have had the things leak in the packages and in my
> equipment.
> All have been stored at room temps and were unused. I could
> see
> dead ones leaking but stinking new ones? The worst offender
> seems
> to be Duracell followed by Eveready. I buy other brands (
> Panasonic,
> Ray-o-vac and some other off brands) and they seem to leak
> MUCH less
> frequently. I have a transistor tester that I use semi
> frequently. The
> batteries are less than a year old (Duracell), still good
> and guess what?! Battery
> nasty goo leaking out. How are you supposed to keep an
> emergency
> flashlight around? I remember how bad the old carbon-zinc
> batteries
> were about this , but here lately the alkalines seem to be
> getting the same
> reputation with me. I have seen the old " We will repair or
> replace, at out
> option any device damaged by this battery if sent with
> batteries prepaid
> to us. " Have any of you out there done this and what were
> the results?
>
> 73
>
> Randy KB8ASO Milan, In.
>
> p.s. I am sending this to the rec.antiques.radio+phono also
> as I am sure
> they have seen their fair share of battery damage!
> --
>

> "Chains shall he break for the slave is our brother. And in
> His name all oppression shall cease..."--Oh Holy Night
>
> URL to Cara's Stitchcraft and Randy's Radio Pages:
> http//members.spree.com/family/happygal

4809. Drawing Schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: Rob <NoEmail@NoWay.com>
Message-ID: <MdT44.197634$5r2.493943@tor-nn1.netcom.ca>
Source record: 64899

Is there a good (preferably Freeware) program out there that can be used to draw electrical schematic diagrams??

I don't want to have to draw symbols for transformers etc by hand!

73's
Rob

4810. Re: Stinkin, leakin alkaline batteries!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: thefiftys@aol.com
Message-ID: <830vtgrk1@bgtnsc01.worldnet.att.net>
Source record: 64900
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.antiques.radio+phono

In article <3853C7F3.53F91F7A@seidata.com>, crrandal@seidata.com says...
>
>Hello all. I have I feel more than my share of leaking
>alkaline batteries.
>I have had the things leak in the packages and in my
>equipment.
>All have been stored at room temps and were unused. I could
>see
>dead ones leaking but stinking new ones? The worst offender
>seems
>to be Duracell followed by Eveready.

<edit>

I have never had any problems, in fact I have some Duracells
in one remote that are dated "Best if installed before Jul 94"
and are still working fine.
They are usually dated for about three
years shelf life, so these must be more than 8 years old.

Pulled some badly corroded cells from an 8 Track player the other day,
but they had been in there since the days of Disco!

Eric

4811. Re: ARRL RADIO RESIGNER (ARD) problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8311bl$46k$0@208.207.71.129>
Source record: 64901

Laszlo I. Morocz wrote:
>
> The "uninstall the universe" approach is fairly dangerous, as well as
> inelegant. If your software does not do a clean uninstall or the install
> media is corrupted, you could permanently lose at least the uninstalled
> program, at worst your whole machine.

I'm seriously considering buying one of the big (and cheap
nowdays) hard drives, partitioning it to several virtual
drives, installing Windows in each, along with a single
application, boot from DOS, select the appripriate drive and
go with that drive/version for whatever application I want
to run.

The solution stinks but not as much as the problem.

Dick

4812. Re: Home Ethernet?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: Christian Diego Guevara <guevara@theriver.com>
Message-ID: <38541364.44811735@theriver.com>
Source record: 64902

I would say that your best bet is to use Shielded Twisted Pair (STP) cable. It is the same as Cat5 cable but it's got a metal shield around the conductors. It's a little harder to work with than UTP but it operates at 10BaseT and 100BaseT.

--
Christian Guevara
KD7CQV

4813. Re: Stinkin, leakin alkaline batteries!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: Jim McKinnon <radiola@ihatespam.com>
Message-ID: <8314fd$mk4$1@autumn.news.rcn.net>
Source record: 64903
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.antiques.radio+phono

I had a nice walky talkie ruined by Radio Shack alkaline batteries. I asked them to replace it as the batteries were only 4 months old. They flat out refused. Last Rat Shack item I ever bought or will ever buy...
--
Jim
radiola@ihatespam.com
To reply replace the "ihatespam" with "erols".

Randy and Cara Randall <crrandal@seidata.com> wrote in message news:3853C7F3.53F91F7A@seidata.com...
> Hello all. I have I feel more than my share of leaking
> alkaline batteries.
> I have had the things leak in the packages and in my
> equipment.
> All have been stored at room temps and were unused. I could
> see
> dead ones leaking but stinking new ones? The worst offender
> seems
> to be Duracell followed by Eveready. I buy other brands (
> Panasonic,
> Ray-o-vac and some other off brands) and they seem to leak
> MUCH less
> frequently. I have a transistor tester that I use semi
> frequently. The
> batteries are less than a year old (Duracell), still good
> and guess what?! Battery
> nasty goo leaking out. How are you supposed to keep an
> emergency
> flashlight around? I remember how bad the old carbon-zinc
> batteries
> were about this , but here lately the alkalines seem to be
> getting the same
> reputation with me. I have seen the old " We will repair or
> replace, at out
> option any device damaged by this battery if sent with
> batteries prepaid
> to us. " Have any of you out there done this and what were
> the results?
>
>
> 73
>
> Randy KB8ASO Milan, In.

>
> p.s. I am sending this to the rec.antiques.radio+phono also
> as I am sure
> they have seen their fair share of battery damage!
> --
>
>
>
>
> "Chains shall he break for the slave is our brother. And in
> His name all oppression shall cease..."--Oh Holy Night
>
>
> URL to Cara's Stitchcraft and Randy's Radio Pages:
> http//members.spree.com/family/happygal
>
>

4814. Re: Stinkin, leakin alkaline batteries!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: "Chaz :-)" <oldradiodays@mediaone.net>
Message-ID: <38541B86.C3B15881@mediaone.net>
Source record: 64904
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.antiques.radio+phono

Hi, all,

I had the meter ruined in a Eico 256 VTVM. I know, it seems strange but the alkaline fumes from a leaking Eveready alkaline cell worked their way into the movement and desolved the aluminum pointer needle.

If you have a vintage portable with a repro battery pack beware!

Chaz :-)

Randy and Cara Randall wrote:

> Hello all. I have I feel more than my share of leaking
> alkaline batteries.
> I have had the things leak in the packages and in my
> equipment.
> All have been stored at room temps and were unused. I could
> see
> dead ones leaking but stinking new ones? The worst offender
> seems
> to be Duracell followed by Eveready. I buy other brands (
> Panasonic,
> Ray-o-vac and some other off brands) and they seem to leak
> MUCH less
> frequently. I have a transistor tester that I use semi
> frequently. The
> batteries are less than a year old (Duracell), still good
> and guess what?! Battery
> nasty goo leaking out. How are you supposed to keep an
> emergency
> flashlight around? I remember how bad the old carbon-zinc
> batteries
> were about this , but here lately the alkalines seem to be
> getting the same
> reputation with me. I have seen the old " We will repair or
> replace, at out
> option any device damaged by this battery if sent with
> batteries prepaid
> to us. " Have any of you out there done this and what were
> the results?
>
> 73
>
> Randy KB8ASO Milan, In.
>

> p.s. I am sending this to the rec.antiques.radio+phono also
> as I am sure
> they have seen their fair share of battery damage!
> --
>
> "Chains shall he break for the slave is our brother. And in
> His name all oppression shall cease..."--Oh Holy Night
>
> URL to Cara's Stitchcraft and Randy's Radio Pages:
> http//members.spree.com/family/happygal

4815. Re: MRF-485s - Pair Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.991212144714.4201F-100000@oso.slonet.org>
Source record: 64905

Your probably better off putting in MRF 422's in. Better check, I do not
think MRF 485 are good with a 28 volt collector supply, but I will check.
You must have removed the 31 volt zener diodes on the final board.
They are there specifically to short and open the fuse on the power supply
board BEFORE the final transistors fail. 73 Cliff K7RR

On Sun, 12 Dec 1999 py1ll@my-deja.com wrote:

> In article <82uk7g$29k0$1@newssvr03-int.news.prodigy.com>,
> <wb0poz@prodigy.net> wrote:
> >
> > Anyone know of a source of these for less than $25 a pop? Anyone have
> a
> > pair in their junkbox?
> >
> > The bias supply in a friend's Scrapwood 930 decided to put a full 12V
> on the
> > bases in the final board - and I even got yelled at by my wife for
> stinking
> > up the house when they fried.
> >
> > Appreciate any leads.
> >
> > 73 John
> >
> >
>
> For US$ 22.95 each you can get them with Ocean State Electronics at
> http://www.oselectronics.com/ose_p46.htm
> --
> Greetings,
>
> Luiz - PY1LL
>
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.
>
>

4816. Re: Drawing Schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: "Laszlo I. Morocz" <kf4pv@SPAMMENOTlmorocz.com>
Message-ID: <xGV44.2753$Jh3.9733@jump.innerx.net>
Source record: 64906

The cheapest solution is to use Paint, since it comes free with Windows.
And, it's possible to avoid drawing your own symbols. Just:

1. Browse the millions of web pages that have schematics

2. Find ones that have the symbols you need in a form you like.

3. Save the image onto your computer.

4. Convert the image to a .BMP file with your favorite freeware graphics convertor.

5. Cut the symbols you need from the file and put them into another file called symbols.bmp or similar.

Now when you want to draw a schematic, bring up 2 copies of Paint, one with the symbols and the other for your new file. Copy from symbols.bmp and paste into the schematic.

Another possibility is to scan in the page from the ARRL handbook that has all the schematic symbols and save that as your symbol file.

I actually used Paint quite happily for several years this way, until my schematics needed to be generating net lists for a layout program. Since it was one of my clients that needed that, I was able to get them to pay for a professional capture package. But if it hadn't been for that I'd still be using Paint.

73 de KF4PV/3, Laszlo

--
To reply, remove the text SPAMMENOT from the e-mail address.
Rob wrote in message ...
>Is there a good (preferably Freeware) program out there that can be used to
>draw electrical schematic diagrams??
>
>I don't want to have to draw symbols for transformers etc by hand!
>
>73's
>Rob
>
>
>
>

4817. Re: GaAsFET replacement help needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.991212145222.4201G-100000@oso.slonet.org>
Source record: 64907

Remove the case lead and let it float! You shorted the input to ground
when you did this. Rewire and try again! Cliff K7RR

On 12 Dec 1999, Bpn518 wrote:

> Hi,
> I have a Mirage 6m preamp, which stopped working during
> testing of a homebrew 6m amp. The preamp was between
> the rig and amp, so I didn't kill it from full amp power. With
> the preamp on, it receives worse than when it's off.
>
> When I called Mirage they said I probably killed the GaAsfet
> called a U309, which they said is kinda sensitive. They said
> they were out of it, but it was a
> common part. At Mouser, I got an SK replacement, that
> had 4 legs instead of 3. I matched up the legs (from the ARRL
> handbook) and tied two legs together that included the case.
> Needless to say, it didn't work.
>
> Did I do something wrong, or is there a different replacement
> FET I can use in place of the U309?
>
> Thanks,
> Bennett ko2ok in NJ.
>
>

4818. Re: Drawing Schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: "Eric J. Goforth" <eric@--SPAM>
Message-ID: <8318v3$kp3$1@ash.prod.itd.earthlink.net>
Source record: 64908

Holy Cow.... I hope he's not in any hurry....

www.shareware.com lists 7 different Schematic programs available for the
Windows OS. Try some of them.
--

Thanx for your time,
Eric J. Goforth, KF6ZDG
Remove --SPAM FILTER-- from my Email address to send me Email

Laszlo I. Morocz <kf4pv@SPAMMENOTlmorocz.com> wrote in message
news:xGV44.2753$Jh3.9733@jump.innerx.net...
> The cheapest solution is to use Paint, since it comes free with Windows.
> And, it's possible to avoid drawing your own symbols. Just:
>
> 1. Browse the millions of web pages that have schematics
>
> 2. Find ones that have the symbols you need in a form you like.
>
> 3. Save the image onto your computer.
>
> 4. Convert the image to a .BMP file with your favorite freeware graphics
> convertor.
>
> 5. Cut the symbols you need from the file and put them into another file
> called symbols.bmp or similar.
>
> Now when you want to draw a schematic, bring up 2 copies of Paint, one
with
> the symbols and the other for your new file. Copy from symbols.bmp and
paste
> into the schematic.
>
> Another possibility is to scan in the page from the ARRL handbook that has
> all the schematic symbols and save that as your symbol file.
>
> I actually used Paint quite happily for several years this way, until my
> schematics needed to be generating net lists for a layout program. Since
it
> was one of my clients that needed that, I was able to get them to pay for
a
> professional capture package. But if it hadn't been for that I'd still be
> using Paint.
>
> 73 de KF4PV/3, Laszlo

>
>
> --
> To reply, remove the text SPAMMENOT from the e-mail address.
> Rob wrote in message ...
> >Is there a good (preferably Freeware) program out there that can be used
to
> >draw electrical schematic diagrams??
> >
> >I don't want to have to draw symbols for transformers etc by hand!
> >
> >73's
> >Rob
> >
> >
> >
> >
>
>

4819. Single chip fm

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: JW <jdwalton@home.com>
Message-ID: <38544BD2.E3AC9B8@home.com>
Source record: 64909

Anyone care to recommend a simple single chip fm receiver - I am looking
for a pretty simple (even boombox) type to monitor only one frequenc
near the fm broadcast band.

4820. Re: Stinkin, leakin alkaline batteries!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: Butch Magee <butchkay@netdoor.com>
Message-ID: <3854339E.3F62AD23@netdoor.com>
Source record: 64910
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.antiques.radio+phono

Well damn, Popeye, and I just bought some of them non-fully-hydrodgenated, testicular free, wimp ass, cross dressing camouflaged homo Laotian or Uganda batteries man. Can't tell for sure of origin, paint keeps rubbing' off. You think they be ok? That leakin' acid, Man not paint oh noooooo! My fingerz are melting, melting right in fonta my eyes, they're dripping on the lap of my pants......OH Holy SHit,...it burning my PP,....eyeeeee!!!

Papa Bear KF5DE

Popeye wrote:

> Randy and Cara Randall wrote:
> >
> > Hello all. I have I feel more than my share of leaking
> > alkaline batteries.
> > I have had the things leak in the packages and in my
> > equipment.
> > All have been stored at room temps and were unused. I could
> > see
> > dead ones leaking but stinking new ones? The worst offender
> > seems
> > to be Duracell followed by Eveready. I buy other brands (
> > Panasonic,
> > Ray-o-vac and some other off brands) and they seem to leak
> > MUCH less
> > frequently. I have a transistor tester that I use semi
> > frequently. The
> > batteries are less than a year old (Duracell), still good
> > and guess what?! Battery
> > nasty goo leaking out. How are you supposed to keep an
> > emergency
> > flashlight around? I remember how bad the old carbon-zinc
> > batteries
> > were about this , but here lately the alkalines seem to be
> > getting the same
> > reputation with me. I have seen the old " We will repair or
> > replace, at out
> > option any device damaged by this battery if sent with
> > batteries prepaid
> > to us. " Have any of you out there done this and what were
> > the results?
> >
> > 73
> >

> > Randy KB8ASO Milan, In.
> >
> > p.s. I am sending this to the rec.antiques.radio+phono also
> > as I am sure
> > they have seen their fair share of battery damage!
>
> I have had the problem you speak of happen so rarely that it is
> something not even to consider. Admittedly, when it does it seems like
> a major problem or world crisis. Aboard ship we use untold hundereds of
> alkaline cells in everything from emergency beacon lights on our
> survival suits, flashlight, emergency use only flashlights that are
> mounted on the bulkhead next to doorways, radios, VOM's and the list
> goes on... over the years maybe only one or two in the bunch leaks or
> develops a crystalline mass on the bottom of the cell. My suggestion,
> use cheap flashlights that you can justify for throwing away (or be
> assured of getting replace by the battery manufacturer) like those 2D
> size yellow Ray-O-Vac jobs.
>
> I 've been told in three separate instances where a consumer has had
> their flashlight replaced because of leaking cells.
>
> Duracell sent me certificates with no hesitation on their part to
> replace a package (and get an extra one free) of cells that had a
> leaker.
>
> My best experience has been with Ray-O-Vac cells. I don't bother with
> Duracell and Eveready since they put those battery testers on the side
> which makes them stick in certain flashlights. I do use Eveready for
> other applications however. Duracell can bite the big one since they
> are more expensive than the other brands where I shop.

4821. Re: Drawing Schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: "Laszlo I. Morocz" <kf4pv@SPAMMENOTlmorocz.com>
Message-ID: <aGW44.2754$Jh3.9734@jump.innerx.net>
Source record: 64911

Actually, it really doesn't take that long, especially compared to learning a full-featured capture program. One good schematic will contain most of the symbols anyone would ever need. I just mentioned the millions to give an idea of what's available out there. And the cut and paste time is quite comparable to the component select and insert time on a full-featured program. I can turn out a schematic with Paint as fast as I can with Orcad Capture. It just doesn't have all the netlist and layout info, the revision info, etc. It may not be optimal, but for those with limited resources, it sure beats pencil and paper.

73 de KF4PV/3, Laszlo

--
To reply, remove the text SPAMMENOT from the e-mail address.
Eric J. Goforth > wrote in message
<8318v3$kp3$1@ash.prod.itd.earthlink.net>...
>Holy Cow.... I hope he's not in any hurry....
>
>www.shareware.com lists 7 different Schematic programs available for the
>Windows OS. Try some of them.
>--
>
>Thanx for your time,
>Eric J. Goforth, KF6ZDG
>Remove --SPAM FILTER-- from my Email address to send me Email
>

4822. Re: Drawing Schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: "Eric J. Goforth" <eric@--SPAM>
Message-ID: <831d3q$1g2$1@fir.prod.itd.earthlink.net>
Source record: 64912

I can't argue with that... That is true... ;-)

--

Thanx for your time,
Eric J. Goforth, KF6ZDG
Remove --SPAM FILTER-- from my Email address to send me Email

Laszlo I. Morocz <kf4pv@SPAMMENOTlmorocz.com> wrote in message
news:aGW44.2754$Jh3.9734@jump.innerx.net...
>
> Actually, it really doesn't take that long, especially compared to
learning
> a full-featured capture program. One good schematic will contain most of
the
> symbols anyone would ever need. I just mentioned the millions to give an
> idea of what's available out there. And the cut and paste time is quite
> comparable to the component select and insert time on a full-featured
> program. I can turn out a schematic with Paint as fast as I can with Orcad
> Capture. It just doesn't have all the netlist and layout info, the
revision
> info, etc. It may not be optimal, but for those with limited resources, it
> sure beats pencil and paper.
>
> 73 de KF4PV/3, Laszlo
>
> --
> To reply, remove the text SPAMMENOT from the e-mail address.
> Eric J. Goforth > wrote in message
> <8318v3$kp3$1@ash.prod.itd.earthlink.net>...
> >Holy Cow.... I hope he's not in any hurry....
> >
> >www.shareware.com lists 7 different Schematic programs available for the
> >Windows OS. Try some of them.
> >--
> >
> >Thanx for your time,
> >Eric J. Goforth, KF6ZDG
> >Remove --SPAM FILTER-- from my Email address to send me Email
> >
>
>
>

4823. Re: Stinkin, leakin alkaline batteries!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: Robert Mozeleski <moz@ncx.com>
Message-ID: <F06E5FE8CC819A46.8CC0171D09630A9F.7F0E513EB0C22FD0@lp.airnews.net>
Source record: 64913
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.antiques.radio+phono

Sometimes i go looking around old houses for old bottles or with the metal
detector. I have dug up a few old batterys, you should see what they do to
the ground around them after being buried for 10 or 20 years.....YUK!
Randy and Cara Randall <crrandal@seidata.com> wrote in message
news:3853C7F3.53F91F7A@seidata.com...
> Hello all. I have I feel more than my share of leaking
> alkaline batteries.
> I have had the things leak in the packages and in my
> equipment.
> All have been stored at room temps and were unused. I could
> see
> dead ones leaking but stinking new ones? The worst offender
> seems
> to be Duracell followed by Eveready. I buy other brands (
> Panasonic,
> Ray-o-vac and some other off brands) and they seem to leak
> MUCH less
> frequently. I have a transistor tester that I use semi
> frequently. The
> batteries are less than a year old (Duracell), still good
> and guess what?! Battery
> nasty goo leaking out. How are you supposed to keep an
> emergency
> flashlight around? I remember how bad the old carbon-zinc
> batteries
> were about this , but here lately the alkalines seem to be
> getting the same
> reputation with me. I have seen the old " We will repair or
> replace, at out
> option any device damaged by this battery if sent with
> batteries prepaid
> to us. " Have any of you out there done this and what were
> the results?
>
>
> 73
>
> Randy KB8ASO Milan, In.
>
> p.s. I am sending this to the rec.antiques.radio+phono also
> as I am sure
> they have seen their fair share of battery damage!
> --

>
>
>
>
> "Chains shall he break for the slave is our brother. And in
> His name all oppression shall cease..."--Oh Holy Night
>
>
> URL to Cara's Stitchcraft and Randy's Radio Pages:
> http//members.spree.com/family/happygal
>
>

4824. Re: Drawing Schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: Rob <NoEmail@NoWay.com>
Message-ID: <JCX44.197688$5r2.495234@tor-nn1.netcom.ca>
Source record: 64914

Thanks for the info.

Rob

"Eric J. Goforth" <eric@--SPAM FILTER--qrz.com> wrote in message
news:8318v3$kp3$1@ash.prod.itd.earthlink.net...
> Holy Cow.... I hope he's not in any hurry....
>
> www.shareware.com lists 7 different Schematic programs available for the
> Windows OS. Try some of them.
> --
>
> Thanx for your time,
> Eric J. Goforth, KF6ZDG
> Remove --SPAM FILTER-- from my Email address to send me Email
>
> Laszlo I. Morocz <kf4pv@SPAMMENOTlmorocz.com> wrote in message
> news:xGV44.2753$Jh3.9733@jump.innerx.net...
> > The cheapest solution is to use Paint, since it comes free with Windows.
> > And, it's possible to avoid drawing your own symbols. Just:
> >
> > 1. Browse the millions of web pages that have schematics
> >
> > 2. Find ones that have the symbols you need in a form you like.
> >
> > 3. Save the image onto your computer.
> >
> > 4. Convert the image to a .BMP file with your favorite freeware graphics
> > convertor.
> >
> > 5. Cut the symbols you need from the file and put them into another file
> > called symbols.bmp or similar.
> >
> > Now when you want to draw a schematic, bring up 2 copies of Paint, one
> with
> > the symbols and the other for your new file. Copy from symbols.bmp and
> paste
> > into the schematic.
> >
> > Another possibility is to scan in the page from the ARRL handbook that
has
> > all the schematic symbols and save that as your symbol file.
> >
> > I actually used Paint quite happily for several years this way, until my
> > schematics needed to be generating net lists for a layout program. Since

> it
> > was one of my clients that needed that, I was able to get them to pay
for
> a
> > professional capture package. But if it hadn't been for that I'd still
be
> > using Paint.
> >
> > 73 de KF4PV/3, Laszlo
> >
> >
> > --
> > To reply, remove the text SPAMMENOT from the e-mail address.
> > Rob wrote in message ...
> > >Is there a good (preferably Freeware) program out there that can be
used
> to
> > >draw electrical schematic diagrams??
> > >
> > >I don't want to have to draw symbols for transformers etc by hand!
> > >
> > >73's
> > >Rob
> > >
> > >
> > >
> > >
> >
> >
>
>
>

4825. Re: Drawing Schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: Rob <NoEmail@NoWay.com>
Message-ID: <mDX44.197689$5r2.495310@tor-nn1.netcom.ca>
Source record: 64915

Thanks for the tip.

I'll give paint a try and maybe one of the schematic programs on
Shareware.com

Rob

"Laszlo I. Morocz" <kf4pv@SPAMMENOTlmorocz.com> wrote in message
news:xGV44.2753$Jh3.9733@jump.innerx.net...
> The cheapest solution is to use Paint, since it comes free with Windows.
> And, it's possible to avoid drawing your own symbols. Just:
>
> 1. Browse the millions of web pages that have schematics
>
> 2. Find ones that have the symbols you need in a form you like.
>
> 3. Save the image onto your computer.
>
> 4. Convert the image to a .BMP file with your favorite freeware graphics
> convertor.
>
> 5. Cut the symbols you need from the file and put them into another file
> called symbols.bmp or similar.
>
> Now when you want to draw a schematic, bring up 2 copies of Paint, one
with
> the symbols and the other for your new file. Copy from symbols.bmp and
paste
> into the schematic.
>
> Another possibility is to scan in the page from the ARRL handbook that has
> all the schematic symbols and save that as your symbol file.
>
> I actually used Paint quite happily for several years this way, until my
> schematics needed to be generating net lists for a layout program. Since
it
> was one of my clients that needed that, I was able to get them to pay for
a
> professional capture package. But if it hadn't been for that I'd still be
> using Paint.
>
> 73 de KF4PV/3, Laszlo
>
>
> --

> To reply, remove the text SPAMMENOT from the e-mail address.
> Rob wrote in message ...
> >Is there a good (preferably Freeware) program out there that can be used
to
> >draw electrical schematic diagrams??
> >
> >I don't want to have to draw symbols for transformers etc by hand!
> >
> >73's
> >Rob
> >
> >
> >
> >
>
>

4826. Re: MRF-485s - Pair Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: wb0poz@prodigy.net
Message-ID: <831mbq$88sq$1@newssvr03-int.news.prodigy.com>
Source record: 64916

Clifford Buttschardt <cbuttsch@slonet.org> wrote in message
news:Pine.GSO.3.95.991212144714.4201F-100000@oso.slonet.org...
> Your probably better off putting in MRF 422's in. Better check, I do not
> think MRF 485 are good with a 28 volt collector supply, but I will check.
> You must have removed the 31 volt zener diodes on the final board.
> They are there specifically to short and open the fuse on the power supply
> board BEFORE the final transistors fail. 73 Cliff K7RR
>

Cliff - no such luck. Someone had replaced the driver xistors and the base lead on one was intermittent. Soldered it back in but now the xmit audio was distorted. I repaired all kinds of intermittents with this crappy radio (dirty relays, dirty pots) so I tried pushing a bit on the bias pot with a plastic stick while xmitting (THAT was dumb!) and rreading the bias voltage. Poof! Sure as hell, the pot was intermittent.

BTW found a NTE sub that is only $10.50 each from Allied.

The Vc max on the MRF485 sez 25V. Looks like pretty close tolerance to me, but then almost everything about this radio is bottom of the barrel.

Thanks and 73 - John

4827. Re: Single chip fm

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <38545F04.65C7@pop.valley.net>
Source record: 64917

JW wrote:
>
> Anyone care to recommend a simple single chip fm receiver - I am looking
> for a pretty simple (even boombox) type to monitor only one frequenc
> near the fm broadcast band.

Hello--
You could detune a cheap FM receiver to the frequency of your
choice-- that's probably easiest.

A few years ago, Radio hack offered a TDA-7000 (if I recall correctly)
single-chip FM receiver for a few dollars. This might still be
available-- comments, anyone?

73,
Brad AA1IP

4828. Re: GaAsFET replacement help needed - U309 was Siliconix JFET

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: Jim Pennell <no-spam@spam.com>
Message-ID: <831qb3thb1@nntp3.atl.mindspring.net>
Source record: 64918

>I don't recall offhand who made the J309/U309 (and related J310/U310)
>parts ... it's been a while since I've seen them used.

They were made by Siliconix, and I've seen them at local surplus shops.

The other message is correct, the J versions are the plastic package and the U versions are the metal case.

For most purposes, they are the same except the fourth lead on the metal case versions is connected to the metal case itself, and is usually grounded.

If you are using it to replace a plastic pack device, cut off the fourth lead and just use the other three. You may want to use a VOM to measure and verify which is the case lead.....

Jim

4829. Re: Stinkin, leakin alkaline batteries!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: Steve Phipps <sphipps@clandjop.com>
Message-ID: <3853efed@mailnnews.janics.com>
Source record: 64919
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.antiques.radio+phono

William Sommerwerck <williams@nwlink.com> wrote in message
news:3853EA3F.16DB2658@nwlink.com...
> I've been using alkaline batteries for over 30 years, and I have _never_
seen an
> alkaline cell that "leaked" or had an odor.

I recently had a set of AA Energizers leak in a radio that had been stored
for about 2 years. No damage done and it cleaned right up, but they
nonetheless leaked...

SP

4830. Re: Drawing Schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: kyrrin@my-deja.com
Message-ID: <1m285scqd6vq7dcstjki4tfh9lg2v4tkiu@4ax.com>
Source record: 64920

On Sun, 12 Dec 1999 15:01:23 -0500, "Rob" <NoEmail@NoWay.com> wrote:

FWIW: You'll get better results if you include at least a
human-readable E-mail address somewhere in the text body of your message.
You can do so with little fear of being spammed as most harvesting
software looks only at the message headers.

On that note, the my-deja address in my own headers is a spam-trap.
Anything sent to it will bounce. If you want to respond direct, please use
the human-readable addy in my own sig block.

With that said...

>>Is there a good (preferably Freeware) program out there that can be used to
>>draw electrical schematic diagrams??

It's not freeware, but I've found CircuitMaker from MicroCode
Engineering (www.microcode.com) to be well worth the investment (around
$250 or so for the standard version).

Not only can it draw darn good schematics, it allows you to build an
analog, digital, or mixed-mode circuit and simulate the crap out of it
using a well-done SPICE engine. No more burned components or messy test
benches.

I chose it over Electronics Workbench because of the lousy support I
got out of the people that make EWB.

Best of luck.

-=-=-=-=-=-=-=-=-
Bruce Lane, Owner and head honcho,
Blue Feather Technologies -- kyrrin (at) bluefeathertech [dot] com
Web: http://www.bluefeathertech.com
"...No matter how we may wish otherwise, our science can only describe an object,
event, or living thing in our own human terms. It cannot possibly define any of them..."

4831. Re: Drawing Schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <945090053.161378412@news.indigo.ie>
Source record: 64921

On Sun, 12 Dec 1999, Rob wrote:
>Is there a good (preferably Freeware) program out there that can be used to
>draw electrical schematic diagrams??
>
>I don't want to have to draw symbols for transformers etc by hand!
>
>73's
>Rob

Hard way, use Windows Paint. There's some symbols on my
home page: http://www.qsl.net/ei9gq/bits.zip

Easier way, Use a standard drawing program like SmartDraw or
a free/demo version of a CAD program. Try Eagle CAD from
http://www.cadsoftusa.com

73, Ed. EI9GQ.

--

Remove 'X' to reply.

Linux 2.2.5-15

4832. selsyns, synchros, resolvers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: Angel Vilaseca <avilaseca@popmail.smis.ch>
Message-ID: <3853F302.1AC56E7E@popmail.smis.ch>
Source record: 64922

Hi, all

I just was given an old dish from a meteo radar. The az-el mount uses synchros as a position control. I want to track satellites from my PC. Is there a way to digitize the output from a selsyn, (or synchro, resolver) and to feed it to a computer?

tnx de Angel Vilaseca HB9SLV
Geneva, Switzerland

4833. FS/FT: Western Electric Transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: ovrreactor@aol.com-nospam
Message-ID: <19991211193345.10804.00000108@ng-cr1.aol.com>
Source record: 64972

I have a Western Electric 104 Y Output Transformer that I would like to sell or trade. I have a picture posted at;

http://members.aol.com/Reactor001

Make offer by email to < OvrReactor@aol.com >.

I'd prefer cash, but if you're looking to swap, I'm looking for unused compactron and magnoval/novar sockets, grid/plate plate caps, 7EY6's, 12AU7's, 20EZ7's, and EL34's.

Regards,
Tom Mitchell

4834. ARRL RADIO RESIGNER (ARD) problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: <>
Message-ID: <noC44.1136$5e3.55558@typ11.nn.bcandid.com>
Source record: 64973

Some time back there was a discussion about problems getting the ARD program to load properly. I also have the problem and no answers from the League except to tell me they know of the problem and no answers as to why it happens or how to fix it.

I have been able to get the program to run again by adding an additional IDE harddrive on the second IDE cable in my computer. If I remove the drive and restart the program, it hangs again at the opening window and I get the vertical bar in the lower left. This was all found by accident but for me, it works everytime. I run WIN95, S3 PCI Video card and a Cyrix 300MKII processor.

Has anyone made any progress at a fix for the problem. It's a nice program if you can get it to run!

Don AF4Z
af4z@arrl.net

4835. Re: ARRL RADIO RESIGNER (ARD) problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <Cz1TOEptmsoOo3mismnBasOC95wp@4ax.com>
Source record: 64974

On Sat, 11 Dec 1999 21:09:11 -0800, Jim Weir <jim@rst-engr.com> wrote:
>I couldn't get it to play for about three months. I shoved it over in a corner
>of my engineering programs window and let it sit for a while. I probably
>fiddled with this and that, probably had to reload windoze due to crashes, did
>some other hard disk manipulation like cleaning and stuff.
>
>Fired it up one day while I was bored and bingo. It loaded and played just
>fine. I don't know what fixed it, probably never will. And like you, the
>"company" had absolutely no help for me.

True, Microsoft is very unresponsive. A decent operating system wouldn't
cause you this sort of grief.

>Some day when I "fix" the original problem back, it will go tango uniform again,
>and when it does, I'll be back in the same "what the hell did I do now" mode.

Keep a log of any system changes. Then you have a prayer of backing out to
a working configuration (though it is a slim prayer considering how a Microsoft
OS tends to booger itself up in the oddest places).

>Until then, it seems to work just fine. But I'm not putting anything into it
>that I depend on for the business.

I wouldn't run *anything* that I depended on for business under Windoze.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

4836. Re: Blocking Cap for computer Mic Jack

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: nq5t <nq5t@gte.net>
Message-ID: <38534912.8228D6E6@gte.net>
Source record: 64975

Rob wrote:

> from my Rig to the mic input jack of the computer, WHAT Value should the
> blocking cap be??
>
> 1 Micro farad? 10 Micro Farads? 100 MicroFarads?? (I may have to use an
> electrolytic cap??)

You do NOT want to use an electrolytic cap in this application. I'd use a TANTALUM (maybe 1uF) with the + side connected towards the computer (assuming the computer is providing a positive voltage). A good 0.1uF mylar would fine also.

Grant

4837. Re: ARRL RADIO RESIGNER (ARD) problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <38536D29.4B2A0069@corecomm.net>
Source record: 64976

Gary Coffman wrote:
> I wouldn't run *anything* that I depended on for business under Windoze.

Linux consultants do. Nothing sells linux like Windoze.

```
--
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
| Cliff Sharp | "light jazz" is to jazz as "rubber band" is to orchestra. |
| WA9PDM | |
+-+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
```

4838. Re: ARRL RADIO RESIGNER (ARD) problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3853895D.1EA21D5E@eznec.com>
Source record: 64977

Whenever you install a new application on your Windows system, it overwrites a number of system files. A well-behaved installation program should only overwrite files with ones having a higher revision number, and most probably do. The rationale is that the application might depend on bug fixes in the newer files in order to operate properly, so each application modifies your system to suit itself. The files which are changed are also used by other applications, so any previously installed software may operate differently as a result. Because your Windows operating system gets modified each time you install new software, and I'm sure your experience is common.

I had a similar problem with some rather expensive software I purchased, where it wouldn't do certain things. Technical support worked and worked at it, but were unable to solve the problem. I felt I could work around it (and there weren't many alternatives), so didn't send it back, but put it aside for a while while I did other things. When I dusted it back off some time later, the problems were gone.

A while back, I pulled most of my remaining hair out searching for a bug in a Windows application I was developing. The symptom was that sometimes when I opened the dialog box used for choosing files, printers, etc., the program would crash. The dialog box returned an error message with no message, and an error number not documented anywhere. After a lot of troubleshooting, I discovered that it would happen only after I opened Notepad or a couple of other Windows applications. I finally tracked it down to one of the Windows files which had been replaced by some application. The newer version, which the unknown application had installed, had a bug in it. I replaced it with the old file and cured the problem. Some time later, the problem re-appeared. Sure enough, something had re-installed the newer file again, so I replaced it again. This was happening with Windows 95. Later on, I installed Windows 98, and with it a file with an even later version number, and no bug. So now it won't be replaced (at least by the known buggy version), and the problem is hopefully gone for good. This file with the later version number will of course be copied onto the user's system (replacing any older version) when he installs my program. Who knows what bugs it might have which don't bother my program but will cause others to malfunction?

It's miraculous that Windows works at all.

I was just reading some information about the forthcoming Windows 2000 operating system, and it looks like Microsoft is going to try to control this in the future, by maintaining the updated files separate from the operating system. But time will tell. . .

Roy Lewallen, W7EL

Jim Weir wrote:
>
> af4z@palmnet.net@somehost.somedomain (Don Winn)
> shared these priceless pearls of wisdom:
>
> ->Has anyone made any progress at a fix for the problem. It's a nice program if
>
> ->you can get it to run!
>
> I couldn't get it to play for about three months. I shoved it over in a corner
> of my engineering programs window and let it sit for a while. I probably
> fiddled with this and that, probably had to reload windoze due to crashes, did
> some other hard disk manipulation like cleaning and stuff.
>
> Fired it up one day while I was bored and bingo. It loaded and played just
> fine. I don't know what fixed it, probably never will. And like you, the
> "company" had absolutely no help for me.
>
> Some day when I "fix" the original problem back, it will go tango uniform again,
> and when it does, I'll be back in the same "what the hell did I do now" mode.
> Until then, it seems to work just fine. But I'm not putting anything into it
> that I depend on for the business.
>
> Jim
> Jim Weir, VP Eng. RST Eng. WX6RST
> A&P, CFI, and other good alphabet soup

4839. Re: Blocking Cap for computer Mic Jack

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <38538CD4.2649B0F7@eznec.com>
Source record: 64978

nq5t wrote:
>
> Rob wrote:
>
> > from my Rig to the mic input jack of the computer, WHAT Value should the
> > blocking cap be??
> >
> > 1 Micro farad? 10 Micro Farads? 100 MicroFarads?? (I may have to use an
> > electrolytic cap??)
>
> You do NOT want to use an electrolytic cap in this application. I'd use
> a TANTALUM (maybe 1uF) with the + side connected towards the computer
> (assuming the computer is providing a positive voltage). A good 0.1uF
> mylar would fine also.
>
> Grant

Since tantalum capacitors are electrolytic, I assume you mean that an aluminum electrolytic shouldn't be used. Why not? I've used them in similar applications for decades, both for amateur applications and in the design of commercial products.

The required value is determined by the impedance looking into the mic jack. I've never looked closely at the impedance of sound card mic inputs, but would be surprised if it's less than 1k ohm. If it's as low as 1k, things will sound pretty tinny with 0.1uF, because it'll roll everything off below about 1.5kHz. (It'll be 3 dB down at 1.5kHz, and drop more below that.) At 1k ohm, 1uF will extend the frequency response down to 159Hz. (If the input impedance is 10k ohms, you'll get 159Hz response from 0.1uF. Do a little experimenting.) If there's no DC voltage on either your rig or the computer, use a couple of electrolytics in series, each having twice the required total value, connected + to + or - to -.

Roy Lewallen, W7EL

4840. Re: ARRL RADIO RESIGNER (ARD) problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <3853E33C.BACCBFCC@bellsouth.net>
Source record: 64979

One thing that's worked for me is to simply reinstall the offending application. If any files got overwritten by something else, this should put back the newer version.

When things get REALLY bad, I've been known to simply restore the contents of C:\WINDOWS\SYSTEM from a backup made while things were working, and tell the backup to overwrite *everything* (even newer files) in that directory. I wouldn't do that unless you also have a *current* backup (and lots of time) as there's a fair chance of completely hosing the system. Also, even if it does fix the application you're working on, you'll probably break one or more other applications. At least you'll be able to figure out which one is conflicting.

Even in Linux, shared library conflicts seem to be a problem. Sometimes (especially with cheap disk space these days) I wonder if shared libraries are worth the trouble?!
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

4841. Re: ARRL RADIO RESIGNER (ARD) problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: "Laszlo I. Morocz" <kf4pv@SPAMMENOTlmorocz.com>
Message-ID: <k9O44.2750$Jh3.9689@jump.innerx.net>
Source record: 64980

The "uninstall the universe" approach is fairly dangerous, as well as inelegant. If your software does not do a clean uninstall or the install media is corrupted, you could permanently lose at least the uninstalled program, at worst your whole machine.

If I was seeing this problem, first I would demand real support from ARRL. At the very least they should be able to give an installation manifest showing all the files they install, including dates and versions. If they won't even do this much, get a refund. If no refund, then boycotts and legal action are in order. If they are a class outfit that stands behind their product, then they should work with you to help resolve the problem. Since this is such a common problem, the best solution would be to make public the sources for the code that gets executed up to the point of the hang. About 15 minutes later someone out there will report back with the problem and a fix.

If I didn't want to deal with the ARRL, I'd load up a debugger like NuMega's Soft-ICE for Windows 95 and run ARD. When it hung, I'd break in and be able to see what the problem was. Or I could run ARD in Soft-ICE and trace through to the hang. This would allow me to isolate exactly which call was causing the problem. And if it did turn out to be a duelling libraries problem, I'd be able to identify the guilty libraries. Then a fix could be designed. One possibility would be to copy ARD's desired library to the ARD directory, change its name and patch the ARD executable to call the renamed library. End of conflict. And depending on just how good the ARRL was about their tech support, it might even be appropriate to post the corrected executable and library to the web.

I've done in excess of $300,000 worth of business on Windows platforms from 3.0 through the latest NT and only lost data when I had physical hardware problems (disk crash, etc.). My experience with misbehaving programs on Windows is that either they're ancient DOS-based programs trying to run in a DOS-box (and doing all the things that were legal back when they were young but aren't anymore), or they were poorly coded and insufficently tested. I haven't seen that much trouble with the libraries conflicting, though it's definitely a possibility, especially with the function/no-function flip-flopping. I've run many troublesome programs under a debugger and seen the generated assembly code, and they were uniform in being highly success-oriented and ignoring any error conditions. If it's a DOS program, you could either run it in real DOS (albeit giving up any cut & paste and swapping between apps), or upgrade to the Windows version if it exists. Otherwise, demand the tech support you deserve as a paying customer.

As for the OS religious wars, I started in computers back when the state of the art was punchcards and paper tape and did 14 years of assembly language

only programming, as well as 14 years on a command line only system. The last 7 years it's been on Windows and other GUI-based systems, as well as Linux. What I see from my viewpoint is that the people (on both sides) who are fanatic enough about "their" operating system to go around calling the opposition Windoze and Eunuchs need to get a life. Come on guys, it's just an operating system. Just use whichever one is the best tool for your current job. Don't get caught up in apples and oranges comparisons and gigabuck envy- life's too short and the world beyond the screen is too beautiful for you to waste your time. Try this - the next time you want to make fun of someone else's OS choice, call your significant other and make a date to see a movie, have a picnic or spend time with the kids instead. People will like you more and your blood pressure will be lower.

73 de KF4PV/3, Laszlo

--
To reply, remove the text SPAMMENOT from the e-mail address.

Don Winn wrote ...
<snip>...it hangs again at the opening window and I get the
>vertical bar in the lower left...
<snip>

Bill W0IYH wrote ...
<snip>...Suggest do a complete "uninstall" operation (not just "delete") on
>various applications, one at a time, such as printers, word processors and
>anything else that you can "reinstall" later...
<snip>

Someone else wrote ...
<snip>...I wouldn't run *anything* that I depended on for business under
>Windoze....
<snip>

4842. Re: ARRL RADIO RESIGNER (ARD) problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@bellsouth.net>
Message-ID: <woO44.15530$Dk.233335@news1.mia>
Source record: 64981

Don Winn wrote in message ...
>Some time back there was a discussion about problems getting the ARD program
>to load properly. I also have the problem and no answers from the League
>except to tell me they know of the problem and no answers as to why it happens
>or how to fix it.
>
>I have been able to get the program to run again by adding an additional IDE
>harddrive on the second IDE cable in my computer. If I remove the drive and
>restart the program, it hangs again at the opening window and I get the
>vertical bar in the lower left. This was all found by accident but for me, it
>works everytime. I run WIN95, S3 PCI Video card and a Cyrix 300MKII
>processor.

I had the same problem. I found that ARD works, when I use the original version of win95 "A" that was released in July 1995. There
were some unlabeled "slip stream" updates shortly afterwards that do not work. ARD does not work on Win95B, or Win98 first edition.
But it does work on Win98 second edition.

Bert

4843. Re: ARRL RADIO RESIGNER (ARD) problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@bellsouth.net>
Message-ID: <DAO44.15555$Dk.233743@news1.mia>
Source record: 64982

While trying to troubleshoot ARD, I swapped *all* the DLLS that were not tied to the window version. That is, everything except
USER.DLL, GDI.DLL, and KERNEL. It may be possible to swap these, but I suspect if I tried it I would spend a few days in "registry
hell".

Anyway, my particular ARD problem is tied to one of these three DLLs. All the other DLLs that ARD links to are the same.

4844. Re: Blocking Cap for computer Mic Jack

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: bpn518@aol.com
Message-ID: <19991212103430.09503.00000230@ng-co1.aol.com>
Source record: 64983

Hi Rob,

I've used Radio Shack audio transformers
on the mic input of my PC's Creative
sound card and the speaker out, to my
Icom 756, with good results over a
2 year period with SSTV, PSK31 and
RTTY. No caps used at all. And I can
change the input from mic to line and
simply reduce levels and still work fine.

Regards,
Bennett ko2ok

4845. Re: Blocking Cap for computer Mic Jack

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: Rob <NoEmail@NoWay.com>
Message-ID: <6pP44.197588$5r2.494632@tor-nn1.netcom.ca>
Source record: 64984

Yes, sometimes it does not without a DC blocking cap since many computers
use current limiting to protect it from shorts. But some computers may not.

I rather be safe than sorry and use a cap!

73's

Rob

"Bpn518" <bpn518@aol.com> wrote in message
news:19991212103430.09503.00000230@ng-co1.aol.com...
> Hi Rob,
>
> I've used Radio Shack audio transformers
> on the mic input of my PC's Creative
> sound card and the speaker out, to my
> Icom 756, with good results over a
> 2 year period with SSTV, PSK31 and
> RTTY. No caps used at all. And I can
> change the input from mic to line and
> simply reduce levels and still work fine.
>
> Regards,
> Bennett ko2ok

4846. GaAsFET replacement help needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: bpn518@aol.com
Message-ID: <19991212104555.09503.00000231@ng-co1.aol.com>
Source record: 64985

Hi,
I have a Mirage 6m preamp, which stopped working during
testing of a homebrew 6m amp. The preamp was between
the rig and amp, so I didn't kill it from full amp power. With
the preamp on, it receives worse than when it's off.

When I called Mirage they said I probably killed the GaAsfet
called a U309, which they said is kinda sensitive. They said
they were out of it, but it was a
common part. At Mouser, I got an SK replacement, that
had 4 legs instead of 3. I matched up the legs (from the ARRL
handbook) and tied two legs together that included the case.
Needless to say, it didn't work.

Did I do something wrong, or is there a different replacement
FET I can use in place of the U309?

Thanks,
Bennett ko2ok in NJ.

4847. Re: Blocking Cap for computer Mic Jack

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: Rob <NoEmail@NoWay.com>
Message-ID: <NCP44.197591$5r2.494571@tor-nn1.netcom.ca>
Source record: 64986

Hi Roy,

Many thanks for the info.

Well, I tried to determine the input impedance of the mic jack by looking in my computer's manual. No luck. But the microphone I bought says it has an output impedance of 2000 ohms. I suspect my mic jack of the computer's sound card has a similar impedance.

A 1 microfarad cap may work. What about trying a 10 microfarad or 100 microfarad cap?

(I have seen 100 MF electrolytic dc blocking caps used when feeding an external audio amp -- see G4YNM's audio break out box in 1998 ARRL handbook (pg 22.32))

But so far most Hams are recommending 1 MF not the much large value of 100 MF

73'

Rob

"Roy Lewallen" <w7el@eznec.com> wrote in message news:38538CD4.2649B0F7@eznec.com...
> nq5t wrote:
> >
> > Rob wrote:
> >
> > > from my Rig to the mic input jack of the computer, WHAT Value should the
> > > blocking cap be??
> > >
> > > 1 Micro farad? 10 Micro Farads? 100 MicroFarads?? (I may have to use an
> > > electrolytic cap??)
> >
> > You do NOT want to use an electrolytic cap in this application. I'd use
> > a TANTALUM (maybe 1uF) with the + side connected towards the computer
> > (assuming the computer is providing a positive voltage). A good 0.1uF
> > mylar would fine also.
> >
> > Grant
>
> Since tantalum capacitors are electrolytic, I assume you mean that an
> aluminum electrolytic shouldn't be used. Why not? I've used them in
> similar applications for decades, both for amateur applications and in

> the design of commercial products.
>
> The required value is determined by the impedance looking into the mic
> jack. I've never looked closely at the impedance of sound card mic
> inputs, but would be surprised if it's less than 1k ohm. If it's as low
> as 1k, things will sound pretty tinny with 0.1uF, because it'll roll
> everything off below about 1.5kHz. (It'll be 3 dB down at 1.5kHz, and
> drop more below that.) At 1k ohm, 1uF will extend the frequency response
> down to 159Hz. (If the input impedance is 10k ohms, you'll get 159Hz
> response from 0.1uF. Do a little experimenting.) If there's no DC
> voltage on either your rig or the computer, use a couple of
> electrolytics in series, each having twice the required total value,
> connected + to + or - to -.
>
> Roy Lewallen, W7EL

4848. Re: Blocking Cap for computer Mic Jack

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: Rob <NoEmail@NoWay.com>
Message-ID: <dFP44.197592$5r2.494297@tor-nn1.netcom.ca>
Source record: 64987

Sorry for the typo. My message should have read:

Yes, sometimes it does work without a DC blocking cap since many computers
use current limiting to protect it from shorts. But some computers may not.

I rather be safe than sorry and use a cap!

73's

Rob

"Rob" <NoEmail@NoWay.com> wrote in message
news:6pP44.197588$5r2.494632@tor-nn1.netcom.ca...
> Yes, sometimes it does not without a DC blocking cap since many computers
> use current limiting to protect it from shorts. But some computers may
not.
>
> I rather be safe than sorry and use a cap!
>
> 73's
>
> Rob
>
> "Bpn518" <bpn518@aol.com> wrote in message
> news:19991212103430.09503.00000230@ng-co1.aol.com...
> > Hi Rob,
> >
> > I've used Radio Shack audio transformers
> > on the mic input of my PC's Creative
> > sound card and the speaker out, to my
> > Icom 756, with good results over a
> > 2 year period with SSTV, PSK31 and
> > RTTY. No caps used at all. And I can
> > change the input from mic to line and
> > simply reduce levels and still work fine.
> >
> > Regards,
> > Bennett ko2ok
>
>

4849. Stinkin, leakin alkaline batteries!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: Randy and Cara Randall <crrandal@seidata.com>
Message-ID: <3853C7F3.53F91F7A@seidata.com>
Source record: 64988
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.antiques.radio+phono

Hello all. I have I feel more than my share of leaking
alkaline batteries.
I have had the things leak in the packages and in my
equipment.
All have been stored at room temps and were unused. I could
see
dead ones leaking but stinking new ones? The worst offender
seems
to be Duracell followed by Eveready. I buy other brands (
Panasonic,
Ray-o-vac and some other off brands) and they seem to leak
MUCH less
frequently. I have a transistor tester that I use semi
frequently. The
batteries are less than a year old (Duracell), still good
and guess what?! Battery
nasty goo leaking out. How are you supposed to keep an
emergency
flashlight around? I remember how bad the old carbon-zinc
batteries
were about this , but here lately the alkalines seem to be
getting the same
reputation with me. I have seen the old " We will repair or
replace, at out
option any device damaged by this battery if sent with
batteries prepaid
to us. " Have any of you out there done this and what were
the results?

73

Randy KB8ASO Milan, In.

p.s. I am sending this to the rec.antiques.radio+phono also
as I am sure
they have seen their fair share of battery damage!
--

"Chains shall he break for the slave is our brother. And in
His name all oppression shall cease..."--Oh Holy Night

URL to Cara's Stitchcraft and Randy's Radio Pages:
http//members.spree.com/family/happygal

4850. Re: Stinkin, leakin alkaline batteries!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: Popeye <nospam@nospam.com>
Message-ID: <3853C135.F3F@nospam.com>
Source record: 64989
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.antiques.radio+phono

Randy and Cara Randall wrote:
>
> Hello all. I have I feel more than my share of leaking
> alkaline batteries.
> I have had the things leak in the packages and in my
> equipment.
> All have been stored at room temps and were unused. I could
> see
> dead ones leaking but stinking new ones? The worst offender
> seems
> to be Duracell followed by Eveready. I buy other brands (
> Panasonic,
> Ray-o-vac and some other off brands) and they seem to leak
> MUCH less
> frequently. I have a transistor tester that I use semi
> frequently. The
> batteries are less than a year old (Duracell), still good
> and guess what?! Battery
> nasty goo leaking out. How are you supposed to keep an
> emergency
> flashlight around? I remember how bad the old carbon-zinc
> batteries
> were about this , but here lately the alkalines seem to be
> getting the same
> reputation with me. I have seen the old " We will repair or
> replace, at out
> option any device damaged by this battery if sent with
> batteries prepaid
> to us. " Have any of you out there done this and what were
> the results?
>
> 73
>
> Randy KB8ASO Milan, In.
>
> p.s. I am sending this to the rec.antiques.radio+phono also
> as I am sure
> they have seen their fair share of battery damage!

I have had the problem you speak of happen so rarely that it is
something not even to consider. Admittedly, when it does it seems like
a major problem or world crisis. Aboard ship we use untold hundereds of
alkaline cells in everything from emergency beacon lights on our

survival suits, flashlight, emergency use only flashlights that are mounted on the bulkhead next to doorways, radios, VOM's and the list goes on... over the years maybe only one or two in the bunch leaks or develops a crystalline mass on the bottom of the cell. My suggestion, use cheap flashlights that you can justify for throwing away (or be assured of getting replace by the battery manufacturer) like those 2D size yellow Ray-O-Vac jobs.

I 've been told in three separate instances where a consumer has had their flashlight replaced because of leaking cells.

Duracell sent me certificates with no hesitation on their part to replace a package (and get an extra one free) of cells that had a leaker.

My best experience has been with Ray-O-Vac cells. I don't bother with Duracell and Eveready since they put those battery testers on the side which makes them stick in certain flashlights. I do use Eveready for other applications however. Duracell can bite the big one since they are more expensive than the other brands where I shop.

4851. Re: Stinkin, leakin alkaline batteries!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: Jack Malone <malonej@c2i2.com>
Message-ID: <TJQ44.179$hg4.21169@news.goodnet.com>
Source record: 64990
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.antiques.radio+phono

Randy:
I only had this problem once with Eveready batts and they leaked in a MagLite flashlight. Sent the flashlight to Eveready and they sent me a check to buy a new one. If I remember right the check was for a little more than a new MagLite cost me. This was maybe ten years ago or so. Don't know how they respond to this problem now.
--
Jack Malone
Hereford, AZ
malonej@c2i2.com

"Randy and Cara Randall" <crrandal@seidata.com> wrote in message news:3853C7F3.53F91F7A@seidata.com...
> Hello all. I have I feel more than my share of leaking
> alkaline batteries.
> I have had the things leak in the packages and in my
> equipment.
> All have been stored at room temps and were unused. I could
> see
> dead ones leaking but stinking new ones? The worst offender
> seems
> to be Duracell followed by Eveready. I buy other brands (
> Panasonic,
> Ray-o-vac and some other off brands) and they seem to leak
> MUCH less
> frequently. I have a transistor tester that I use semi
> frequently. The
> batteries are less than a year old (Duracell), still good
> and guess what?! Battery
> nasty goo leaking out. How are you supposed to keep an
> emergency
> flashlight around? I remember how bad the old carbon-zinc
> batteries
> were about this , but here lately the alkalines seem to be
> getting the same
> reputation with me. I have seen the old " We will repair or
> replace, at out
> option any device damaged by this battery if sent with
> batteries prepaid
> to us. " Have any of you out there done this and what were
> the results?
>
>

> 73
>
> Randy KB8ASO Milan, In.
>
> p.s. I am sending this to the rec.antiques.radio+phono also
> as I am sure
> they have seen their fair share of battery damage!
> --
>
>
>
>
> "Chains shall he break for the slave is our brother. And in
> His name all oppression shall cease..."--Oh Holy Night
>
>
> URL to Cara's Stitchcraft and Randy's Radio Pages:
> http//members.spree.com/family/happygal
>
>

4852. FS: pair of Morganite non inductive resistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: paul <apollo_six@btinternet.com>
Message-ID: <7tVuPOAFe9U4EwtE@btinternet.com>
Source record: 64991

Pair of Morganite tubular non inductive carbon resistors.
Marked as 150 ohms +/- 20% measuring 110 ohms and 120 ohms, in parallel
around 58 ohms.

6 inch long X 1 inch dia each with clamps

Placed in a suitable container and immersed in transformer oil would
make a fantastic dummy load.

15 GBP (23 dollars) the pair plus carriage.

--

4853. Re: Info needed on BB409 varactor diode

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: Raw Power Radio <rawpowerradioNOraSPAM@go.com.invalid>
Message-ID: <1e9b4e00.9250f948@usw-ex0101-003.remarq.com>
Source record: 64992

Thanks, Pete and Luiz. This is exactly what I needed.

* Sent from RemarQ http://www.remarq.com The Internet's Discussion Network *
The fastest and easiest way to search and participate in Usenet - Free!

4854. Re: GaAsFET replacement help needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-12 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <s57oh0p653101@corp.supernews.com>
Source record: 64993

-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

"Bpn518" <bpn518@aol.com> wrote in message
news:19991212104555.09503.00000231@ng-co1.aol.com...
> Hi,
> I have a Mirage 6m preamp, which stopped working during
> testing of a homebrew 6m amp. The preamp was between
> the rig and amp, so I didn't kill it from full amp power. With
> the preamp on, it receives worse than when it's off.
>
> When I called Mirage they said I probably killed the GaAsfet
> called a U309, which they said is kinda sensitive. They said
> they were out of it, but it was a
> common part. At Mouser, I got an SK replacement, that
> had 4 legs instead of 3. I matched up the legs (from the ARRL
> handbook) and tied two legs together that included the case.
> Needless to say, it didn't work.
>
> Did I do something wrong, or is there a different replacement
> FET I can use in place of the U309?

The U309 sounds like the plastic packaged version of the J309,
which was a JFET, not a GaAsFET, as I recall. I recall it as being
a 3-terminal device, not having 4 leads, though, perhaps a metal-cased
version would have a lead to ground the case ...

I don't recall offhand who made the J309/U309 (and related J310/U310)
parts ... it's been a while since I've seen them used.

You might try one of the "advanced search" options, like at AltaVista
and search on " (J309 OR U309) AND JFET " or something like
that ...

Perhaps someone else recalls who makes/made these parts ...

73,

- --
Carl - wa6vse
- --
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
Director, No Code International
Fellow, Radio Club of America
Senior Member, IEEE

Member, TAPR
Member, ARRL
- --
Join No Code International! Hams for the 21st Century.
Help assure the future survival of amateur radio.
http://www.nocode.org

-----BEGIN PGP SIGNATURE-----
Version: PGP for Personal Privacy 5.5.3

iQA/AwUBOFPh8Je+N6+q84HiEQLxeACeL76N/d1YLUo1Y1FBXSwlYhfLBu0AnjHI
LXW58VhnGEACm+MgR7vee1wi
=fvu4
-----END PGP SIGNATURE-----

4855. TS-820S HF $325

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-13 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <74j54.90280$5W2.2599827@news6.giganews.com>
Source record: 64794
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

A very clean Kenwood TS-820S with copy of owner's manual for sale, $325 plus shipping from the Los Angeles area.

This was top of the line rig, one of Kenwood's most popular riges ever. Covers 160-80-40-20-15-10 meters plus WWV receive. Passband tuning, speech processor, crystal calibrator, digital readout, and more features. Over 100 Watts output on all bands.

I can get a copy of the service manual for a few bucks more. Probably won't need it; it's a solid, stable, reliable rig. SSB, CW, FSK.

73, Bob K6DDX

4856. Re: Broadband VHF frequency doubler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-13 00:00:00 UTC
From: Roger lascelles <rogerl@datafast.net.au>
Message-ID: <38545723.4B8EC734@datafast.net.au>
Source record: 64795

Hi !

Your frequency doubled signal will have twice the drift and twice the FM noise of the lower frequency oscillator. Are you sure your 100 MHz oscillator is worse than twice as bad as the 50 MHz oscillator ?

A two to one tuning ratio is quite ordinary for an oscillator. 1.5 to one is easy.

You don't mention actual frequency drift values, but it is quite easy to produce respectable oscillators at 100MHz. Many FM receivers have free running local oscillators. Hewlett Packard and many others used to sell signal genarators containing free running LC oscillators - we have one here for 10 to 512 MHz .

Almost anything will oscillate, but stable oscillators have controlled bias current. If the transistor is saturating at any point of the waveform, it will damp the tuned circuit and degrade noise and stability. If you are using a bipolar or FET, throttle back the bias current until the oscillator stops, then increase the current somewhat.

Frequency multiplication can be necessary, but rarely at 100MHz.

Regards,
Roger

Raw Power Radio wrote:
>
> While experimenting in my lab, I built a very stable (1kHz of drift)
> VCO that spans 43MHz to 55Mhz. Redesigning it for 88-108 resulted in a
> range of only 90-107MHz and degraded stability. Naturally, it occurs to
> me that doubling the output of the stable 43-55MHz VCO could be a
> useful approach for a simple 3-meter exciter. Any recommendations for a
> good doubler circuit, preferably of the "no-tune" variety and without
> excessive insertion loss? I have seen some application circuits for
> doublers using the LM/MC1496 balanced modulator, but I am skeptical of
> the capability of this device at FM broadcast frequencies. (The
> operating range is vaguely stated as "up to" 100MHz in the datasheets).
> I am also aware of the practice of feeding one signal to both inputs of
> a four-quadrant multiplier, but these devices are costly and the ones
> with which I'm familiar are not usable at hundreds of MHz.
>
> * Sent from RemarQ http://www.remarq.com The Internet's Discussion Network *
> The fastest and easiest way to search and participate in Usenet - Free!

--
Roger Lascelles

Electro Tools - Worksheets for Electronics
http://server24.hypermart.net/electrotools/

4857. FS: GE NOS 7360 TUBES...!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-13 00:00:00 UTC
From: erpi@junction.net
Message-ID: <8320n3$g10$1@news.junction.net>
Source record: 64923

Hi! I do have for sale 3 GE NOS 7360 for $35.00 US. each plus ship.
If interested,email me direct....Thanks...73
Net-Tamer V 1.11.2 - Test Drive

4858. FS: 272A WEST ELECT. TUBE.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-13 00:00:00 UTC
From: erpi@junction.net
Message-ID: <8320nd$g10$3@news.junction.net>
Source record: 64924

Hi! I have for sale a 272A Western Electric NOS tube for sale
Asking $90.00 plus shipping.If interested,email me direct...73

Net-Tamer V 1.11.2 - Test Drive

4859. Re: GaAsFET replacement help needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-13 00:00:00 UTC
From: blackm00@cam.org
Message-ID: <blackm00-1312990042500001@dialup-580.hip.cam.org>
Source record: 64925

In article <s57oh0p653101@corp.supernews.com>, "Carl R. Stevenson"
<wa6vse@fast.net> wrote:

> -----BEGIN PGP SIGNED MESSAGE-----
> Hash: SHA1
>
> "Bpn518" <bpn518@aol.com> wrote in message
> news:19991212104555.09503.00000231@ng-co1.aol.com...
> > Hi,
> > I have a Mirage 6m preamp, which stopped working during
> > testing of a homebrew 6m amp. The preamp was between
> > the rig and amp, so I didn't kill it from full amp power. With
> > the preamp on, it receives worse than when it's off.
> >
> > When I called Mirage they said I probably killed the GaAsfet
> > called a U309, which they said is kinda sensitive. They said
> > they were out of it, but it was a
> > common part. At Mouser, I got an SK replacement, that
> > had 4 legs instead of 3. I matched up the legs (from the ARRL
> > handbook) and tied two legs together that included the case.
> > Needless to say, it didn't work.
> >
> > Did I do something wrong, or is there a different replacement
> > FET I can use in place of the U309?
>
> The U309 sounds like the plastic packaged version of the J309,
> which was a JFET, not a GaAsFET, as I recall. I recall it as being
> a 3-terminal device, not having 4 leads, though, perhaps a metal-cased
> version would have a lead to ground the case ...
>
> I don't recall offhand who made the J309/U309 (and related J310/U310)
> parts ... it's been a while since I've seen them used.
>
> You might try one of the "advanced search" options, like at AltaVista
> and search on " (J309 OR U309) AND JFET " or something like
> that ...
>
> Perhaps someone else recalls who makes/made these parts ...
>
I was wondering if anything was garbled along the way, since Siliconix
did make a U309. It is a metal case, though my Siliconix databook
from about twenty years ago shows it only has three leads.

case connects to Gate
|

G S (tab is here)

D

This is the bottom view.

The J309 is the plastic version

(flat side)
D S G

(again, the bottom view)

The 310s are on the same pages as the 309s. A quick glance makes the 309 appear somewhat better than the 310.

I'ms till wondering if we've missed something, that the FET is realy a GaAsfet. It would have been helpful to know what the SK replacement number was that the original poster used.

Michael VE2BVW

4860. List Of Stamp Applications [991213]

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-13 00:00:00 UTC
From: cjX@hth.com
Message-ID: <385490e4.24724153@news.sverige.net>
Source record: 64926
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

Hi,

Below is the latest index of L.O.S.A and you can download the
complete L.O.S.A from the following places...

WWW:

http://www.hth.com/losa/

FTP:

ftp://ftp.parallaxinc.com/pub/text/losa.txt

1.0 What is L.O.S.A all about?

This list was started back in -95 when I heard about (more or less)
uniqe problems that was solved by using a BASIC Stamp. Especially Guy
Gustavson's story (see #001) about how he saved his beloved cat Kesha
gave me the inspiration to start writing L.O.S.A. I hope Kesha still
is alive and having a great life. Now 4 years later there are 150+
applications described and I hope you will enjoy reading all (or
parts) of them.

The main purpose of this list is to get an idea of what other people
are using their BASIC Stamps for and maybe get some inspiration or
hints for your own projects. Some of the projects described in the
list also have links to source code and schematics for download.

1.1 How can I contribute to this list ?

If you have done something (big or small) with the BASIC Stamp that
you are willing to tell others please use the form given below and
write a short description, nothing fancy is needed just a simple
explanation. If you have source code to share that's even better but
it's not necessary.

Visit the following Web site and fill in the contribution form...

http://www.hth.com/losa/

1.2 Why are some links dud's ?

Since people changes their e-mail and web addresses some links may be
dud's. If you previously contributed with one (or more) of the
applications please take a quick look and check your e-mail address

and/or web-links. I'm only able to keep the list updated if I'm
informed about changes, thanks in advance.

1.3 List of contributions

> = Indicates a new or updated application since last time.

001 Robo-Cat
002 Logic Rudder
003 Interfacing MAX186 8 channel 12bit A/D
004 Scrolling LED Sign
005 Tone Decoder
006 Pager
007 HexWalker Mobile Robot
008 Robo Bug
009 EXPBOT Robot controlled by Stamp
010 Andrews Ever Evolving Lego Robot
011 Factory Monitoring System
012 Wave to the Cats/Desk Temperature
013 Gamer's Die Roller
014 Stamp II Serial I/O
015 Voice and CW Fox Hunt Transmitter IDer
016 Lift (elevator) Controller
017 Paging with the Stamp
018 Switching Sytem
019 Door Entry Card Reader
020 Telephone Card Reader
021 DTMF Decoder
022 Ion chamber radiation monitor
023 Barn Monitor
024 Dallas one-wire interface
025 Sculpture control
026 Commercial clothes dryer controler
027 Morse Code Keyer
028 Traffic Light Controller
029 Automotive Lamp Control
030 Single Switch Scanning Device for Disabled
031 Bell timer for school bell control
032 RIMS controller for beer making
033 Stamp 1 and ISD 25XX Sound Chip Application
034 Camera Wireless Controller
035 Simple Battery Check using the BS2-IC
036 Photocell MIDI Controller
037 DCF-Clock
038 Radio-controlled Digital Clock
039 Weather Station I
040 Private Aid To Navigation
041 Stamp II in Space
042 MAT32 long integer math routines
043 Distinctive Ring Detector

044 Extended Stamp Memory
045 Debate Stoplite
046 Digital nametag
047 ST506 Disk Seeking Demo Controller
048 Robot: Multi-Stamps Communicate via Shared Memory
049 NiMH Battery Charger/Conditioner
050 555 Timer as A/D Converter
051 Bits of Light
052 Process Control
053 Near Space Capsule
054 PIC Debugger
055 DS1820 Temp Sensor
056 Air muscle hexapod robot
057 Lights
058 Caller-ID Interface
059 Wind speed and wind direction measurement device
060 Calibrated Dust Feeder for Air Cleaner Tests
061 Use of a Serial EEPROM as a Lookup Table
062 Displaying Quantities on a 200 mV Panel Meter
063 Programmable Proportional Air Valve
064 Basic Stamp machine control application
065 Compass Interface for Navigation
066 Truck + ? identification
067 Meteoreological Station
068 Stamp Controls Electronic Tester for flex circuits
069 Game Timer
070 Photoghrapic light meter
071 Data System Remote Control on unmanned aircraft
072 Speaking Instructor
073 Small Mobile Robot
074 R/C helicopter altitude control unit
075 Automobile Rally Odometer Interface to Laptop
076 LCD drivers
077 Stamp I / PC Interface Demo
078 Stamp Photo Meter
079 Stiquito(TM) 97 HexaPod Robot
080 XRaCS DTMF Radio X10 Control with Voice Response
081 Interfacing the Basic Stamp 2 with I2C Devices
082 The WeatherStamp Meteorological Station
083 Maxxum 7000 Remote Release Widget
084 Xs And Os games for college project
085 Stamp II Mouse Emulator (Version 6)
086 Basic Alarm System
087 Interfacing with a Printer
088 Dinosaur Quiz Game
089 Chemical Injection System
090 RS-232 connections between Stamp and host
091 Video Character Overlay Generator Controller
092 Suction tube depth measurement display
093 Electronic Compass with Basic Stamp 2

094 Event Logger with 8K 24C65 I2C memory
095 Fixing the depth of a suction-pipe with the BS 2
096 Superchaser
097 Corky'z Robotz
098 Cloudrider: analog network with BS2 and BS1's
099 Yet Another Real Time Clock, Dallas DS1287
100 Amateur RadioSatellite Tracking (Az/El) Controller
101 DTMF Decoder
102 PC to STAMP via RS232 routines
103 PC Frequency Counter
104 Sub-Millisecond Reaction Timer
105 Computerized Dynamics Cart
106 Ham Radio Interface Using the Basic Stamp 2
107 Remote tempsensors communicates over the power lines
108 Interfacing a BASIC Stamp to SRAM
109 Stepper controller pulse generator
110 Automatic rang caller
111 Automatic emergency broadcast system
112 BASIC Stamp I as an welding machine
113 PLM-24 to X-10 Gateway
114 Semi-Automated Combusitible Gas Indicator Tester
115 Counter-rotating Servos
116 Joystick Controlled Robotic Arm
117 Anti Traction Control Device
118 Cat Chasing Lego Robot and Other Circuits
119 Camlift
120 Control 15 Servos in Parallel
121 8 Digit "Smart" Alphanumeric Display
122 Cycle Testing AC Motor Controller
123 Controlling an LCD by BS2 via I2C Bus
124 The Newcastle Robotic Bilby Project
125 The EM1 (Electric mule)
126 Distance Measurement with GP2D02 SHARP Sensor
127 TI82 Interface
128 Operator Interface for Multiple Stamps
129 Infrared Glucose (Blood Sugar) Monitor
130 Fox For ham radio or Automated Propogation Beacon
131 GPS Data Overlay on Video
132 10Base-T Cable Tester
133 Kodak DC40/50/120 camera control
134 Implement S.N.A.P network protocol in a BASIC Stamp
135 Stamp/PC RS-485 Network
136 Easy-to-build BS keyboard/display w/ 10 keys/LEDs
137 Joystick control: BS2, 2 motors & 2 HBridges
138 Basic Stamp 2 Mobile Robot
139 Home Automation and Security System
140 UM3750 Read Code
141 Magnetic Stripe Reader
142 Telephone Remote Control and Remote Alarm
143 Tube preamplifier control section

144 Interrupt for PBASIC
145 dLOG
146 Compass
147 BS-2 serial VISCA interface
148 Servo tester
149 Small-bot
150 Repeater Controller
151 ESD Tester for Foot and Wrist Straps
152 Beneficial Insect Dispenser
153 Bugsey
154 Vector2X Compass Module with the new BS2SX Stamp
155 Serial Mouse to BS2 Interface
156 Radio Repeater Controller
157 Keypad reader
158 Automatic Vehicle Location / Mobile Asset Tracking
159 Interfacing a 4X4 keypad to the stamp II
160 Interfacing a Max186 8 Channel ADC to a stamp II
161 Realistic Manual Shifter for PC Driving Games
162 Contact ID handshake board
163 Basic Stamp II I2C protocol for several ICs
164 Home Controller
165 Coinmachine
166 Navigation system for the blind
167 Robot Fighters
168 Octobot
169 SPI interface chip
170 Implementing TCP/IP functionallity
171 Home Security System
172 Garage Door Opener
># 173 New Method Of Home Automation
># 174 Water Volume Meter
># 175 Table-Top Practice ROBOT for USFirst Competition
># 176 Model-rocket acceleration measurement
># 177 Interface to SPECTRON MICRO-50 2 Axis Inclinometer

Regards,

/Christer

[NOTE: Clear the "X" from my e-mail address if you want to e-mail me]

-=-
* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
-=-
Send and receive serial data over the power lines... For more info
about the PLM-24 Power Line Modem go to http://www.hth.com/plm-24/
-=-

4861. Re: Stinkin, leakin alkaline batteries!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-13 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@corecomm.net>
Message-ID: <385494AF.39499427@corecomm.net>
Source record: 64927
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.antiques.radio+phono

Jack Malone wrote:
> I only had this problem once with Eveready batts and they leaked in a
> MagLite flashlight. Sent the flashlight to Eveready and they sent me a check
> to buy a new one. If I remember right the check was for a little more than a
> new MagLite cost me. This was maybe ten years ago or so. Don't know how they
> respond to this problem now.

Somewhere along the way I was warned not to leave alkaline batteries in
a MagLite for long periods. I was told to remove them for a few seconds
every few weeks; something about slight outgassing plus aluminum sleeve
is all I remember.

--
+-+
| Cliff Sharp | "light jazz" is to jazz as "rubber band" is to orchestra. |
| WA9PDM | |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+

4862. Re: Yaesu ADMS-1 Software problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-13 00:00:00 UTC
From: knox_k_NOBS@nemaine.com
Message-ID: <3854dbea.1164698@news.nemaine.com>
Source record: 64928

You might be able to copy the installation software from the floppy across that network to the laptop, and then install it from there. I've been able to accomplish that with some software, unless it requires to be installed from a floppy.

Ken

4863. Re: GaAsFET replacement help needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-13 00:00:00 UTC
From: bw201@torfree.net
Message-ID: <FMoHn2.J9q.0.queen@torfree.net>
Source record: 64929

A U309 is not a GaAsFET, but a standard Silicon N-channel Junction Fet in a metal can. It is available from many distributors as is its plastic case version the J309 and they are quite inexpensive.

Bpn518 (bpn518@aol.com) wrote:
: Hi,
: I have a Mirage 6m preamp, which stopped working during
: testing of a homebrew 6m amp. The preamp was between
: the rig and amp, so I didn't kill it from full amp power. With
: the preamp on, it receives worse than when it's off.

: When I called Mirage they said I probably killed the GaAsfet
: called a U309, which they said is kinda sensitive. They said
: they were out of it, but it was a
: common part. At Mouser, I got an SK replacement, that
: had 4 legs instead of 3. I matched up the legs (from the ARRL
: handbook) and tied two legs together that included the case.
: Needless to say, it didn't work.

: Did I do something wrong, or is there a different replacement
: FET I can use in place of the U309?

: Thanks,
: Bennett ko2ok in NJ.

4864. Re: Stinkin, leakin alkaline batteries!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-13 00:00:00 UTC
From: William Sommerwerck <williams@nwlink.com>
Message-ID: <3854EB19.89D0A943@nwlink.com>
Source record: 64930
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.antiques.radio+phono

I'm very "attentive" to the battery-operated devices I own, so I've never had any problems. However, I appreciate the advice about Maglites.

Steve Phipps wrote:

> William Sommerwerck <williams@nwlink.com> wrote in message
> news:3853EA3F.16DB2658@nwlink.com...
> > I've been using alkaline batteries for over 30 years, and I have _never_
> seen an
> > alkaline cell that "leaked" or had an odor.
>
> I recently had a set of AA Energizers leak in a radio that had been stored for
> about 2 years. No damage done and it cleaned right up, but they nonetheless
> leaked...

4865. UC734B and 3N128 Cascode

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-13 00:00:00 UTC
From: afrb2@cus.cam.ac.uk
Message-ID: <833506$7f1$1@pegasus.csx.cam.ac.uk>
Source record: 64931

I've been experimenting with a cascode RF amplifier using a UC734B as the imput stage and a 3N128 as the active load, with AGC RF voltage applied to the grid of the 3N128 (it occurs as the RF amplifier in an Eddystone EC958 Receiver).

I've got very little data on either the 3N128 or the UC734B (only the Towers data) and both parts seem totally unobtainable here (in the UK) from the usual parts suppliers. I'm beginning to suspect from the poor performance which I'm measuring (ac voltage gain of less that 0.1) that on or other of the FETs has died. I've replaced the 3N128 by a 3N201 with g2 connected to the source, which has partially improved maters, but the first FET has a drain source voltage of about a volt, which suggests that it isn't operating in the saturated region.

Does anyone have any idea at all of where I could find any more information (or replacements) for these FETs. Equally a pointer to a source of information on cascode amplifier design would be useful; I have the Siliconix book (desiging with FETs which touches upon the matter but doesn't have much detail).

Alan

4866. Re: Single chip fm

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-13 00:00:00 UTC
From: Gene Eighmy <eighmy@nospam.com>
Message-ID: <g4954.4112$Ye.257167@monger.newsread.com>
Source record: 64932

> A few years ago, Radio hack offered a TDA-7000 (if I recall correctly)
> single-chip FM receiver for a few dollars. This might still be
> available-- comments, anyone?

I have used the Philips SA605/SA615 (used to be the NE605) which is based on the famous NE602. The 605 http://www-us.semiconductors.philips.com/pip/SA605D) has a mixer, IF amp and quadrature detector and RSSI. Philips also has some newer versions of the chip on their webpage http://www-us.semiconductors.philips.com/similar/SA626D) and you can buy them through Digi-key.

Gene
W4EAE
eighmy at scott dot net

4867. HB: IC-MT02B info needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-13 00:00:00 UTC
From: af389@lafn.ORG
Message-ID: <385531BA.E880BDF3@lafn.org>
Source record: 64933

Hi,

This IC, MT02B, might be an RF PRescaler up to at least 2 GHz?

I found it in a DIGTIAL TV Tuner, working with the MC44817 Controller.
Tuner receives commands from 3 wire serial bus, but not the complex I2C.

Really need datasheet description. Searched Suppliers with PartMiner
but found nothing and Interent searches yielded nothing also.

Also, URL's to examples of using PC Parallel port for sending commamnds
to serial IC's would be helpful.
Looks like a nice usable Prescaler for QRP Counters or ? when I can
figure how to program it.

Thank you for any hints, 73, W6MIK
--
David Shalita (Dave)
af389@lafn.org
Van Nuys, CA

4868. Re: GaAsFET replacement help needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-13 00:00:00 UTC
From: "Charles H. Reichert" <reichert@cig.mot.com>
Message-ID: <38552EE2.58646F0C@cig.mot.com>
Source record: 64934

U309 sounds like a Siliconix JFET number, not a GaAsFET.
Is this a Mirage designation or what the part is marked
as? Is this a 3 lead or 4 lead device, otherwords how
many gates?

Chuck KD9JQ

Bpn518 wrote:
>
> Hi,
> I have a Mirage 6m preamp, which stopped working during
> testing of a homebrew 6m amp. The preamp was between
> the rig and amp, so I didn't kill it from full amp power. With
> the preamp on, it receives worse than when it's off.
>
> When I called Mirage they said I probably killed the GaAsfet
> called a U309, which they said is kinda sensitive. They said
> they were out of it, but it was a
> common part. At Mouser, I got an SK replacement, that
> had 4 legs instead of 3. I matched up the legs (from the ARRL
> handbook) and tied two legs together that included the case.
> Needless to say, it didn't work.
>
> Did I do something wrong, or is there a different replacement
> FET I can use in place of the U309?
>
> Thanks,
> Bennett ko2ok in NJ.

4869. New TRF kits avail in Jan2000

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-13 00:00:00 UTC
From: weathrship@aol.com
Message-ID: <19991213135014.20106.00000606@ng-fo1.aol.com>
Source record: 64935

Hello, I've got some pictures of an intended TRF kit planned for introduction in Jan2000. I'll be supplying the tube lineup (6K7G, 6K7G, 6C or 6J5GT, 6K6GT)

the tuning cap, audio xformer, resistors, sockets, capacitors, breadboard and front
see-through acrylic panel, pre-drilled etc.
see: www.ghostmoon.bigstep.com

I don't think I'll be supplying the power supply, the parts are too heavy and expensive. Should be a good starter kit for someone that wants to learn about and how to repair TRF's. They are pretty simple and I'm going to supply a construction manual with TRF theory, tube basics etc... should be a fun and good-looking project! This might be a good project for those starting out in basic electronics related to restoring your old antiques.

Thanks, tony

4870. Re: Yaesu ADMS-1 Software problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-13 00:00:00 UTC
From: goldreged@aol.comJUNKBLOK
Message-ID: <19991213151154.08608.00000473@ng-fl1.aol.com>
Source record: 64936

Call the manufacturer & ask them.
I found them VERY helpful.
Ed G.
KB1DQX
(Please Remove "JUNKBLOK" to E-mail.
Unless it's a Flame.)

4871. Re: Drawing Schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-13 00:00:00 UTC
From: Tom Bruhns <tom_bruhns@agilent.com>
Message-ID: <38557253.4D2C25FA@agilent.com>
Source record: 64937

FWIW, check out www.cadmigos.com. Also, I recently downloaded freeware from a CAD company that sells bigger, better stuff, but offers the intro level for free. And darned if I can remember who it was! They've been running ads in rags like EE Times lately. Haven't even had a chance to try it myself yet. (Have it bookmarked at home; not here.)

Cheers,
Tom

Rob wrote:
>
> Is there a good (preferably Freeware) program out there that can be used to
> draw electrical schematic diagrams??
>
> I don't want to have to draw symbols for transformers etc by hand!
>
> 73's
> Rob

4872. WEB SITE USED iz0ckl

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-13 00:00:00 UTC
From: iz0ckl@libero.it
Message-ID: <385574d9.2431702@news.libero.it>
Source record: 64938

www.geocities.com/iz0ckl/

4873. web site used

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-13 00:00:00 UTC
From: iz0ckl@libero.it
Message-ID: <38557566.2572756@news.libero.it>
Source record: 64939

www.geocities.com/iz0ckl/

4874. Re: Blocking Cap for computer Mic Jack

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-13 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3855A480.83F132AF@eznec.com>
Source record: 64940

Rob wrote:
>
> Hi Roy,
>
> Many thanks for the info.
>
> Well, I tried to determine the input impedance of the mic jack by looking in
> my computer's manual. No luck. But the microphone I bought says it has an
> output impedance of 2000 ohms. I suspect my mic jack of the computer's
> sound card has a similar impedance.
>
> A 1 microfarad cap may work. What about trying a 10 microfarad or 100
> microfarad cap?

There's no harm in using a larger capacitor.

Roy Lewallen, W7EL

4875. Re: Stinkin, leakin alkaline batteries!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-13 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3855A655.FA9234F6@eznec.com>
Source record: 64941
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.antiques.radio+phono

I've had batteries leak from time to time, but it's always been after they had been left in the device for a considerable time after they'd discharged. When possible, I try not to leave batteries in something I won't be using for a long time (although it takes years for a fresh alkaline to self-discharge). When leakage does happen, I've found WD-40 to do a good job of stopping the corrosion.

Roy Lewallen, W7EL

4876. Re: Stinkin, leakin alkaline batteries!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-13 00:00:00 UTC
From: DavidC <eDoc@netzero.net>
Message-ID: <07efa1ad.e4f56047@usw-ex0102-011.remarq.com>
Source record: 64942
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.antiques.radio+phono

One solution to alkaline battery problems is to replace them regularly. Normally that would cost a lot of money ... but what if you could get them free?

If you go to your local market or photo shop where they develop the use-once-then-throw-away cameras in-house you will discover that most of them toss the empty cameras in the trash.

If you ask nicely they will give them to you. Inside you will find two barely used alkaline AA cells. Dig a little deeper and you will also find a nice electrolytic cap!

Be careful as the cap will still hold a charge that can "bite" you real good! Also be careful because that charge will always fire the flash at the moment you have your eye about 2 inches from it!

Just F.Y.I., proceed at your own risk, YMMV, etc. 73, DavidC K1YP

* Sent from RemarQ http://www.remarq.com The Internet's Discussion Network *
The fastest and easiest way to search and participate in Usenet - Free!

4877. Repeater stuff

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-13 00:00:00 UTC
From: Karl Shoemaker <kshoe@juno.com>
Message-ID: <3855AFC4.26EF@juno.com>
Source record: 64943

Anyone know of a site (other than this group) that talks about
repeater building and stuff?
Karl
--
Karl Shoemaker, WA7YCP
kshoe@juno.com
http://www.dalek.org/srg

4878. Re: Single chip fm

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-14 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <83439u$2eg$1@nnrp1.deja.com>
Source record: 64796

In article <38544BD2.E3AC9B8@home.com>,
JW <jdwalton@home.com> wrote:
> Anyone care to recommend a simple single chip fm receiver - I am
looking
> for a pretty simple (even boombox) type to monitor only one frequenc
> near the fm broadcast band.
>
>

Enter http://www.chipdir.com/chipdir/f/radio.htm and chosse among the
many!
--
Greetings,

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Before you buy.

4879. Re: UC734B and 3N128 Cascode

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-14 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <83442l$354$1@nnrp1.deja.com>
Source record: 64797

In article <833506$7f1$1@pegasus.csx.cam.ac.uk>,
afrb2@cus.cam.ac.uk (A.F.R. Bain) wrote:
> I've been experimenting with a cascode RF amplifier using a UC734B as
> the imput stage and a 3N128 as the active load, with AGC RF voltage
> applied to the grid of the 3N128 (it occurs as the RF amplifier in
> an Eddystone EC958 Receiver).
>
> I've got very little data on either the 3N128 or the UC734B (only the
> Towers data) and both parts seem totally unobtainable here (in the UK)
> from the usual parts suppliers. I'm beginning to suspect from the
> poor performance which I'm measuring (ac voltage gain of less that
0.1)
> that on or other of the FETs has died. I've replaced the 3N128 by
> a 3N201 with g2 connected to the source, which has partially
> improved maters, but the first FET has a drain source voltage of about
> a volt, which suggests that it isn't operating in the saturated
region.
>
> Does anyone have any idea at all of where I could find any more
> information (or replacements) for these FETs. Equally a pointer
> to a source of information on cascode amplifier design would be
useful;
> I have the Siliconix book (desiging with FETs which touches upon the
> matter but doesn't have much detail).
>
> Alan
>

Dial Electronicas at http://www.dialelectronics.co.uk/37.htm (UK!!!)
seems to have at least the 3N128 FET.
--
Greetings,

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Before you buy.

4880. 6 meter amp question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-14 00:00:00 UTC
From: turboblown@aol.com
Message-ID: <19991213220452.22962.00000784@ng-fe1.aol.com>
Source record: 64798

I know that a 10/11 meter amp can be retuned for use in the 6 meter band, now the question is......HOW! Does anyone have the info to do this. I know at one time there were general plans in circulation but I have yet to find them.
The amp that I want to do is an Afterburner Plus 100w (yes, an old illegal CB amp!)
Thanks in advance
N3UVX

4881. Re: NEW G.E. 32uF, 4500VOLT OIL FILLED CAPACITOR FA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-14 00:00:00 UTC
From: Mike <m.j.willis@rl.ac.uk>
Message-ID: <834ubl$1dvs@newton.cc.rl.ac.uk>
Source record: 64799
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.homebrew,rec.radio.swap

KQ6UV <kq6uv@hamsnet.net> wrote in message
news:KRB44.2842$LK3.102167@nuq-read.news.verio.net...
> New G.E. 32 microfarad, 4500 volt oil filled capacitor with no PCBs.
> Approximately 9 1/2" tall, 4 1/2" wide, and 3 3/4" deep.
> http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=215107401
> Jim Smith, KQ6UV
>

These sound like the energy storage ones from Fair Radio ($20) that I was
told would not work in an amplifier PSU. I have tested them at 2A ripple
current for an hour and they worked fine at 3500V 1A. I would be interested
in hearing other opinions.

Mike

4882. Re: Stinkin, leakin alkaline batteries!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-14 00:00:00 UTC
From: jfriley@no.spam.airmail.net
Message-ID: <3855fa2d.25793376@news.swbell.net>
Source record: 64800

On Sun, 12 Dec 1999 16:07:29 GMT, Randy and Cara Randall
<crrandal@seidata.com> wrote:

> I buy other brands (>Panasonic...) and they seem to leak
>MUCH less frequently.

My experience is just the opposite. I bought a box of Panasonic
batteries from DigiKey and had to do major clean ups on every piece of
equipment they went in. Maybe it just runs in cycles.

4883. Re: Drawing Schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-14 00:00:00 UTC
From: "Robert A. Poplawski" <poplawski@ias.wat.waw.pl>
Message-ID: <38560789.2463@ias.wat.waw.pl>
Source record: 64801

Rob wrote:
>
> Is there a good (preferably Freeware) program out there that can be used to
> draw electrical schematic diagrams??
>
> I don't want to have to draw symbols for transformers etc by hand!

Hi,
I think that very useful program is Proteus Isis Lite
You can download it from: http://www.labcenter.co.uk/prolite

73!
Robert.
ps. program for drawing PCB'c is there too.

4884. HFradio.org and Prefix Lookups, QSLing, etc.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-14 00:00:00 UTC
From: nw7us@hfradio.removethispart.org
Message-ID: <kCp54.186$V2.2499@sea-read.news.verio.net>
Source record: 64802
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hello,

I recently added a PREFIX look-up form on the QSL page. If you need to know where a prefix is from, simply enter the call or prefix and see what country it is assigned to.

You are invited to http://hfradio.org, a non-commercial site offering:

+ Azimuth Map / Equidistant Map Creation (choose any QTH as center, many options)

+ Propagational Resources (live, real-time reports, eAlert service (sign up for automatic email solar/geo reports, complete with Aurora index))

+ News, and DX information and reports

+ QSL Manager and Callsign Lookup center

+ Swap and Shop

+ FREE HOME PAGES THAT YOU CAN USE TO POST YOUR OWN HAM OR SWL SITE

+ Bookstore - SWL and Ham related books. Over a 1000 titles so far.

+ Plus more (Directories, etc.)

73!

--

: World-Wide Communications via Amateur Radio : 122.93W : 47.67N :
: 10x56526 : CW/SSB - DX hunter : Brinnon, WA : Code Warrior #60 :
: visit http://hfradio.org/ :

4885. wanna trade

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-14 00:00:00 UTC
From: elliotta <olebaldy1@yahoo.com>
Message-ID: <cPq54.536$M85.4119@newsfeed.slurp.net>
Source record: 64803

I have a Compaq Presario 1220, 200Mhz for trade. I would like to have the uhf yaseu ft490r mkII?, all mode transceiver. I have the vhf ft290r mkII all mode and would like to have the uhf model for my shack. If you have one in good condition and would like to part with it please email me at: elliotta@netusa1.net .....Dick Elliott.....N9IPA

4886. Re: Blocking Cap for computer Mic Jack

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-14 00:00:00 UTC
From: Rob <NoEmail@NoWay.com>
Message-ID: <ais54.198085$5r2.497138@tor-nn1.netcom.ca>
Source record: 64804

Hi Roy,

Thanks for the message.

I understand that a larger capacitor (e.g 100 Mf) will more easily allow the low audio frequecies to pass through the capacitor but will it attenuate the higher frequencies more?? (e.g. 3000hz)

Rob

"Roy Lewallen" <w7el@eznec.com> wrote in message news:3855A480.83F132AF@eznec.com...
> Rob wrote:
> >
> > Hi Roy,
> >
> > Many thanks for the info.
> >
> > Well, I tried to determine the input impedance of the mic jack by looking in
> > my computer's manual. No luck. But the microphone I bought says it has an
> > output impedance of 2000 ohms. I suspect my mic jack of the computer's
> > sound card has a similar impedance.
> >
> > A 1 microfarad cap may work. What about trying a 10 microfarad or 100
> > microfarad cap?
>
> There's no harm in using a larger capacitor.
>
> Roy Lewallen, W7EL

4887. 810 Transmitter Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-14 00:00:00 UTC
From: Chris <ck5@ix.netcom.com>
Message-ID: <3856919C.515@ix.netcom.com>
Source record: 64805
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.swap,rec.radio.amateur.homebrew

I have nine of them for $250 Lot Sale Only. All in good condition pulls.
73 Chris VE3NGW/W4 Florida

4888. How do I make ARD use external databank files?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-14 00:00:00 UTC
From: emr01@ms19.hinet.net
Message-ID: <37cd554e.5290586@news.hinet.net>
Source record: 64806

Can anyone show me how to make ARRL Radio Designer
use external databank files ? Nowhere in the ARD manual did it explain
how a design file use the external .FLP or .S2P files. Thank you.

Oliver

4889. How to use external databank files in ARD ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-14 00:00:00 UTC
From: emr01@ms19.hinet.net
Message-ID: <37cd5804.5984304@news.hinet.net>
Source record: 64807

Can anyone show me how to use ARRL Radio Designer use external .FLP or .S2P files ? p.17-9 of the ARD manual only says this can be done, but nowhere in the manual did explain how to do it! Thanks.

Oliver

4890. Re: Good resources for learning electronics?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-14 00:00:00 UTC
From: emr01@ms19.hinet.net
Message-ID: <37d11fa5.20153092@news.hinet.net>
Source record: 64808

On Wed, 01 Sep 1999 23:43:45 -0400, Luke Seubert <lseubert@radix.net>
wrote:

>Good day.
>
>What are some good resources for learning electronics? I recently set
>up a new shortwave listening rig, and would like to build some of the
>simple circuits for little projects here and there - you know - those
>great little Arnie Coro projects.
>

Try the book "The Art Of Electronics" by Horowitz and Hill.
There's alot of practical design insignts. Also check out EDN web site
at www.ednmag.com, there interesting design articles.

Oliver

4891. Re: Good resources for learning electronics?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-14 00:00:00 UTC
From: emr01@ms19.hinet.net
Message-ID: <37d124fa.21518142@news.hinet.net>
Source record: 64809

On Wed, 01 Sep 1999 23:43:45 -0400, Luke Seubert <lseubert@radix.net>
wrote:

>Good day.
>
>What are some good resources for learning electronics? I recently set
>up a new shortwave listening rig, and would like to build some of the
>simple circuits for little projects here and there - you know - those
>great little Arnie Coro projects.
>

The book "The Art Of Electronics" by Horowitz & Hill is pretty
good, there are a lot of design insights. Also check out EDN's web
site at www.ednmag,com, there are many design articles there.

Oliver

4892. Re: Gummel-Poon Transistor Model ? Can ARD use it?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-14 00:00:00 UTC
From: emr01@ms19.hinet.net
Message-ID: <37d12901.22548916@news.hinet.net>
Source record: 64810

>SPICE programs use Gummel-Poon parameters to establish an operating point
>for a BJT, and from there a small-signal equivalent circuit. In SPICE the
>two-port S-parameters for the transistor can be found by simulating a
>two-port test circuit (50 ohm gen, 50 ohm load) that is based on these G-P
>parameters.
>
>When these S-parameters are found at a set of frequencies they can be used
>by ARD, employing the Circles Utility for amplifier and matching network
>design, which "low-end" SPICE programs do not have.
>

Thanks for the information. I did extract the S-parameters
using an example model given in the 2-port modeling chapter of the
book "A Guide to Circuit Simulation & Analysis Using PSpice". Can I
also generate the noise figure parameters (Fmin, Gamma_opt,Rn) using
Spice? The noise analysis covered in Spice books desn't seem to
provide useful information on how to do this. Do you know where I may
find more information on generating the noise figure parameters from
the Gummel-Poon model for the ARD?

Oliver

4893. 4CX tube series gas question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-14 00:00:00 UTC
From: hexter@blazenet.net
Message-ID: <slv54.1225$ce3.25834@typ11.nn.bcandid.com>
Source record: 64811

I have several 4X150A's , and 8930's that have a violet (not blue) glow. Since these tubes have such a small internal volume, it would seem that they would gas more quickly from even a very small amount of seal leakage over the years.

What is your favorite trick for de-gassing them, plate voltage on, screen voltage off? I am assuming there is no internal 'getter'.
TNX and 73

4894. Re: Synchros, Selsyns: how to interface to a PC?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-14 00:00:00 UTC
From: hexter@blazenet.net
Message-ID: <EPv54.1247$ce3.25834@typ11.nn.bcandid.com>
Source record: 64812

In article <3851F787.882D3255@popmail.smis.ch>,
avilaseca@popmail.smis.ch says...
>
>Hi, all
>
>I just was given an old dish from a meteo radar. The az-el mount uses
>synchros as a position control. I want to track satellites from my PC.
>Is there a way to digitize the output from a selsyn, (or synchro,
>resolver) and to feed it to a computer?
>
>tnx de Angel Vilaseca HB9SLV
>Geneva, Switzerland

To control a 5 wire 'selsyn' from a computer is a large task,
and very expensive. I would suggest removing the 'selsyn' and
replacing it with a 'stepper' motor. steppers are very common,
and controls for them are reasonably priced. steppers can commomly
be found with 7.5 or 15 degrees of rotation per step. there are
micro step controllers that provide up to about 10,000 steps per
revolution

73 and good luck

4895. WANTED: 2m mobile linear schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-14 00:00:00 UTC
From: "Randall D. DuCharme" <randyd@tcainternet.com>
Message-ID: <38569BC2.D624A9C7@tcainternet.com>
Source record: 64813

Greetings,

Does anyone have a favorite circuit diagram they'd like to share?

Happy Holidays!

--
Randall D DuCharme
Programmer - Plant Systems Group
Tyson Foods, Inc.
Phone: 501-290-3662
Fax: 290-7980

4896. Want 10 mtr linear Schematic.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-14 00:00:00 UTC
From: Super Sport <rerickso@eidnet.org>
Message-ID: <Rjx54.8627$fy1.780@tundra.ops.attcanada.net>
Source record: 64814

Is there anyone out there that can tell me where I can find a schematic for
a
solid state 10 meter linear that can push out about 100 watts or more ?
For mobile operation....Thank you for your attention to my request.. Rick
VE6GTE.

4897. Want schematic 10 mtr linear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-14 00:00:00 UTC
From: Super Sport <rerickso@eidnet.org>
Message-ID: <Xrx54.8628$fy1.787@tundra.ops.attcanada.net>
Source record: 64815

I'm looking for a schematic for a mobile solid state 10
meter linear that can give me at least 100 watts out.
rerickso@eidnet.org

4898. Questions about TEK 465 scopes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-14 00:00:00 UTC
From: Joe McElvenney <joemac@xic.demon.co.uk>
Message-ID: <VA.00000062.01c0f6d1@joe-mcelvenney>
Source record: 64816

Hello,

I have purposely posted this to 'Homebrew' instead of 'Boat-anchors' because I believe it is a better group for the purpose as to my mind scopes and home-brewers go together.

Yesterday I picked up a clean, cheap-ish TEK 465 scope with relatively recent calibration seals - you know the type, "Remove these labels and we will kill your entire family and burn down the house". I was attracted to it over the 465B's they had in stock because, apart from some storage marks on the case, it was in pristine condition.

Now I'm pretty familiar with the 465B but would like to know the differences in its spec over the vanilla 465. Of course the 'B' is newer but this 465 seems to be functionally the same. It was made in the Channel Islands and has a 'British Aerospace' plaque on it if that means anything. It also has OPT's 4 & 7 fitted. I know that the '7' is the 12/24V option but am curious about the '4'.

The surplus house had a number of 465M's which were a different shape (tent-like) and which they said were the mil-spec variant but, as they were apparently not as rugged as the 465B, I doubt that was true.

I would also like to read-up in general on the Tektronix line of scopes and the company history and am wondering if there is a book available anywhere on this? If anyone has any answers to the above, I would appreciate hearing from them.

73 de Joe, G3LLV

Sheffield
South Yorkshire
United Kingdom

4899. Re: Synchros, Selsyns: how to interface to a PC?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-14 00:00:00 UTC
From: hexter@blazenet.net
Message-ID: <MMy54.148$qk.5986@tw12.nn.bcandid.com>
Source record: 64817

In article <EPv54.1247$ce3.25834@typ11.nn.bcandid.com>,
hexter@blazenet.net says...
>
>In article <3851F787.882D3255@popmail.smis.ch>,
>avilaseca@popmail.smis.ch says...
>>
>>Hi, all
>>
>>I just was given an old dish from a meteo radar. The az-el mount uses
>>synchros as a position control. I want to track satellites from my PC.
>>Is there a way to digitize the output from a selsyn, (or synchro,
>>resolver) and to feed it to a computer?
>>
>>tnx de Angel Vilaseca HB9SLV
>>Geneva, Switzerland
>
>
Opps, Sorry. I told you how to control it. upon re-reading
it seems you wanted to know how to interpert it's existing
position. Yes, there are I.C.'s designed specifically to convert
the phase relations of a 'syncro' or 'selsyn' to a digital
representation. Some convert directly to degrees in BCD, and some
simply convert to straight binary count as in 0 to 1023 etc.

The other reply giving the I.C. numbers is exactly correct.
73

4900. Re: IC IF amp & detector for AM????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-14 00:00:00 UTC
From: Jake Brodsky <frussle@erols.com>
Message-ID: <6c8d5s01lsgq2cc6k60bvbep9k9cmtne73@4ax.com>
Source record: 64818

On Fri, 10 Dec 1999 03:51:07 GMT, jos <soj@sympatico.ca> wrote:

>Hello! I cannot understand how a frequency doubler can remove the sidebands of an AM
>modulated carrier! When the carrier is 100% modulated, the envelope is going through
>a
>zero signal value and if fed to a frequency doubler should also give zero. I am very
>interested in this idea and would appreciate reading on the subject. I have seen the
>mention of quasi-synchronous before for a TV detector in which the carrier is
>regenerated by limiting which is easy because TV modulation modulates to 87.5% only
>leaving a risidual carrier of 12.5%. The results were not good because of the VSB
>nature of the TV signal. In television professional demodulators, a true synchronous
>detector is one with a regenerated carrier using a VCO and PLL in which there is no
>AM or PM sidebands. In the article of RF Design magazine, I think that the signal
>fed to the limiter was first filtered with a very narrow crystal filter. Regards!

The sidebands are removed by the limiter. Doubling the signal
recovers the carrier.

Basically, when you suppress (or null) the carrier, you're left with a
signal which shifts phase 180 degrees every time the modulation
crosses zero. Doubling this signal and limiting the result will
recover the carrier because 180 degrees * 2 is 360 degrees. The
doubled sidebands will be messed up, but that's ok. All you want is
the carrier. So you limit this signal and recover nothing but
carrier. Now, divide this doubled carrier by two, adjust the phase
for the extra delays introduced by the doubling, filtering, limiting,
and division circuitry, and you're on your way...

Except for the few cases where the modulation index drops to zero on a
real DSBSC signal, you won't have to work too hard to recover the
carrier.

Merely limiting a DSB signal with no carrier will not recover the
carrier. Instead, the limiter output will be "captured" by the
sidebands, resulting in an incoherent and distorted mess.

Some have used narrow band filters in an attempt to "lock on" to
whatever residual AM carrier may be left. This works, but it's not
easy to lock on and stay with a signal when your capture bandwidth is
so narrow.

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

4901. Re: Questions about TEK 465 scopes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-14 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <3856FEA7.6512@pop.removethistomailme.net>
Source record: 64819

Joe McElvenney wrote:
> Now I'm pretty familiar with the 465B but would like to know the
> differences in its spec over the vanilla 465. Of course the 'B' is
> newer but this 465 seems to be functionally the same. It was made in
> the Channel Islands and has a 'British Aerospace' plaque on it if that
> means anything. It also has OPT's 4 & 7 fitted. I know that the '7' is
> the 12/24V option but am curious about the '4'.
>
> The surplus house had a number of 465M's which were a different
> shape (tent-like) and which they said were the mil-spec variant but, as
> they were apparently not as rugged as the 465B, I doubt that was true.
>
> I would also like to read-up in general on the Tektronix line of
> scopes and the company history and am wondering if there is a book
> available anywhere on this? If anyone has any answers to the above, I
> would appreciate hearing from them.
>

The book by Stan Griffiths that Steve mentions is nice to have, but it doesn't cover any 4xx-series scopes except the older 453/454. There isn't currently a good buyer/collector/repairer/restorer's reference for the later Tek scopes and analyzers, which is a shame. As things stand, the only real resources are the Tucker Electronics catalog (http://www.tucker.com) and various Tek catalogs from the vintage you're interested in (70s through 80s in your case). These are readily collected on eBay -- there are always plenty of Tek and HP catalogs in the Test Equipment category.

There is also a book called "Winning With People: The First 40 Years of Tektronix" that was issued to all Tek employees some time back in the early 80s. This is an interesting and informative read, but isn't written from a technical point of view. Again, eBay is likely to be your best bet for digging up one of these. They are less common than the catalogs, and usually not as cheap. I think I paid something like $60 for the copy I bought. For a more technical perspective on classical Tek circuit designs you want to search eBay for the "Circuit Concepts" series of books they put out. Also the Jim Williams books on analog design have a few chapters written by some of the bearded gurus at Tek.

Mark Kahrs has some good info on the Tek 7000 series at http://www.caip.rutgers.edu/~kahrs/testeq/7000.html, but (again) this won't do you much good with a 465.

Along the same lines as the Stan Griffiths book on the older instruments, you want to check out the Tektronix virtual museum at http://margo.student.utwente.nl/~wel/tek.htm.

If I had an infinite amount of time and nothing else to do with it, I'd write the definitive buyer's/collector's guide to all of the great Reagan-era Tek and HP test equipment that's saturating the marketplace nowadays. I'd think that someone could make a few bucks by researching and writing such a book!

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

4902. WTB Vac vari cap

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-14 00:00:00 UTC
From: Matt Erickson <kk5dr@hotmail.com>
Message-ID: <38570AE7.542EAEC4@hotmail.com>
Source record: 64820

Still looking for a vacuum variable capacitor.
1500-2000pf @ max. 3kv or better
reasonable price (NO, I won't pay Neb. surplus prices)

4903. FS amp building parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-14 00:00:00 UTC
From: Matt Erickson <kk5dr@hotmail.com>
Message-ID: <38570A6C.FA864B55@hotmail.com>
Source record: 64821

Filament transformer 7.5vac @ 21A. w/CT, HV tested, 120/240v primary
Great for those 3-1000Z, 4-1000A, 3CX1200A7 amps.
$40 shipped.

Kilovac KM-14 Vacuum relay, dpdt, 12KV @ 10A, contacts, 12vdc coils,
NEW! never used, with spec data sheet. T/R for a "BIG" amp!
$100 shipped.

4904. Re: Questions about TEK 465 scopes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-15 00:00:00 UTC
From: quatsein@island.net
Message-ID: <3856f5fe.257237950@news.cr.island.net>
Source record: 64822

You need this book, Oscilloscopes, Selecting and
restoring a Classic, by Stan Griffiths, W7NI

All about Tek scopes, call Stan at w7ni@teleport.com

Steve Carlisle VE7AHL

On Tue, 14 Dec 1999 20:47:07 GMT, Joe McElvenney
<joemac@xic.demon.co.uk> wrote:

>Hello,
>
> I have purposely posted this to 'Homebrew' instead of 'Boat-anchors'
>because I believe it is a better group for the purpose as to my mind
>scopes and home-brewers go together.
>
> Yesterday I picked up a clean, cheap-ish TEK 465 scope with
>relatively recent calibration seals - you know the type, "Remove these
>labels and we will kill your entire family and burn down the house". I
>was attracted to it over the 465B's they had in stock because, apart
>from some storage marks on the case, it was in pristine condition.
>
> Now I'm pretty familiar with the 465B but would like to know the
>differences in its spec over the vanilla 465. Of course the 'B' is
>newer but this 465 seems to be functionally the same. It was made in
>the Channel Islands and has a 'British Aerospace' plaque on it if that
>means anything. It also has OPT's 4 & 7 fitted. I know that the '7' is
>the 12/24V option but am curious about the '4'.
>
> The surplus house had a number of 465M's which were a different
>shape (tent-like) and which they said were the mil-spec variant but, as
>they were apparently not as rugged as the 465B, I doubt that was true.
>
> I would also like to read-up in general on the Tektronix line of
>scopes and the company history and am wondering if there is a book
>available anywhere on this? If anyone has any answers to the above, I
>would appreciate hearing from them.
>
>
> 73 de Joe, G3LLV
>
> Sheffield
> South Yorkshire
> United Kingdom
>

>
>
>

4905. Re: Good resources for learning electronics?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-15 00:00:00 UTC
From: n2cqr@erols.com
Message-ID: <3857bd0c.519995626@news.erols.com>
Source record: 64823

On Tue, 14 Dec 1999 18:02:45 GMT, emr01@ms19.hinet.net (Oliver Huang)
wrote:

>On Wed, 01 Sep 1999 23:43:45 -0400, Luke Seubert <lseubert@radix.net>
>wrote:
>
>>Good day.
>>
>>What are some good resources for learning electronics? I recently set
>>up a new shortwave listening rig, and would like to build some of the
>>simple circuits for little projects here and there - you know - those
>>great little Arnie Coro projects.

I think the key is to get many different books on electronics. Don't
rely on any one particular book. This is complicated stuff and no one
author is going to be able to describe everything in a way that is
going to help you. I often find myself scratching my head after
reading one author's description; I then go to the other books in
search of understanding. Good luck. Hang in there. Bill N2CQR

4906. Re: ARRL RADIO RESIGNER (ARD) problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-15 00:00:00 UTC
From: Linda Ferguson <lin.ferguson@mindspring.com>
Message-ID: <838b57$pl3$1@nntp4.atl.mindspring.net>
Source record: 64824

Laszlo I. Morocz <kf4pv@SPAMMENOTlmorocz.com> wrote in message
news:k9O44.2750$Jh3.9689@jump.innerx.net...
> As for the OS religious wars.... <snip>
>What I see from my viewpoint is that the people (on both sides) who
> are fanatic enough about "their" operating system to go around calling the
> opposition Windoze and Eunuchs need to get a life. Come on guys, it's just
> an operating system.

Well said. I've programmed since 1972, for W95 since 1996, and am currently using Linux. Neither is perfect. An OS is not written to be continually "set up". It's written to run and service >applications< and shouldn't be seen nor heard from otherwise.

Incidentally, in 3 years of intensive C++/W95 programming, I've seen just about every error possible, and NONE of them was caused by W95. Almost all errors are caused by apps, and what you see is not W95 "instability" but W95 trapping application errors as it's spozed to do, to protect the rest of the system.

73 de aa7hk

4907. Re: Questions about TEK 465 scopes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-15 00:00:00 UTC
From: quatsein@island.net
Message-ID: <3857c101.309216036@news.cr.island.net>
Source record: 64825

Yes, I knew I seen a 400 series listed in the book I mentioned, but
after posting, and looking at the book, I seen it had no listing for
the model no. he was looking for.

Steve

On Tue, 14 Dec 1999 19:36:23 -0700, John Miles
<jmiles@pop.removethistomailme.net> wrote:

>Joe McElvenney wrote:
>> Now I'm pretty familiar with the 465B but would like to know the
>> differences in its spec over the vanilla 465. Of course the 'B' is
>> newer but this 465 seems to be functionally the same. It was made in
>> the Channel Islands and has a 'British Aerospace' plaque on it if that
>> means anything. It also has OPT's 4 & 7 fitted. I know that the '7' is
>> the 12/24V option but am curious about the '4'.
>>
>> The surplus house had a number of 465M's which were a different
>> shape (tent-like) and which they said were the mil-spec variant but, as
>> they were apparently not as rugged as the 465B, I doubt that was true.
>>
>> I would also like to read-up in general on the Tektronix line of
>> scopes and the company history and am wondering if there is a book
>> available anywhere on this? If anyone has any answers to the above, I
>> would appreciate hearing from them.
>>
>
>The book by Stan Griffiths that Steve mentions is nice to have, but it
>doesn't cover any 4xx-series scopes except the older 453/454. There
>isn't currently a good buyer/collector/repairer/restorer's reference for
>the later Tek scopes and analyzers, which is a shame. As things stand,
>the only real resources are the Tucker Electronics catalog
>(http://www.tucker.com) and various Tek catalogs from the vintage you're
>interested in (70s through 80s in your case). These are readily
>collected on eBay -- there are always plenty of Tek and HP catalogs in
>the Test Equipment category.
>
>There is also a book called "Winning With People: The First 40 Years of
>Tektronix" that was issued to all Tek employees some time back in the
>early 80s. This is an interesting and informative read, but isn't
>written from a technical point of view. Again, eBay is likely to be
>your best bet for digging up one of these. They are less common than
>the catalogs, and usually not as cheap. I think I paid something like
>$60 for the copy I bought. For a more technical perspective on
>classical Tek circuit designs you want to search eBay for the "Circuit

>Concepts" series of books they put out. Also the Jim Williams books on
>analog design have a few chapters written by some of the bearded gurus
>at Tek.
>
>Mark Kahrs has some good info on the Tek 7000 series at
>http://www.caip.rutgers.edu/~kahrs/testeq/7000.html, but (again) this
>won't do you much good with a 465.
>
>Along the same lines as the Stan Griffiths book on the older
>instruments, you want to check out the Tektronix virtual museum at
>http://margo.student.utwente.nl/~wel/tek.htm.
>
>If I had an infinite amount of time and nothing else to do with it, I'd
>write the definitive buyer's/collector's guide to all of the great
>Reagan-era Tek and HP test equipment that's saturating the marketplace
>nowadays. I'd think that someone could make a few bucks by researching
>and writing such a book!
>
>-- jm
>
>---
>http://www.qsl.net/ke5fx
>Note: My E-mail address has been altered to avoid spam
>---

4908. Re: What is a Raytheon CK5829?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-15 00:00:00 UTC
From: hexter@blazenet.net
Message-ID: <XRP54.65$L5.7534@tw11.nn.bcandid.com>
Source record: 64826

In article <19991201202745.16835.00000037@ng-cr1.aol.com>,
tubepwr813@aol.com says...
>
>Does anyone have a pinout for this ultra mini tube? Voltages? What
type it is?
>I found it in a box of junk parts and was still wrapped up. I would
like to
>make a little QRP rig with it. Simple oscillator maybe for 40M.
>
>
>Thanks!
>Chris

Well, I don't think you will be building much of an oscillator
with it as it appears to be a twin diode. as for pin out, here it
is
1= plate 1
2= cath 1
3= fil
4= no connection
5= fil
6= plate 2
7= cath 2

filament voltage 6.3 at .15 amp
73

4909. Re: 6 meter amp question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-15 00:00:00 UTC
From: "jstrohm@texas.net" <jstrohm@texas.net>
Message-ID: <3857D3E3.5B72@texas.net>
Source record: 64827

Turboblown wrote:
>
> I know that a 10/11 meter amp can be retuned for use in the 6 meter band, now
> the question is.....HOW! Does anyone have the info to do this. I know at one
> time there were general plans in circulation but I have yet to find them.
> The amp that I want to do is an Afterburner Plus 100w (yes, an old illegal CB
> amp!)

Some tube amps, yes, depending on the tube. If the interelectrode capacitances are low enough, it's simply a matter of shortening the plate coil by approx. 50% and retuning (assuming a pi network) as a starting point.

Note that not all sweep tubes will go to 6 meters.

If it's a bipolar transistor amp, it probably cannot be retuned that high. If it's got broadband transformers on the input and output, you might experiment with a couple watts in, and see whether it will swing to 6 m -- reducing the core size on the transformers _MIGHT_ get you there, though most of the older bipolar transistors run out of gain rather sharply above 30 MHz.

If it's a FET transistor amp with broadband transformers, it might already work on 6.

Happy experimenting, and thank you for rescuing an amp from illegal class D service.

4910. Re: 4CX tube series gas question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-15 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <3857F12A.5A18@ixpres.com>
Source record: 64828

gudmundur wrote:
>
> I have several 4X150A's , and 8930's that have a violet
> (not blue) glow. Since these tubes have such a small internal
> volume, it would seem that they would gas more quickly from
> even a very small amount of seal leakage over the years.
>
> What is your favorite trick for de-gassing them, plate
> voltage on, screen voltage off? I am assuming there is no
> internal 'getter'.
> TNX and 73

Gudmundur,

There is no way to restore them, other than connecting up to a vacuum pump, and pumping them down as originally done in the factory. The gases must be removed entirely from the tube. Most transmitting tubes are this way; the vacuum is much harder (lower pressure) than receiving tubes.
They make a good paperweight...

73,
Don, W6JL

--
ï¿½ï¿½à¡±ï¿½

4911. 10 ghz, portable radar, pps-15

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-15 00:00:00 UTC
From: Bill Reuber <breuber@wcl.on.ca>
Message-ID: <3857F82B.1B3B@wcl.on.ca>
Source record: 64829

For Sale,, PPS-15 portable radar system,
comes with everything required..
transit case,
soft backpack
tripod
r/t unit with readout and rangegate
headphones
battery and vehicle power cords
operations manual(copy)

these are current serviceable units Tested and calibrated 1992
they will detect and range objects to 3000 meters,
they have ALARM feature for specified scan area..

don,t miss this opportunity to own a very unique piece
of kit..

breuber@wcl.on.ca

4912. Re: Want 10 mtr linear Schematic.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-15 00:00:00 UTC
From: goldreged@aol.comJUNKBLOK
Message-ID: <19991215160941.10760.00001065@ng-cr1.aol.com>
Source record: 64830

<<Is there anyone out there that can tell me where I can find a schematic for
a
solid state 10 meter linear that can push out about 100 watts or more ?
For mobile operation....Thank you for your attention to my request.. Rick>>

http://www.rfparts.com

Above site has a Great booklet type manual for just that purpose. Just like the
manual & directions for a Heathkit !!!

Really gives you the theory in as easy way to understand.
Ed G.
KB1DQX
(Please Remove "JUNKBLOK" to E-mail.
Unless it's a Flame.)

4913. 70cm antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-15 00:00:00 UTC
From: Michel Pelletier <michel@digicool.com>
Message-ID: <38581822.FD988EBA@digicool.com>
Source record: 64831

Anyone have any suggestions on a 70cm mobile antenna easy enough for a Technician Plus to whip up?

Thanks,

-Michel

4914. Re: Want schematic 10 mtr linear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-15 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <3856ac7b.244231208@news.online.no>
Source record: 64832

On Tue, 14 Dec 1999 20:07:19 GMT, "Super Sport" <rerickso@eidnet.org>
wrote:

>I'm looking for a schematic for a mobile solid state 10
>meter linear that can give me at least 100 watts out.
> rerickso@eidnet.org
>
>
and your callsign?

4915. Re: 4CX tube series gas question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-15 00:00:00 UTC
From: Jack Taylor <n7oo@theriver.com>
Message-ID: <oMX54.132974$y45.2721990@news4.giganews.com>
Source record: 64833

Years ago as an electronic tech for the FAA, I seem to recall the 4X250s would occasionally show a violet colour under normal operation. The original poster didn't state that he also noted a performance decrease. If the tube operates as normal, I wouldn't be too concerned about it.

73 de Jack

Don W6JL wrote in message <3857F12A.5A18@ixpres.com>...
>gudmundur wrote:
>>
>> I have several 4X150A's , and 8930's that have a violet
>> (not blue) glow. Since these tubes have such a small internal
>> volume, it would seem that they would gas more quickly from
>> even a very small amount of seal leakage over the years.
>>
>> What is your favorite trick for de-gassing them, plate
>> voltage on, screen voltage off? I am assuming there is no
>> internal 'getter'.
>> TNX and 73
>
>Gudmundur,
>
> There is no way to restore them, other than connecting up to a vacuum
>pump, and pumping them down as originally done in the factory. The
>gases must be removed entirely from the tube. Most transmitting tubes
>are this way; the vacuum is much harder (lower pressure) than receiving
>tubes.
> They make a good paperweight...
>
> 73,
> Don, W6JL
>
>--
>

4916. Re: Speaking of TEK, why the 5000?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-15 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <38586013.6F6A@pop.removethistomailme.net>
Source record: 64834

JW wrote:
>
> Speaking of TEK scopes, why did TEK produce the 5000 series of scopes
> with their limited bandwidth? I have a quite ancient 545a, still a rock
> solid trigger, but 35Mhz bandwidth. I recognize that bandwidth isn't
> the only figure of merit, but am all ears. Was it to meet a specific
> OEM demand in the late 60's, early 70's since the units seem to have a
> very comprehensive range of plugins.

FWIW, I'm told these units were aimed largely at the biomedical field.
You tend to see a lot of high-sensitivity, low-bandwidth plugins in that
series, compared to the 7000 line.

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

4917. Re: Stinkin, leakin alkaline batteries!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-15 00:00:00 UTC
From: Keith Randino <krandino@snet.net>
Message-ID: <83ccse$o23@news1.snet.net>
Source record: 64835
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.antiques.radio+phono

I have recently had a leak of 4 D-cell energizer batteries into my Mag light. I called them and they told me to send them the flashlight and batteries. I will do so as soon as possible. I have never had alkilines leak into anything that I have owned until now. I remember the carbon-zinc batteries leaking all the time. I had a hell of a time getting those batteries out of the light.

William Sommerwerck wrote in message <3854EB19.89D0A943@nwlink.com>...
>I'm very "attentive" to the battery-operated devices I own, so I've never had
>any problems. However, I appreciate the advice about Maglites.
>
>Steve Phipps wrote:
>
>> William Sommerwerck <williams@nwlink.com> wrote in message
>> news:3853EA3F.16DB2658@nwlink.com...
>> > I've been using alkaline batteries for over 30 years, and I have _never_
>> seen an
>> > alkaline cell that "leaked" or had an odor.
>>
>> I recently had a set of AA Energizers leak in a radio that had been stored for
>> about 2 years. No damage done and it cleaned right up, but they nonetheless
>> leaked...
>

4918. Re: Want schematic 10 mtr linear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-16 00:00:00 UTC
From: Super Sport <rerickso@eidnet.org>
Message-ID: <UuW54.9108$fy1.862@tundra.ops.attcanada.net>
Source record: 64836

J M Noeding <LA8AK@online.no> wrote in message
news:3856ac7b.244231208@news.online.no...
> On Tue, 14 Dec 1999 20:07:19 GMT, "Super Sport" <rerickso@eidnet.org>
> wrote:
>
> >I'm looking for a schematic for a mobile solid state 10
> >meter linear that can give me at least 100 watts out.
> > rerickso@eidnet.org
> >
> >
> and your callsign? hr is VE6GTE what you got ?
>

4919. Re: Good resources for learning electronics?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-16 00:00:00 UTC
From: anti.spam@netcentral.co.uk
Message-ID: <B47DEA11966811115D@dial6.netcentral.co.uk>
Source record: 64837

>On Wed, 01 Sep 1999 23:43:45 -0400, Luke Seubert <lseubert@radix.net>
>wrote:
>
>>Good day.
>>
>>What are some good resources for learning electronics? I recently set
>>up a new shortwave listening rig, and would like to build some of the
>>simple circuits for little projects here and there - you know - those
>>great little Arnie Coro projects.

Take a look at:

http://www.netcentral.co.uk/satcure/design.htm or
http://www.satcure.co.uk/design.htm

Martin Pickering

4920. Re: Drawing Schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-16 00:00:00 UTC
From: anti.spam@netcentral.co.uk
Message-ID: <B47DEA11966811118B@dial6.netcentral.co.uk>
Source record: 64838

In article <MdT44.197634$5r2.493943@tor-nn1.netcom.ca>,
"Rob" <NoEmail@NoWay.com> wrote:

>Is there a good (preferably Freeware) program out there that can be used to
>draw electrical schematic diagrams??
>
>I don't want to have to draw symbols for transformers etc by hand!

Sure, take a look at DesignWorks Lite

http://www.dsgnwrks.com/

There's a 30 day trial version but it was so good that I paid my $45 next
day!

Takes about 7 minutes to download.

Contains most of the symbols you'll need.

Available for Macintosh and Windows :o)

Once you've paid the small fee, they'll give you access to more symbol
libraries, too.

I have no connection with the company, other than as a satisfied user.
This software is *much* better than struggling with paint or draw programs.
Time is money in my business and this little program saved me a bundle.
There's a Professional version, too, that supports SPICE etc.

Martin Pickering
http://www.satcure.co.uk

4921. homebrew FM demod...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-16 00:00:00 UTC
From: AJ <alaje@sympatico.ca>
Message-ID: <3858500B.EC8FB346@sympatico.ca>
Source record: 64839

Hi,

I am interested in doing an ultra low power 'walkie talkie' type circuit cell using basic principles for fun and to improve my understanding of the basics. However, in my research, I generally see FM transmitters and AM crystal receivers, very rarely AM transmitters or FM receivers. I would like to find more of the AM transmitters (voice) and FM receivers.

I am interested in doing a homebrew FM demod similar to a Foster Seeley circuit. However, I'm finding it tough to get good references on how it works exactly . I have seen several different versions of the circuit (not just the 'ratio detector' changes) and would appreciate any references that would help clarify the circuit operation somewhat.

I'd also be interested in information on a simple (very simple as it would be transmitting to a crystal receiver) AM transmitter.

I know that they will give less than ideal performance, but I am more interested in the circuit concepts and playing with them a bit than how great they work.

Any help would be appreciated.

aj

4922. Speaking of TEK, why the 5000?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-16 00:00:00 UTC
From: JW <jdwalton@home.com>
Message-ID: <3858710B.AA71F33B@home.com>
Source record: 64840

Speaking of TEK scopes, why did TEK produce the 5000 series of scopes with their limited bandwidth? I have a quite ancient 545a, still a rock solid trigger, but 35Mhz bandwidth. I recognize that bandwidth isn't the only figure of merit, but am all ears. Was it to meet a specific OEM demand in the late 60's, early 70's since the units seem to have a very comprehensive range of plugins.

4923. Re: 6 meter amp question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-16 00:00:00 UTC
From: Tim Elder <telder@1st.net>
Message-ID: <BZ_54.496$BJ1.11155@news>
Source record: 64841

Would the Svetlana EL509 be suitable?How low should the interelectrode cap.
be to be considered usable on 6m?I am all for recyling!!!
Tim

<jstrohm@texas.net> wrote in message news:3857D3E3.5B72@texas.net...
> Turboblown wrote:
> >
> > I know that a 10/11 meter amp can be retuned for use in the 6 meter
band, now
> > the question is......HOW! Does anyone have the info to do this. I know
at one
> > time there were general plans in circulation but I have yet to find
them.
> > The amp that I want to do is an Afterburner Plus 100w (yes, an old
illegal CB
> > amp!)
>
> Some tube amps, yes, depending on the tube. If the interelectrode
> capacitances are low enough, it's simply a matter of shortening the
> plate coil by approx. 50% and retuning (assuming a pi network) as
> a starting point.
>
> Note that not all sweep tubes will go to 6 meters.
>
> If it's a bipolar transistor amp, it probably cannot be retuned that
> high. If it's got broadband transformers on the input and output,
> you might experiment with a couple watts in, and see whether it
> will swing to 6 m -- reducing the core size on the transformers
> _MIGHT_ get you there, though most of the older bipolar transistors
> run out of gain rather sharply above 30 MHz.
>
> If it's a FET transistor amp with broadband transformers, it might
> already work on 6.
>
> Happy experimenting, and thank you for rescuing an amp from illegal
> class D service.

4924. ICOM PRC-100/1000 RSSI?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-16 00:00:00 UTC
From: Peter Bolch <nc_bolchpe@netcologne.de>
Message-ID: <839utg$n7v$1@news.netcologne.de>
Source record: 64842

Hi,

what is the dynamic range and the resolution of ICOM's PRC-100/1000 RSSI function? I think of using such a receiver as a simple spectrum analyzer/selective level meter if a dynamic range > 40 dB and a resolution (after linearity correction by
software) of at least 3 or 4 dB can be achieved. ICOM told me that the resolution is high. But what is high?

Peter

4925. Guide to the rec.radio Newsgroups

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-16 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <83a46d$74o$1@news.hawaii.edu>
Source record: 64843
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Archive-name: radio/personal-intro

This message describes the rec.radio.amateur.*, rec.radio.cb, rec.radio.info, and rec.radio.swap newsgroups, as well as their Internet mailing list counterparts and complements. It is intended to serve as a guide for the new reader on what to find where. Questions and comments may be directed to Jeffrey Herman, KH6O, jeffreyh@hawaii.edu, or Paul Schleck, K3FU, pschleck@novia.net.

This message was last changed on 14 March, 1998.

History
=======

Way back when, before there was a Usenet, the Internet hosted a mailing list for hams, called (appropriately enough) INFO-HAMS. Ham radio discussions were held on the mailing list, and sent to the mailboxes of those who had signed up for it. When the Usenet software was created, and net news as we now know it was developed, a newsgroup was created for hams: net.ham-radio. The mailing list and the newsgroup were gatewayed together, eventually.

Over the years, as the net grew, the volume of discussion became progressively higher. First one by one, and then as part of two reorganizations, what was once one group became many. In the process, developments elsewhere on the net were reflected in the groups as they were created, most notably the change to place all of the ham radio groups in one hierarchy.

The collection of newsgroups continues to grow as more people join the net, and as more topics of discussion gain volume, I expect to see more groups be created as well. This follows what is happening on the rest of the net.

Nearly all of the radio newsgroups have corresponding mailing lists, the notable exception being rec.radio.swap. There are also a few mailing lists that don't have newsgroups.

The Current Groups
==================

It's important to post messages to the group that's appropriate for them, and not to the groups that aren't. The whole idea of having different newsgroups is so that folks who aren't interested in, say, homebrewing, don't have to wade through messages about homebrewing on the way to read about Field Day. Posting appropriately is just good etiquette.

The rec.radio.amateur.misc group is the catchall. It is what rec.ham-radio was renamed to during the first major reorganization. Any amateur radio-related message that's not more appropriate in one of the other groups belongs here, from contesting to DX to ragchewing on VHF to information on becoming a ham.

The group rec.radio.amateur.digital.misc is for discussions related to (surprise!) digital amateur radio. This doesn't have to be the common two-meter AX.25 variety of packet radio, either; some of the most knowledgeable folks in radio digital communications can be found here, and anything in the general area is welcome. The name was changed to emphasize this, and to encourage discussion not only of other text-based digital modes, such as AMTOR, RTTY, and Clover, but things like digital voice and video as well. The former group, rec.radio.amateur.packet, was removed on September 21st, 1993. It is obsolete, and you should use .digital.misc instead (or the appropriate new mailing list, mentioned below). The group has .misc as part of the name to allow further specialization if the users wish it, such as .digital.tcp-ip.

The swap group is rec.radio.swap. This recognizes a fact that became evident shortly after the original group was formed: Hams don't just swap ham radio gear, and other folks besides hams swap ham equipment. If you have radio equipment, or test gear, or computer stuff that hams would be interested in, here's the place. Equipment wanted postings belong here too. Discussions about the equipment generally don't; if you wish to discuss a particular posting with the buyer, email is a much better way to do it, and the other groups, especially .equipment and .homebrew, are the place for public discussions. There is now a regular posting with information on how to go about buying and selling items in rec.radio.swap; please refer to it before you post there. To answer a frequently asked question: No, there is no mailing list that goes along with this group. If you can't read Usenet news directly, you're out of luck.

The group rec.radio.amateur.policy was created as a place for all the discussions that seem to drag on interminably about the many rules, regulations, legalities, and policies that surround amateur radio, both existing and proposed. Recent changes to the Amateur Radio Rules (FCC Part 97) have finally laid to rest the Great Usenet Pizza Autopatch Debate - it's now legal to order a pizza on the autopatch, if you're not in the pizza business - as well as complaints about now-preempted local scanner laws hostile to amateurs, but plenty of discussion about what a bunch of rotten no-goodniks the local frequency coordinating body is, as well as the neverending no-code debate, may still be found here.

The group rec.radio.cb is the place for all discussion about the Citizens' Band radio service. Such discussions have been very inflammatory in rec.ham-radio in the past; please do not cross-post to both rec.radio.cb and rec.radio.amateur.* unless the topic is genuinely of interest to both hams and CBers - and very few topics are.

The rec.radio.info group is just what its name implies: it's the place where informational messages from across rec.radio.* may be found, regardless of where else they're posted. As of this writing, information posted to the

group includes Cary Oler's daily solar progagation bulletins, ARRL bulletins, the Frequently Asked Questions files for the various groups, and radio modification instructions. This group is moderated, so you cannot post to it directly; if you try, even if your message is crossposted to one of the other groups, your message will be mailed to the moderator, who is currently David Dodell, WB7TPY. The email address for submissions to the group is rec.radio.info-moderator@primenet.com. Inquires and other adminis-trivia should be directed to rec.radio.info-request@primenet.com. For more information about rec.radio.info, consult the introduction and posting guidelines that are regularly posted to that newsgroup.

The groups r.r.amateur.antenna, .boatanchors, .dx, .equipment, .homebrew, and .space are for more specialized areas of ham radio: discussions about antennas, the older tube based amateur, military, and commercial gear, commercially-made equipment, homebrewing, and amateur radio space operations. The .equipment group is not the place for buying or selling equipment; that's what rec.radio.swap is for. Similarly, the .space group is specifically about amateur radio in space, such as the OSCAR program and SAREX, the Shuttle Amateur Radio EXperiment; other groups cover other aspects of satellites and space. Homebrewing isn't about making your own alcoholic beverages at home (that's rec.crafts.brewing), but rather construction of radio and electronic equipment by the amateur experimenter. The .dx group is devoted to long distance amateur communications. Each of these subgroups has its own charter and FAQ; please refer to the archives to find these documents.

Except for rec.radio.swap and rec.radio.cb, all of these newsgroups are available by Internet electronic mail in digest format; send a mail message containing "help" on a line by itself to listserv@ucsd.edu for instructions on how to use the mail server.

All of the groups can be posted to by electronic mail, though, by using a gateway at the University of Texas at Austin. To post a message this way, change the name of the group you wish to post to by replacing all of the '.'s with '-'s - for example, rec.radio.swap becomes rec-radio-swap - and send to that name@cs.utexas.edu (rec-radio-swap@cs.utexas.edu, for example). You may crosspost by including multiple addresses as Cc: entries (but see below). This gateway's continued availability is at the pleasure of the admins at UT-Austin, and is subject to going away at any time - and especially if forgeries and other net.abuses become a problem. You have been warned.

Mailing Lists

In addition to the mailing lists that mirror the Usenet newsgroups, there also are a few that stand alone. These cover specific areas of ham radio, and discussion is focused on just those areas. PLEASE BE SURE TO SAVE THE WELCOME MESSAGE YOU RECEIVE AFTER SUBSCRIBING -- IT WILL CONTAIN IMPORTANT INFO REGARDING UNSUBSCRIBING!

The cq-contest mailing list is for discussions of contesting in ham radio. To join, send an email to cq-contesting-request@contesting.com.

The DX mailing list covers the finer points of DXing. This one is also joined by mailing "subscribe" on a line by itself, this time to dx-request@unbc.edu.

There's also a VHF mailing list, for VHF operators of the weak signal persuasion. You can join this one be sending "subscribe vhf" on a line by itself to vhf-request@w6yx.stanford.edu.

The QRP-L list is devoted to building and operating gear at low-power outputs. To subscribe, send an email to listproc@lehigh.edu and only write: subscribe qrp-l Your Name.

The TopBand e-list is devoted to all areas of operation on 160m. To subscribe, send an email to majordomo@contesting.com and only write: subscribe topband and follow the instructions you'll be sent.
This site, contesting.com, also hosts a couple dozen other ham-related e-lists. Use the above address, and only write: lists to get the entire index.

The Boatanchors e-list is devoted to the older tube-based ham, military, and commercial communications gear. To subscribe, send an email to: listserv@listserv.tempe.gov and only write: subscribe boatanchors

For homebuilding transmitters and receivers using tube technology, there is the Glowbugs e-list; send an email to: majordomo@piobaire.mines.uidaho.edu and only write: subscribe glowbugs <your@address.here>

The VHF DX discussion list can be accessed by sending an email to: majordomo@blacksheep.org and only writing: subscribe VHF-DX-discuss.

We now have a list devoted to amateur radio history. To subscribe, send an email to: ham-radio-history-subscribe@egroups.com - leave the body of the message blank.

Qth.net hosts over 100 ham-related e-lists, including lists devoted to each state, manufacturer, mode, band - too many to state here. Send an email to majordomo@qth.net and only write: lists to get the complete index.

For one of the most complete indexes of email lists, see the excellent web site http://pw2.netcom.com/~ac6v/pageae.html

Please do NOT send subscription requests to the mailing lists themselves; that doesn't work very often, and is very annoying to those on the list. Also, please keep your electronic mail address current with any mailing lists you subscribe to, as dealing with returned email is a nuisance for the person maintaining the mailing list.

A Few Words on Crossposting
==========

Please do not crosspost messages to two or more groups unless there is genuine interest in both groups in the topic being discussed, and when you do, please include a header line of the form "Followup-To: group.name" in your article's

headers (before the first blank line). This will cause followups to your article to go to the group listed in the Followup-To: line. If you wish to have replies to go to you by email, rather than be posted, use the word "poster" instead of the name of a group. Such a line appears in the headers of this article.

One of the few examples of productive cross-posting is with the rec.radio.info newsgroup. To provide a filtered presentation of information articles, while still maintaining visibility in their home newsgroups, the moderator strongly encourages cross-posting. All information articles should be submitted to the rec.radio.info moderator so that he may simultaneously cross-post your information to the appropriate newsgroups. Most newsreaders will only present the article once, and network bandwidth is conserved since only one article is propagated. If you make regular informational postings, and have made arrangements with the moderator to post directly to the group, please cross-post as appropriate.

--
Jeffrey Herman, KH6O, and your friendly rec.radio.amateur working-group
jeffreyh@hawaii.edu

4926. Re: 4CX tube series gas question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-16 00:00:00 UTC
From: Mike <m.j.willis@rl.ac.uk>
Message-ID: <83a7s6$l8g@newton.cc.rl.ac.uk>
Source record: 64844

> Years ago as an electronic tech for the FAA, I seem to recall the 4X250s
> would occasionally show a violet colour under normal operation. The
> original poster didn't state that he also noted a performance decrease.
If
> the tube operates as normal, I wouldn't be too concerned about it.

What is glowing, the inside of the tube or the outside ?

4927. Re: 4CX tube series gas question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-16 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <38588F1E.50FD@pop.removethistomailme.net>
Source record: 64845

Mike wrote:
>
> > Years ago as an electronic tech for the FAA, I seem to recall the 4X250s
> > would occasionally show a violet colour under normal operation. The
> > original poster didn't state that he also noted a performance decrease.
> If
> > the tube operates as normal, I wouldn't be too concerned about it.
>
> What is glowing, the inside of the tube or the outside ?

Yeah, nothing can ruin your day like finding your QRO rig is emitting
Cerenkov radiation....

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

4928. Armstrong FM modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-16 00:00:00 UTC
From: Vincent <vincent.habchi@art.alcatel.fr>
Message-ID: <3858C7F3.2431C4CA@art.alcatel.fr>
Source record: 64846

Hi there,

I'd like to know what is the upper (real) limit imposed on the modulation index
ï¿½ of FM generated
through an Armstrong modulator scheme.

0.1 seems a good guess, but it may be more (or less).

Anybody having an idea ? Or practical experience ?

Thanks,
Vince, F5RCS

--
Vulnerant omnes, necat ultima.
La sï¿½mantique gï¿½nï¿½rale en Europe : http://www.esgs.org

4929. HOW To Make: Notch, High Pass, Low Pass, etc Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-16 00:00:00 UTC
From: rahershey@juno.com
Message-ID: <19991216.080535.-419921.0.rahershey@juno.com>
Source record: 64847

I would like to build these filters, notch, high pass, low pass, band pass and
band stop filters. The problem is figuring out the values of the components
to the frequency's I want. These will be used for VHF & UHF frequency's
receive ONLY.

Are there any programs that can do this or a simple way of figuring out these
values. Are there any WEB sites that have some schematics on building
these filters.

Thanks In Advance
Rich

Why pay more to get Web access?
Try Juno for FREE -- then it's just $9.95/month if you act NOW!
Get your free software today: http://dl.www.juno.com/dynoget/tagj.

4930. Re: HOW To Make: Notch, High Pass, Low Pass, etc Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-16 00:00:00 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <iqth5s099k87qlff2qh21mpiu6jef7g2dn@4ax.com>
Source record: 64848

On Thu, 16 Dec 1999 08:01:57 EST, rahershey@juno.com wrote:

>I would like to build these filters, notch, high pass, low pass, band
>pass and band stop filters. The problem is figuring out the values of the
>components to the frequency's I want.

Get a filter designed for a specific frequency and scale to the
frequency of interest by dividing the capacitances and inductances by
the ratio between the desired frequency and the original frequency.

>These will be used for VHF & UHF frequency's receive ONLY.

Especially on UHF there is not much point of using lumped components,
but at these frequencies quarter wave and half wave sections of
transmission lines are generally used to construct various resonators.
Thus, you need a program that also handles transmission line segments
and not just R, C and L lumped components.

Paul OH3LWR

4931. Re: 70cm antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-16 00:00:00 UTC
From: Jim <jdport@concentric.net>
Message-ID: <38590999.D92C20C9@concentric.net>
Source record: 64849

A quarter-wave spike antenna for 440 is only a fairly stiff piece of wire about 6 inches long, and provides a fair match to 50 ohm coax cable. Use of most any coaxial bulkhead for the vehicle roof (BNC, SO-239 "UHF", etc) allows you to just use a mating male connector for the base of the quarter-wave.
A J-pole is fairly easy and very effective as well on 440:
(copper clad welding rod works, as does brazing rod)

| Total length of long side of the 'J' is 3/4 wavelength @ 446 MHZ or 19"
| | Length of the stub or short side of the 'J' is 6.3 inches
^ -- Short the bottom of the 'J' together; space the two rods about 1/2 inch or slightly less
-Attach your 50 ohm coax to the lower part of the stub, try about 1/2 to one inch from the bottom for starters.
Using a UHF (!) SWR meter, carefully slide the contacts up and down to achieve minimum reflected power.
Conversely, attaching the coax (shield to one side, center to the other, 'polarity' doesn't matter) with spots of solder and adjusting the spacing of the lower stub often results in a better match.
This whole antenna can be the upper end of a longer welding rod, and the base of the antenna below the shorted stub can be mounted in any fashion you find effective. The J pole is essentially an end-fed dipole, and the ground plane below it is of minor importance, so it can be mounted most anywhere on the vehicle, of course the best place being "high and in the clear".
The worst part about J poles is that the coax coupled connections will wear with time and need to be repaired occasionally, but they are very effective antennas. The same adage applies to mobile antennas as does to fixed antennas: If it stays up and undamaged all winter, you don't have it high enough!
Jim W5AOX

Michel Pelletier wrote:

> Anyone have any suggestions on a 70cm mobile antenna easy enough for a
> Technician Plus to whip up?
>
> Thanks,
>
> -Michel

4932. Re: Armstrong FM modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-16 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <83b4kq$520$1@nnrp1.deja.com>
Source record: 64850

In article <3858C7F3.2431C4CA@art.alcatel.fr>,
Vincent <vincent.habchi@art.alcatel.fr> wrote:
> Hi there,
>
> I'd like to know what is the upper (real) limit imposed on the
modulation index
> of FM generated
> through an Armstrong modulator scheme.
>
> 0.1 seems a good guess, but it may be more (or less).
>
> Anybody having an idea ? Or practical experience ?
>
> Thanks,
> Vince, F5RCS
>
> --
> Vulnerant omnes, necat ultima.
> La s mantique g n rale en Europe : http://www.esgs.org
>

It will depend on how much 3rd harmonic is acceptable for you.
The ratio wanted to distortion components is given by: (□/4)/(1-□/4)
See details at http://www.comms.eee.strath.ac.uk/~ike/ug/325/slides.htm
by clicking on 'PM and FM generators'. You will get a .pdf explanation.
--
Greetings,

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Before you buy.

4933. Re: homebrew FM demod...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-16 00:00:00 UTC
From: Jim <jdport@concentric.net>
Message-ID: <38590D28.E70D8F13@concentric.net>
Source record: 64851

You remind me of my early attempts to get in on the then-burgeoning 2 meter FM activity in the early 1970's.
I built my own walkie-talkie using a 3 X 5 X 7" Bud minibox with a 1 watt VHF engineering 2M FM transmitter strip paired with a very simple 2 Meter converter that outputted to ~1600 KHZ(!), i.e. the broadcast band.
It used a simple AM transistor radio as the tunable IF, and with slope detection it actually worked rather well. With this arrangement there was very little background noise coming out of the speaker when no signal was present, thus squelch control was unneeded. I modified the AM receiver with a reduction-geared tuning capacitor that allowed much better tuning control, and it was very stable. When the set was tuned for optimum audio (just off either SIDE of the "right" frequency for slope detection of FM signals), it would stay on that frequency all day, or almost, as the battery pack slowly declined.
Like most of my projects that were later junked and cannibalized for newer toys, I wish I still had the thing, just to show how effectively cheap, easy "junk" can work. The rig was light enough I even put a belt clip on it and rode around with it on my bike between classes in college at NMSU.
Nowadays I have a very small duo-bander that has thousands of channels, great audio, selectivity, etc..... but I don't get the incredulous looks I used to get with my "homebrew" aluminum-box HT! Nobody ever asked if I was a cop, or even a CB'er, with that thing..... <sigh>
Jim W5AOX

AJ wrote:

> Hi,
>
> I am interested in doing an ultra low power 'walkie talkie' type
> circuit cell using basic principles for fun and to improve my
> understanding of the basics. However, in my research, I generally see FM
> transmitters and AM crystal receivers, very rarely AM transmitters or FM
> receivers. I would like to find more of the AM transmitters (voice) and
> FM receivers.
>
> I am interested in doing a homebrew FM demod similar to a Foster
> Seeley circuit. However, I'm finding it tough to get good references on
> how it works exactly . I have seen several different versions of the
> circuit (not just the 'ratio detector' changes) and would appreciate any
> references that would help clarify the circuit operation somewhat.
>
> I'd also be interested in information on a simple (very simple as it
> would be transmitting to a crystal receiver) AM transmitter.
>
> I know that they will give less than ideal performance, but I am

> more interested in the circuit concepts and playing with them a bit than
> how great they work.
>
> Any help would be appreciated.
>
> aj

4934. Re: homebrew FM demod...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-16 00:00:00 UTC
From: Tom Bruhns <tom_bruhns@agilent.com>
Message-ID: <38592DC5.2A29D712@agilent.com>
Source record: 64852

You didn't mention frequency ranges...

You can get ICs that will do practically all the active parts of an FM receiver in one IC. Look for cordless phone ICs. I think Motorola still has those and didn't move them to "ON Semiconductors". They also have some transmitter-related chips, including a pair of ones that will do both AM and FM. Seems to me they are MC13175/13176. AM is quite common in transmitters for remote control...the little garage door opener type. Most of them are just on-off keyed, but there are chips out there (like the Motorola ones) that will do linear modulation.

IIRC, the Foster-Seeley detector works through a frequency-dependent phase shift through a lightly coupled RF tuned circuit. The phase shifts up and down as you move off the center frequency. By feeding a center tap on the coil with a signal shifted 90 degrees from what's in the tuned circuit at the center freq, you get the same RF voltage at each end of the tuned circuit. Rectifying that and subtracting gives you zero. But...if the phase shifts (which it does as you change freq), one side gets more net RF voltage and the other side gets less. Draw a vector diagram...one vector from (0,0) to (1,0) say, representing what's fed to the center tap. Then one from (1,0) to (1,1) representing the voltage in the upper half of the tuned circuit, and one from (1,0) to (1,-1) representing the voltage in the lower half. The net on each side is a vector of length sqrt(2), and rectifying (to get a "DC" representation of the magnitudes) and subtracting yields zero. But if the phase changes, the upper might go from (1,0) to (1.1,0.9) and the lower from (1,0) to (0.9,-0.9) Then the lengths are different...longer on the upper and shorter on the lower...and the difference is no longer zero. Similarly if the phase shifts the other way, the upper gets shorter and the lower gets longer, giving a difference in the other direction.

See http://www.vintage-radio.com/rts5556.htm for a circuit with some polarities labeled. Refer to figure 5a for my description in the previous paragraph. The coil feeding the center tap is coupled tightly to the primary, and the tuned secondary is coupled more loosely, to get the phase shifts.

It seems like almost all the IC detectors use a quadrature method...OK, probably not all, but an awful lot of them do. They are very common and inexpensive.

If you're willing to not build totally from scratch but modify an existing circuit, you can often pick up pager receiver modules for a very low price. That's much of an FM receiver right there...and a pretty capable one at that.

Cheers,
Tom

AJ wrote:
>
> Hi,
>
> I am interested in doing an ultra low power 'walkie talkie' type
> circuit cell using basic principles for fun and to improve my
> understanding of the basics. However, in my research, I generally see FM
> transmitters and AM crystal receivers, very rarely AM transmitters or FM
> receivers. I would like to find more of the AM transmitters (voice) and
> FM receivers.
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> how it works exactly . I have seen several different versions of the
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> would be transmitting to a crystal receiver) AM transmitter.
>
> I know that they will give less than ideal performance, but I am
> more interested in the circuit concepts and playing with them a bit than
> how great they work.
>
> Any help would be appreciated.
>
> aj

4935. Re: HOW To Make: Notch, High Pass, Low Pass, etc Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-16 00:00:00 UTC
From: Tom Bruhns <tom_bruhns@agilent.com>
Message-ID: <385931C3.BAE30CCC@agilent.com>
Source record: 64853

I'm not aware of a web site that really covers the subject you want in enough detail to do you any good. There are lots of filter design books, though, ranging from very theoretical to very practical. At VHF and UHF, depending on the bandwidth you want, lumped components may be appropriate, or you may need to consider helical or coaxial or cavity resonators. If you're making a lot of them, you can consider other technologies like surface acoustic wave, too--but of course those aren't very practical for one-off homebrewing.

You might find some web info on helical resonators...but please be aware that people fill whole books just with practical info about helical resonators and how to build filters from them. If you're interested in books, let us know...I can come up with at least a couple recommendations for decent practical ones. The ones I'm thinking of do assume familiarity with RF circuits (for RF filters) and some math background. One includes algorithms that are easy to implement on a calculator or spreadsheet.

Cheers,
Tom

rahershey@juno.com wrote:
>
> I would like to build these filters, notch, high pass, low pass, band
> pass and
> band stop filters. The problem is figuring out the values of the
> components
> to the frequency's I want. These will be used for VHF & UHF frequency's
> receive ONLY.
>
> Are there any programs that can do this or a simple way of figuring out
> these
> values. Are there any WEB sites that have some schematics on building
> these filters.
>
> Thanks In Advance
> Rich
> --
> Why pay more to get Web access?
> Try Juno for FREE -- then it's just $9.95/month if you act NOW!
> Get your free software today: http://dl.www.juno.com/dynoget/tagj.

4936. Re: selsyns, synchros, resolvers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-16 00:00:00 UTC
From: Bob Weiss <bweiss@carroll.com>
Message-ID: <38593B43.4B3B364A@carroll.com>
Source record: 64854

There are complete resolver/digital converters available, but they are pretty expensive. Analog Devices, CSI, DDC, and Burr-Brown all make them. I found a few CSI units surplus a few years ago. Synchros are very nice devices, but they can be somewhat difficult to use on a hobbyist level. You may want to consider replacing them with optical encoders for a direct digital interface , or precision pots and A/D converters.

Bob Weiss N2IXK

Angel Vilaseca wrote:

> Hi, all
>
> I just was given an old dish from a meteo radar. The az-el mount uses
> synchros as a position control. I want to track satellites from my PC.
> Is there a way to digitize the output from a selsyn, (or synchro,
> resolver) and to feed it to a computer?
>
> tnx de Angel Vilaseca HB9SLV
> Geneva, Switzerland

4937. Re: Speaking of TEK, why the 5000?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-16 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <385945AB.CE9438BF@eznec.com>
Source record: 64855

The 5000 series was particularly popular with educational institutions, and for two primary reasons. One was the price, which was considerably lower than the expensive 7000 series. The other was the interchangeability of plug-ins. One mainframe could be used as anything from a spectrum analyzer to a logic analyzer, in addition to a wide variety of scope configurations. And all this without having to physically move mainframes around.

An interesting side note -- either the first or second real-time sampling scope Tek produced was in the 5000 series. I was in the 5000 series design group for several years and designed some major portions of that scope.

Roy Lewallen, W7EL

John Miles wrote:
>
> JW wrote:
> >
> > Speaking of TEK scopes, why did TEK produce the 5000 series of scopes
> > with their limited bandwidth? I have a quite ancient 545a, still a rock
> > solid trigger, but 35Mhz bandwidth. I recognize that bandwidth isn't
> > the only figure of merit, but am all ears. Was it to meet a specific
> > OEM demand in the late 60's, early 70's since the units seem to have a
> > very comprehensive range of plugins.
>
> FWIW, I'm told these units were aimed largely at the biomedical field.
> You tend to see a lot of high-sensitivity, low-bandwidth plugins in that
> series, compared to the 7000 line.
>
> -- jm
>
> --
> http://www.qsl.net/ke5fx
> Note: My E-mail address has been altered to avoid spam
> --

4938. Re: selsyns, synchros, resolvers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-16 00:00:00 UTC
From: Tom Bruhns <tom_bruhns@agilent.com>
Message-ID: <385949FE.CCD9089@agilent.com>
Source record: 64856

Yes...resolvers normally just have a pair of outputs, if you excite the rotor winding. The amplitude of one is |A*k*sin(theta)|, and the other is |A*k*cos(theta)|, where A is the input amplitude, k is a proportionality constant, and theta is the shaft rotation angle. You can precision-rectify the outputs, convert them to digital, and then compute theta as the arctangent of the ratio of the two values. That doesn't resolve the quadrant. For that, use a synchronous rectifier AKA double-balanced mixer to preserve the signs of the sine and cosine terms, and resolve quadrant with that. The DBM LO input comes from the excitation, and it's handy to provide a phase tweak if you want good accuracy.

Similarly, a synchro has three stator windings which will deliver three phases, 120 degrees apart from each other, and you can do the same sort of thing with them. Each outputs an amplitude which is proportional to the sine of (the rotational angle plus a constant), given constant excitation of the rotor winding. If you ratio the outputs, you can avoid having to know the excitation amplitude and proportionality constant.

I expect the proportionality constants to be quite accurately the same for all the windings of a given unit. You will want to excite with a sinewave of the rated amplitude and frequency for best accuracy, though you can probably get by with lower frequency if you proportionally lower the excitation amplitude.

Having recently done something akin to this with a PIC microcontroller, I can imagine making a little unit with just a PIC (one with ADC built in) which would "talk" to the computer via RS-232 and tell it the angle. The PIC can effectively do the synchronous rectifier in software. About all it might need is input scaling to match the ADC range. It could probably even generate the excitation, to feed to a little IC power amplifier chip, if excitation was a problem. PICs aren't real fast computing things like multi-word-precision sines and cosines and arctangents, but that part of it you shouldn't need more than once a second anyway, if that often.

Cheers,
Tom

Angel Vilaseca wrote:
>
> Hi, all
>
> I just was given an old dish from a meteo radar. The az-el mount uses
> synchros as a position control. I want to track satellites from my PC.

> Is there a way to digitize the output from a selsyn, (or synchro,
> resolver) and to feed it to a computer?
>
> tnx de Angel Vilaseca HB9SLV
> Geneva, Switzerland

4939. wtb 0-300 mA meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-16 00:00:00 UTC
From: stevem <wb9tow@egr.msu.edu>
Message-ID: <38594E31.5BD16732@egr.msu.edu>
Source record: 64857

Looking for a round Weston model 301 , 0-300 mA meter...
will consider other brand round meter tho..
73 steve
w8tow

4940. Re: Want schematic 10 mtr linear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-16 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <38583a36.346065379@news.online.no>
Source record: 64858

On Thu, 16 Dec 1999 00:37:08 GMT, "Super Sport" <rerickso@eidnet.org>
wrote:

>
>J M Noeding <LA8AK@online.no> wrote in message
>news:3856ac7b.244231208@news.online.no...
>> On Tue, 14 Dec 1999 20:07:19 GMT, "Super Sport" <rerickso@eidnet.org>
>> wrote:
>>
>> >I'm looking for a schematic for a mobile solid state 10
>> >meter linear that can give me at least 100 watts out.
>> > rerickso@eidnet.org
>> >
>> >
>> and your callsign? hr is VE6GTE what you got ?
>>
>
>
if you are blind, GUESS!

4941. 1.5 million WATT HF tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-16 00:00:00 UTC
From: "john williams (remove X to reply)" <Xac6ts@n2.net>
Message-ID: <38596495.131B53E3@n2.net>
Source record: 64859

Take a look at this 175lb. 1,500,000 watt transmitter tube! Go to link
at bottom of 1st page. No need to wait for images to load, just scroll
down to LINK and click.
--
--
PAGE AT-> http://www.angelfire.com/ca2/home4biz/index.html

---/---
---/---
----/----
-----/-----

AC6TS John Williams
LAT. 33.06.15 LON. -117.03.36 7.030Mhz CW
DM13KC 14.030Mhz CW

4942. Re: Want schematic 10 mtr linear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-16 00:00:00 UTC
From: "Al, N2NKB"
Message-ID: <83bp23rsl1@bgtnsc03.worldnet.att.net>
Source record: 64860

J M Noeding wrote in message <3856ac7b.244231208@news.online.no>...
>On Tue, 14 Dec 1999 20:07:19 GMT, "Super Sport" <rerickso@eidnet.org>
>wrote:
>
>>I'm looking for a schematic for a mobile solid state 10
>>meter linear that can give me at least 100 watts out.
>> rerickso@eidnet.org
>>
>>
>and your callsign?
>
My guess is that anyone who can successfully build a 100 watt amplifier from
a schematic
could easily earn a legitimate amateur radio licensee.
Al

4943. wtb: plans for simplex repeater

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-16 00:00:00 UTC
From: dn307@FreeNet.Carleton.CA
Message-ID: <83bpnlspo1@freenet9.carleton.ca>
Source record: 64861

looking for plans to build my own simplex repeater, only looking for something basic, my experience in electronic building is limited but i am getting better each day !

thank you !

note: if someone has one for sale... let me know

4944. Re: Want schematic 10 mtr linear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-16 00:00:00 UTC
From: goldreged@aol.comJUNKBLOK
Message-ID: <19991216185703.24210.00001925@ng-fc1.aol.com>
Source record: 64862

<<and your callsign? >>

THe callsign was posted w/ the origional !!!
DId ya chack out:
http://www.rfparts.com
for the manual I told ya?
Ed G.
KB1DQX
(Please Remove "JUNKBLOK" to E-mail.
Unless it's a Flame.)

4945. power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-16 00:00:00 UTC
From: Clara Harris <chocolatechip@dvnc.net>
Message-ID: <s5j99hrkqrs132@corp.supernews.com>
Source record: 64863
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.cb,rec.radio.swap

Looking for 75 amp duracom power supply>>>>>>>>>>>Jim

4946. Re: power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-16 00:00:00 UTC
From: "George T. Baker" <w5yr@worldnet.att.net>
Message-ID: <3859C379.5B0F1F4@worldnet.att.net>
Source record: 64864
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.cb,rec.radio.swap

What is and who makes the "Duracom" power supply? I see references to
them but I have never seen an ad or any specs on the make. I have also
seen it referred to as a "Duracomm."

Thanks.

72/73, George
Fairview, TX 30 mi NE Dallas in Collin county
Amateur Radio W5YR, in the 54th year and it just keeps getting better!
R/C since 1964 - AMA 98452 RVing since 1972

Clara Harris wrote:
>
> Looking for 75 amp duracom power supply>>>>>>>>>>>Jim

4947. Re: power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-16 00:00:00 UTC
From: James Parsons <k5rov@earthlink.net>
Message-ID: <3859C862.ACBAFE38@earthlink.net>
Source record: 64865
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.cb,rec.radio.swap

Duracomm power supplies are (or was) sold by:

Duracomm Corp.
2119 Atlantic
North Kansas City, MO 64116

The Company is/was owned by John Fuhrman. I believe he is (or was) a HAM. I have one of his switching 22 amp power supplies and it has worked great for me for a number of years and is still in use. When I first got it, it had a lot of noise which I could hear in my receiver. I wrote John about it and he had me send it to him. He totally cleaned it up, and sent it back to me at no cost to me. He is a great guy, and his power supply has never failed me. Oh, the little switching power supply that TenTec used to sell for the Scout was a Duracomm, so I have been told.

I don't know if he is still in business. I have not heard from him in a number of years.

James (Jim) Parsons, K5ROV USAF, Ret. Ham for 58 yrs.
k5rov@earthlink.net QCWA, NWQRP, Fists, ARRL
EX: W1RLA, K5FBB, K4FEO, SV0WN (CRETE), SV0WN (RHODES),
DL4NC, DL4JP, KA2FC (JAPAN), KA2JP (JAPAN).
JOHN 3:16

"George T. Baker" wrote:
>
> What is and who makes the "Duracom" power supply? I see references to
> them but I have never seen an ad or any specs on the make. I have also
> seen it referred to as a "Duracomm."
>
> Thanks.
>
> 72/73, George
> Fairview, TX 30 mi NE Dallas in Collin county
> Amateur Radio W5YR, in the 54th year and it just keeps getting better!
> R/C since 1964 - AMA 98452 RVing since 1972
>
> Clara Harris wrote:
> >
> > Looking for 75 amp duracom power supply>>>>>>>>>>>Jim

--

4948. Filter/Ground question with HT

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-17 00:00:00 UTC
From: tmelcon@mit.edu
Message-ID: <3859c03c$0$22859@senator-bedfellow.mit.edu>
Source record: 64866

I have recently been attempting to build filters for an HT, and I have been less than successful. I've been using lumped components, for the simple reason that that is what I know how to design.

I shall describe the simplest design I tried which demonstrates behavior I cannot understand. I am using BNC connectors on the radio and antenna; I insert whatever I'm testing between the radio and the antenna in an aluminum box with two panel-mount BNC jacks on the ends.

When I connect the signal pin from the antenna to the ground via a wire, and connect it to the signal pin on the radio via a 100 ohm resistor, very modest attenuation is achieved (don't recall exact amount). I would expect this to eliminate all signals altogether, and I am confused. When the 100 Ohm connection to the signal pin on the radio is removed, there is no signal.

This seems to me to indicate that the BNC ground on an HT antenna connection (I'm using an ICOM W32, in case it matters) serves only as a shield and does not in fact serve as an electrical ground. Is this the case, or am I missing something? I would appreciate any insight you could provide.

-Terran

4949. Re: Speaking of TEK, why the 5000?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-17 00:00:00 UTC
From: blackm00@cam.org
Message-ID: <blackm00-1712990030170001@dialup-532.hip.cam.org>
Source record: 64867

> John Miles wrote:
> >
> > JW wrote:
> > >
> > > Speaking of TEK scopes, why did TEK produce the 5000 series of scopes
> > > with their limited bandwidth? I have a quite ancient 545a, still a rock
> > > solid trigger, but 35Mhz bandwidth. I recognize that bandwidth isn't
> > > the only figure of merit, but am all ears. Was it to meet a specific
> > > OEM demand in the late 60's, early 70's since the units seem to have a
> > > very comprehensive range of plugins.
> >
> > FWIW, I'm told these units were aimed largely at the biomedical field.
> > You tend to see a lot of high-sensitivity, low-bandwidth plugins in that
> > series, compared to the 7000 line.
> >
> > -- jm

Is there a typo here? The manual that came with my 545A has a copyright of 1959. That makes it as old as I am. It does not seem like 30MHz is too shabby for 1959. Considering that many at the time would have been happy to have an oscilliscope, and if they got one it would be AC coupled and bandwidth in the KHz range, 30MHz seems downright great.

As for the biomedical field, I got mine a few years ago when someone found it being thrown out at a hospital. He didn't want it, so I got it. It was nice and complete, with two two or three plug-ins, a manual for the scope, and a manual one of the plug-ins.

I saw another Tektronix scope in an alley a few months ago. I recognized it as such, but didn't get close to completely identify it. They are not the sort of thing that you haul home without transport, especially if you've already got one at home.

Michael VE2BVW

4950. Re: Armstrong FM modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-17 00:00:00 UTC
From: Vincent <vincent.habchi@art.alcatel.fr>
Message-ID: <3859F864.F8B6BEB6@art.alcatel.fr>
Source record: 64868

py1ll@my-deja.com dixit :

> See details at http://www.comms.eee.strath.ac.uk/~ike/ug/325/slides.htm
> by clicking on 'PM and FM generators'. You will get a .pdf explanation.

Thanks a lot ! That was a lot helpful.

Vincent

--
Vulnerant omnes, necat ultima.
La sï¿½mantique gï¿½nï¿½rale en Europe : http://www.esgs.org

4951. Qusetion about TEK 7000, was: Speaking of TEK, why the 5000?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-17 00:00:00 UTC
From: "Dr. Rainer Meergans" <dr.r.meergans@bigfoot.de>
Message-ID: <945424703.1815144055@saturn.heiden.de>
Source record: 64869

Nowadays you can buy a (used) TEK7000 here in Germany for about 900 $
(Mainframe and 2 x 7A26, 1 7B70 AND 1 7B85) resulting in 200 MHz Bandwith.

Is it a good buy, compared to portable Scopes like TEK2246 A or 2235, wich seem
to be not so old and cost about 700-800 $? I would mainly use it for
HF/VHF/UHF use, no digital circuits.

73, Rainer

4952. Swap high end 35mm camera gear for HF rig.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-17 00:00:00 UTC
From: John <john@mm1dsp.freeserve.co.uk>
Message-ID: <83d7s5$8jb$3@newsg3.svr.pol.co.uk>
Source record: 64870

Hello Everyone,

Due to a lack of interest in photography these days, I would like
to swap the following quality kit for a HF rig, plus cash either way.

Canon EOS-5 Body fitted with the following,
Canon EF 28-105mm f3.5-f4.5 latest USM lens + EW-63 hood.
Canon vertical grip VG-10.
Canon remote switch 60-T3.

All the above kit is boxed and in mint, showroom condition
and has had less than 10 films through it!!!
It cost me close on £1000 last year, now it's worth between
£450-£500 on the second hand market at the moment.

Please reply direct to the address below.
All the very best.

john@mm1dsp.freeserve.co.uk

4953. WTB Kenwood 8830KHz 2.7KHz Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-17 00:00:00 UTC
From: ss <ssluz@worldnet.att.net>
Message-ID: <385A2D59.D6AAA673@worldnet.att.net>
Source record: 64871

I'm looking for the wide 2.7KHz ssb filter that comes stock in many Kenwood radios such as the TS-820/830/430/440/450/690/930/940.

The IF freq is 8830KHz. The exact size or pinout doesn't matter since this is going in a homebrew project.

Thanks;

Steve

4954. Re: Broadband VHF frequency doubler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-17 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <83dge4oeb1@nnrp1.deja.com>
Source record: 64872

In article <01906254.c564dbcb@usw-ex0102-013.remarq.com>,
Raw Power Radio <rawpowerradioNOraSPAM@go.com.invalid> wrote:
> While experimenting in my lab, I built a very stable (1kHz of drift)
> VCO that spans 43MHz to 55Mhz. Redesigning it for 88-108 resulted in a
> range of only 90-107MHz and degraded stability. Naturally, it occurs
to
> me that doubling the output of the stable 43-55MHz VCO could be a
> useful approach for a simple 3-meter exciter. Any recommendations for
a
> good doubler circuit, preferably of the "no-tune" variety and without
> excessive insertion loss? I have seen some application circuits for
> doublers using the LM/MC1496 balanced modulator, but I am skeptical of
> the capability of this device at FM broadcast frequencies. (The
> operating range is vaguely stated as "up to" 100MHz in the
datasheets).
> I am also aware of the practice of feeding one signal to both inputs
of
> a four-quadrant multiplier, but these devices are costly and the ones
> with which I'm familiar are not usable at hundreds of MHz.
>
> * Sent from RemarQ http://www.remarq.com The Internet's Discussion
Network *
> The fastest and easiest way to search and participate in Usenet -
Free!
>
>

Another approach is to build a good VCO for 88-108MHz, divide its signal
by 2 and phase compare it with the original one. The stability will be 2
times poorer than the original one but the noise will be strongly
dependent on the VCO design, components quality (I'd suggest a
plastic J-FET like J-308, 309 or 310) and loop bandpass. Normally it is
difficult to improve the low frequencies noise.
If you cannot phase compare on those frequencies, you may divide both
VCO's frequencies before the phase detector.
--
Greetings,

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Before you buy.

4955. Simple interface for programing HT YAESU FT-50R

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-17 00:00:00 UTC
From: Luis Antonio Albergaria Pacheco <luis.a.albergaria@telecom.pt>
Message-ID: <83darjlij1@pthp35.telecom.pt>
Source record: 64873

Hello,

I would like to build a simple hardware interface for programing the FT-50R
ht. Can anyone help?

Thank you

Luis, CU2IJ

4956. Re: Speaking of TEK, why the 5000?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-17 00:00:00 UTC
From: Jack Taylor <n7oo@theriver.com>
Message-ID: <kQt64.107426$7I4.2759200@news5.giganews.com>
Source record: 64874

Many applications don't require a high bandwidth, thus there is a need for a more economical scope main frame series. One boatanchor scope that's showing up is the HP-140/141 series. These guys will accept a WIDE variety of specialized 1400 series plug-ins such as swept frequency, TDR, the 8552/8553 spectrum analyzer, as well as the standard 20 MHz dual trace ones. While not as light weight as the current crop of solid state 20 MHz scopes, it's certainly a lot smaller and much less heavy as the old Tek 545 :-)

73 de Jack

JW wrote in message <3858710B.AA71F33B@home.com>...
>Speaking of TEK scopes, why did TEK produce the 5000 series of scopes
>with their limited bandwidth? I have a quite ancient 545a, still a rock
>solid trigger, but 35Mhz bandwidth. I recognize that bandwidth isn't
>the only figure of merit, but am all ears. Was it to meet a specific
>OEM demand in the late 60's, early 70's since the units seem to have a
>very comprehensive range of plugins.
>

4957. antenna tubing sourse?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-17 00:00:00 UTC
From: Chuck Calloway <clc@conninc.com>
Message-ID: <83do7q0818@enews2.newsguy.com>
Source record: 64875

Im looking for a sourse of light weight aluminum tubing for maiking antennas,Ive tried old TV elements but there not tubing just folded aluminum that cant be adjusted.
Ive tried department stores & outlets with no luck.Out here were I live there are no hobby supply stores. Thanks Chuck

4958. Re: Repeater stuff

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-17 00:00:00 UTC
From: William Ricker <wdr@world.std.com>
Message-ID: <FMwEBD.3qM@world.std.com>
Source record: 64876

Karl WA7YCP asks:
> Anyone know of a site (other than this group) that talks about
> repeater building and stuff?

I don't know of any other Usenet groups, but there's websites on the topic. From my bookmark list,

http://www.cdi2.com/build_it/
http://www.seits.org/repeater/repeater.htm
http://www.seits.org/duplexer/duplexer.htm
http://www.shol.com/kuggie/ttid.htm
http://www.mindspring.com/~otterson
http://www.nhrc.net/
http://www.nhrc.net/mastr2/index.html
http://www.wa8dbw.ifip.com/RepeaterStuff.html
http://www.wa8dbw.ifip.com/BCD.html
http://www.wa8dbw.ifip.com/Hardware.html
http://www.wa8dbw.ifip.com/RBI-1.html
http://www.dheco.com/
http://www.dheco.com/voter.htm
http://www.dheco.com/rbi1.htm
http://www.link-comm.com/

--
Bill Ricker N1VUX wdr@world.std.com "The freedom of the press belongs
http://world.std.com/~wdr/ to those who own one."--A.J.Liebling

4959. Re: antenna tubing sourse?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-17 00:00:00 UTC
From: Bob <bob-baldwin@tamu.edu>
Message-ID: <385A9039.CCEE38F0@tamu.edu>
Source record: 64877

Chuck Calloway wrote:

> Im looking for a sourse of light weight aluminum tubing for maiking
> antennas,Ive tried old TV elements but there not tubing just folded
> aluminum that cant be adjusted.
> Ive tried department stores & outlets with no luck.Out here were I live
> there are no hobby supply stores. Thanks Chuck

Chuck,
Try Aircraft Spruce & Specialty Company. Their phone is 1+800 824-1930, and
the mailing address is:
Box 424
Fullerton, CA 92632

73,
Bob WA5JOT PP-ASEL
bob-baldwin@tamu.edu

4960. Re: Home Ethernet?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-17 00:00:00 UTC
From: "David M. Brodbeck" <dmbrodbe@mtu.edu>
Message-ID: <83e67qige3@campus3.mtu.edu>
Source record: 64878

Christian Diego Guevara <guevara@theriver.com> wrote:
> I would say that your best bet is to use Shielded Twisted Pair (STP)
> cable. It is the same as Cat5 cable but it's got a metal shield around
> the conductors. It's a little harder to work with than UTP but it
> operates at 10BaseT and 100BaseT.

--> <grin> At work we called this "crispy cable" because of the noise it makes when bent.

David Brodbeck, N8SRE dmbrodbe@mtu.edu
finger gull@cyberspace.org for my public key block.

"Up here in Michigan, winter tends to encourage people to turn in their bald tires, because in snow it quickly becomes obvious bald tires are no good at anything but using your car's headlights to remove door handles from parked cars." -- Marcus Watts

4961. Re: Broadband VHF frequency doubler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-17 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <385aa126.503513103@news.online.no>
Source record: 64879

> While experimenting in my lab, I built a very stable (1kHz of drift)
> VCO that spans 43MHz to 55Mhz. Redesigning it for 88-108 resulted in a
> range of only 90-107MHz and degraded stability. Naturally, it occurs to
> me that doubling the output of the stable 43-55MHz VCO could be a
> useful approach for a simple 3-meter exciter. Any recommendations for a
> good doubler circuit, preferably of the "no-tune" variety and without
> excessive insertion loss? I have seen some application circuits for
> doublers using the LM/MC1496 balanced modulator, but I am skeptical of
> the capability of this device at FM broadcast frequencies.

I made some experiments with doublers in this frequency range using
2x1N4148, need some positive bias, but easy to make

LA8AK

4962. Re: Filter/Ground question with HT

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-17 00:00:00 UTC
From: Dale Parfitt <parinc@bellsouth.net>
Message-ID: <385ABEA5.4EE41ACA@bellsouth.net>
Source record: 64880

Terran Melconian wrote:

> I have recently been attempting to build filters for an HT, and I have
> been less than successful. I've been using lumped components, for the
> simple reason that that is what I know how to design.
>
> I shall describe the simplest design I tried which demonstrates
> behavior I cannot understand. I am using BNC connectors on the radio
> and antenna; I insert whatever I'm testing between the radio and the
> antenna in an aluminum box with two panel-mount BNC jacks on the ends.
>
> When I connect the signal pin from the antenna to the ground via a
> wire, and connect it to the signal pin on the radio via a 100 ohm
> resistor, very modest attenuation is achieved (don't recall exact
> amount). I would expect this to eliminate all signals altogether, and
> I am confused. When the 100 Ohm connection to the signal pin on the
> radio is removed, there is no signal.
>
> This seems to me to indicate that the BNC ground on an HT antenna
> connection (I'm using an ICOM W32, in case it matters) serves only as
> a shield and does not in fact serve as an electrical ground. Is this
> the case, or am I missing something? I would appreciate any insight
> you could provide.
>
> -Terran

Hi Terran,

If I understand your simple circuit correctly, the mistake you are making
is in assuming that a piece of wire from center pin to ground is a short
circuit at RF as it is at DC- not so.
A 1" piece of wire has about 20 Ohms reactance at 2M- far from a short.

Check our WEB site for some near ideal V/U filters. For instance,
Insertion loss at 146 MHz= 0.24 dB, Return loss >25 dB and loss at the
pager freqs (152-153 MHz) > 50 dB. http://www.parelectronics.com

Dale W4OP

4963. Re: antenna tubing sourse?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-17 00:00:00 UTC
From: Dale Parfitt <parinc@bellsouth.net>
Message-ID: <385ABF33.4A06E809@bellsouth.net>
Source record: 64881

Chuck Calloway wrote:

> Im looking for a sourse of light weight aluminum tubing for maiking
> antennas,Ive tried old TV elements but there not tubing just folded
> aluminum that cant be adjusted.
> Ive tried department stores & outlets with no luck.Out here were I live
> there are no hobby supply stores. Thanks Chuck

Hi Chuck,
Texas Towers used to carry aluminum- may still. Remember you are not looking for 2000 or 3000 series- this stuff is dead soft and takes a set easily. You should be looking for 6061T6 alloy. 0.058 wall extruded tube telescopes beautifully with 9 mil clearance.

Dale W4OP

4964. Re: Broadband VHF frequency doubler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-17 00:00:00 UTC
From: Charles Reichert <kd9jq@rsg.org>
Message-ID: <385AD233.BC6553DA@rsg.org>
Source record: 64882

Pages 43 - 45 of the ARRL Solid State Design book covers freq
multipliers.
There's a passive one using a broadband xfmr but you loose LO Power at
2X
but circuit is very simple. Diodes are fed to at least a 2 stage BPF
tuned to 2X. The 1496 would not work well (if at all) that high in
frequency.

Chuck KD9JQ

http://www.mbn.net/kd9jq/hamradio

J M Noeding wrote:
>
> > While experimenting in my lab, I built a very stable (1kHz of drift)
> > VCO that spans 43MHz to 55Mhz. Redesigning it for 88-108 resulted in a
> > range of only 90-107MHz and degraded stability. Naturally, it occurs to
> > me that doubling the output of the stable 43-55MHz VCO could be a
> > useful approach for a simple 3-meter exciter. Any recommendations for a
> > good doubler circuit, preferably of the "no-tune" variety and without
> > excessive insertion loss? I have seen some application circuits for
> > doublers using the LM/MC1496 balanced modulator, but I am skeptical of
> > the capability of this device at FM broadcast frequencies.
>
> I made some experiments with doublers in this frequency range using
> 2x1N4148, need some positive bias, but easy to make
>
> LA8AK

4965. Re: Speaking of TEK, why the 5000?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-17 00:00:00 UTC
From: Jim Adney <jadney@vwtype3.org>
Message-ID: <mqxZOM0CO0ea3g0MnlWASwOHuIMq@4ax.com>
Source record: 64883

JW <jdwalton@home.com> wrote:

>Speaking of TEK scopes, why did TEK produce the 5000 series of scopes
>with their limited bandwidth? I have a quite ancient 545a, still a rock
>solid trigger, but 35Mhz bandwidth. I recognize that bandwidth isn't
>the only figure of merit, but am all ears.

The 5000 series was rather strange in that it was made up of 2
completely different performance families that just looked the same.
There was a 2.5 MHz family and a 60 MHz family. I have a lot of time
on a 2.5 MHz dual beam 5000 that was really very nice. The fact that
you could get a wide variety of plugins, for both the vert amps AND
the time base, made these scopes very nice.

There was also the 560 series with a max bandwidth of 10 MHz that also
had both vert amp and time base plugins.

Of course many of you out there actually NEED 75 MHz, but I'd have to
admit that the vast majority of stuff I have ever looked at came in
under 20 MHz.

Jim
-

Jim Adney jadney@vwtype3.org
Madison,Wisconsin USA

4966. Re: "PC-Radio" WINRADIO?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-17 00:00:00 UTC
From: grasmick@earthlink.net
Message-ID: <385AF53E.D231BFE4@earthlink.net>
Source record: 64884

From what I saw on the winradio web site, it comes with spectrum analyzer software. Unless that in in adequate for you application, looks like your there.

scott

Peter Bolch wrote:

> Hi
>
> I think of buying an external "PC-Radio" like WINRADIO and want to use it
> not only as a receiver but also as a simple spectrum analyzer. In principle
> it should be possible to correct the frequency response and the lineartity
> of the RSSI signal by software.
>
> Does anybody here know whether the control codes sent to the receiver via
> RS232 and the structure of data telegrams sent to the PC are documented? And
> are there lots of birdies and other artefacts with the receiver mentioned?
>
> Peter

--
"All of us, are truly and literally a little bit of stardust."
- William Fowler (1911-1995)

4967. Re: Stinkin, leakin NiCd batteries! (was alkaline)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-17 00:00:00 UTC
From: "David M. Brodbeck" <dmbrodbe@mtu.edu>
Message-ID: <83e641ige2@campus3.mtu.edu>
Source record: 64885

I recently bought a used Kenwood TR-7850 (which I'm still looking for a mounting bracket for, BTW.) This rig uses 4-AA NiCd batteries to maintain the memories. I pulled out four very old Radio Shack NiCds that had all vented, leaving deposits of white crystals around the ends. I tried hard to keep this crud from falling into the radio when I removed them, and I brushed most of it away...should I be concerned about further corrosion?

David Brodbeck, N8SRE dmbrodbe@mtu.edu
finger gull@cyberspace.org for my public key block.

"Up here in Michigan, winter tends to encourage people to turn in their bald tires, because in snow it quickly becomes obvious bald tires are no good at anything but using your car's headlights to remove door handles from parked cars." -- Marcus Watts

4968. Re: Broadband VHF frequency doubler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-17 00:00:00 UTC
From: Raw Power Radio <rawpowerradioNOraSPAM@go.com.invalid>
Message-ID: <2a42f762.6248283e@usw-ex0101-003.remarq.com>
Source record: 64886

Actually, my posting was a little premature. With a little more time
and effort, I DID manage to come up with a good VCO that works directly
at 88-108. Stability is better than I would have dared to hope for from
the simple, uncompensated circuit I used. It's lots better than the
Mini-Circuits POS-150 module that set me back 16 bucks :)
My VCO meanders back and forth about 1.5kHz above and below the nominal
frequency over the course of several hours... certainly good enough for
my application (wideband FM). Of course, this decent drift performance
was observed at a constant temperature.

Still, I'm glad I posted because the responses have been very
educational. I have years of experience in electronics, but I'm fairly
new to RF design.

* Sent from RemarQ http://www.remarq.com The Internet's Discussion Network *
The fastest and easiest way to search and participate in Usenet - Free!

4969. FS: EEV C1111/715C valve

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-18 00:00:00 UTC
From: arnoldg@sf.telia.no
Message-ID: <385bc6c9.421226@news.telia.no>
Source record: 64744
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Hi,

I have one EEV (English Electric Valves) C1111 valve for sale. This is the same as 715C by WE and very close to the 5D21. A very powerful pulse tetrode, but can be used in audio, too. The valve is in its original packing and unused. Very nice and in mint condition. Top quality.
Best offer.

Regards,

Arnold Goks�yr

DEMOSTENES - N6899 Balestrand, Norway
Tlf. +47 5769 1340 Fax +47 5769 1267

Valves, sockets, transformers, books and components
Good stock on all types. We ship worldwide.

4970. Poor Man's Spectrum Analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-18 00:00:00 UTC
From: Raw Power Radio <rawpowerradioNOraSPAM@go.com.invalid>
Message-ID: <109aa7be.0e7d4517@usw-ex0101-003.remarq.com>
Source record: 64745

As described at:
http://www.science-workshop.com/

Anyone bought/used this? Comments?

Thanks.

rawpowerradio at go dot com

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The fastest and easiest way to search and participate in Usenet - Free!

4971. Micas, Micas

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-18 00:00:00 UTC
From: Joe Hargis <joehargis@worldnet.att.net>
Message-ID: <83gjv2mnj1@bgtnsc03.worldnet.att.net>
Source record: 64746

Have .0004 2500wvdc/5000vtest for .25 each
Have .005 same voltages for .50 each(limited supply)

Joe.7hc@juno.com address is better, Tnx WS0E

4972. Connecting sound card to Computer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-18 00:00:00 UTC
From: Rob <NoEmail@NoWay.com>
Message-ID: <rSR64.198955$5r2.502966@tor-nn1.netcom.ca>
Source record: 64747
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

I heard that it is NOT a good idea to connect both channels (Left and Right) of the sound card's line output to the Rig's mic input. It might cause distortion. (On the other hand, I heard it doesn't matter whether the rig's speaker output is connected to both channels of the sound card's line input or mic input).

Is this true? Will there be distortion?

I also heard if you just used a mono plug for the sound card's line output (or speaker output), it will short out one of the channels and may cause distortion. It is best to use a stereo plug and only use one of the channels. Is this good advice?

73's

Rob
VA2FB

4973. Re: Speaking of TEK, why the 5000?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-18 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <385BECD0.F5363666@eznec.com>
Source record: 64748

Tektronix wasn't incorporated until after WWII, in 1946. Their first scope, a 511, was sold in May 1947. The 530 series was introduced in 1954, the 540 series in 1955.

Roy Lewallen, W7EL

(Source: _Winning With People: The First 40 Years of Tektronix_, by Marshall M. Lee, published by Tektronix, 1986)

Greg Werstiuk wrote:
> No typo. The Tek 500 series originated long prior to 1959. I don't
> have it at my fingertips, but as I recall, the 53x series was WWII
> vintage.
>
> Several other vendors produced these under government contract.
> (The only one I remember is LeCroix, now LeCroy. I assume the name
> was changed to not off-put potential customers that didn't know how it
> was pronounced.)
>
> Nice hardware. I owned a 555 (dual beam with separate power supply)
> about 20 years ago. For the price, it was an oustanding instrument.
> Most of us couldn't have personally afforded the current technology of
> that time (even single beam).
>
> It doubled as an excellent forced air heater. Actually used it on
> rare occasions to heat part of our apartment. :)

4974. Re: Connecting sound card to Computer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-18 00:00:00 UTC
From: "D. Stussy" <kd6lvw@bde-arc.ampr.org>
Message-ID: <Pine.LNX.4.10.9912182046590.2810-100000@dns.bde-arc.ampr.org>
Source record: 64749
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

On Sat, 18 Dec 1999, Rob wrote:
> I heard that it is NOT a good idea to connect both channels (Left and Right)
> of the sound card's line output to the Rig's mic input. It might cause
> distortion. (On the other hand, I heard it doesn't matter whether the rig's
> speaker output is connected to both channels of the sound card's line input
> or mic input).
>
> Is this true? Will there be distortion?
>
> I also heard if you just used a mono plug for the sound card's line output
> (or speaker output), it will short out one of the channels and may cause
> distortion. It is best to use a stereo plug and only use one of the
> channels. Is this good advice?

...If someone were smart, the soundcard driver software could be re-written so each audio channel were a different "port" thus creating a dual-port virtual TNC. Of course, there would have to be two PTT circuits, two DSP engines for RX, etc. Then the above situation would be moot.

4975. Re: Connecting sound card to Computer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-18 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.991218132227.19452D-100000@oso.slonet.org>
Source record: 64750
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

Good comments these, but I am still confused. Is the line and microphone inputs USUALLY stereo plugs? I think the mic input is always stereo but does it use the "ring" in any way? I would guess the line input would be mono in most cases. Is this true most of the time? Cliff K7RR

On Sat, 18 Dec 1999, D. Stussy wrote:

> On Sat, 18 Dec 1999, Rob wrote:
> > I heard that it is NOT a good idea to connect both channels (Left and Right)
> > of the sound card's line output to the Rig's mic input. It might cause
> > distortion. (On the other hand, I heard it doesn't matter whether the rig's
> > speaker output is connected to both channels of the sound card's line input
> > or mic input).
> >
> > Is this true? Will there be distortion?
> >
> > I also heard if you just used a mono plug for the sound card's line output
> > (or speaker output), it will short out one of the channels and may cause
> > distortion. It is best to use a stereo plug and only use one of the
> > channels. Is this good advice?
>
> ...If someone were smart, the soundcard driver software could be re-written so
> each audio channel were a different "port" thus creating a dual-port virtual
> TNC. Of course, there would have to be two PTT circuits, two DSP engines for
> RX, etc. Then the above situation would be moot.
>
>
>

4976. WTD Valves and XTALs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-18 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <w45lLIAj+AX4Ewk1@falstaf.demon.co.uk>
Source record: 64751

Dear All,
I am rebuilding a G2DAF SSB TX, a design from the UK which was a common home build in the 60s.

To get this going again I need the following:

6146 RF Tetrode
11.5 MHz xtal
11.75 MHz xtal
1.547 MHz xtal
2.453 MHz xtal

Can anyone help out with these, especially the xtals. I can probably cope with most any case for the XTALs, the 1.547 and 2.453 would be best in quite large holders whilst the 11.5 and 11.75 would be best in smaller ones. The pins on the low frequency ones are 0.75 inch apart whilst the high frequency ones are somewhere around 12mm or 0.5 inch apart.

Regards

Robin

Robin Birch robin@falstaf.demon.co.uk

M1ASU/2E0ARJ/M5ABD Old computers and radios always welcome

4977. Re: Connecting sound card to Computer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-18 00:00:00 UTC
From: "D. Stussy" <kd6lvw@bde-arc.ampr.org>
Message-ID: <Pine.LNX.4.10.9912182306270.3537-100000@dns.bde-arc.ampr.org>
Source record: 64752
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

Depends on the soundcard. Most soundcards now have stereo inputs.

On Sat, 18 Dec 1999, Clifford Buttschardt wrote:
> Good comments these, but I am still confused. Is the line and microphone
> inputs USUALLY stereo plugs? I think the mic input is always stereo but
> does it use the "ring" in any way? I would guess the line input would be
> mono in most cases. Is this true most of the time? Cliff K7RR
>
> On Sat, 18 Dec 1999, D. Stussy wrote:
>
> > On Sat, 18 Dec 1999, Rob wrote:
> > > I heard that it is NOT a good idea to connect both channels (Left and Right)
> > > of the sound card's line output to the Rig's mic input. It might cause
> > > distortion. (On the other hand, I heard it doesn't matter whether the rig's
> > > speaker output is connected to both channels of the sound card's line input
> > > or mic input).
> > >
> > > Is this true? Will there be distortion?
> > >
> > > I also heard if you just used a mono plug for the sound card's line output
> > > (or speaker output), it will short out one of the channels and may cause
> > > distortion. It is best to use a stereo plug and only use one of the
> > > channels. Is this good advice?
> >
> > ...If someone were smart, the soundcard driver software could be re-written so
> > each audio channel were a different "port" thus creating a dual-port virtual
> > TNC. Of course, there would have to be two PTT circuits, two DSP engines for
> > RX, etc. Then the above situation would be moot.

4978. Re: Speaking of TEK, why the 5000?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-18 00:00:00 UTC
From: Jim Adney <jadney@vwtype3.org>
Message-ID: <3xJcOLCLyhXvRU4GvxcAJgjm9Pnm@4ax.com>
Source record: 64753

Greg Werstiuk <greg_werstiuk@email.msn.com> wrote:

>No typo. The Tek 500 series originated long prior to 1959. I don't
>have it at my fingertips, but as I recall, the 53x series was WWII
>vintage.

You're quite right about this, of course, but the original post asked about the 5000 series (see the subject line), not the 500 series. This thread then got diverted before you got to it.

The original question was something like, "Why did Tek introduce the low bandwidth 5000 series long after the nice medium bandwidth 500 series scopes, like the 535 were already on the market."

Jim
-

Jim Adney jadney@vwtype3.org
Madison,Wisconsin USA

4979. Re: Connecting sound card to Computer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-18 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <83hcepprq1@bob.news.rcn.net>
Source record: 64754
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

> I heard that it is NOT a good idea to connect both channels (Left
and Right)
> of the sound card's line output to the Rig's mic input. It might
cause
> distortion.

It is NOT a good idea. When you connect the two outputs together you are shorting the outputs. Whether this causes any distortion depends on the sound card output circuit design and how well balanced the two outputs are. If, for example, you had the mixer balance all the way to one side, the dead side would attempt to short the output of the other. The output impedance *may* be high enough to prevent distortion or damage but you never know how it was designed. It's best not to do it and there's no advantage to it that I can think of. In pro audio a resistor is often inserted into each channel in order to provide a "resistive combiner" circuit to feed a stereo channel into a mono channel. With PSK31 both channels have the same signal so there's no reason to do it.

> (On the other hand, I heard it doesn't matter whether the rig's
> speaker output is connected to both channels of the sound card's
line input
> or mic input).

It doesn't matter because because you are shorting two inputs. The load impedance drops to one-half but it's still plenty high enough not to overload the receiver's output.

> I also heard if you just used a mono plug for the sound card's line
output
> (or speaker output), it will short out one of the channels and may
cause
> distortion. It is best to use a stereo plug and only use one of
the
> channels. Is this good advice?

Good advice! A mono plug will short one output. It may not cause distortion in the other channel, but it's never good practice to short an output unless you know for sure that the circuit design can handle it.

4980. Re: Connecting sound card to Computer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-18 00:00:00 UTC
From: Rob <NoEmail@NoWay.com>
Message-ID: <NcX64.198992$5r2.503233@tor-nn1.netcom.ca>
Source record: 64755
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

Bob,

Many thanks for the info.

I understand that it is alright to fed both channels of the sound card line input.

BUT I heard it is a different story for the MIC input. I was told that the mic jack on a sound card is a MONO circuit but uses a STEREO JACK with one channel carrying the audio and the other carrying a DC voltage for the mic. It was suggested that I use a STEREO connector and ONLY use the TIP which carries the audio. (AND DON'T USE the RING which carries the polarizing voltage).

Since HAMS like me sometimes plug cables in the wrong jack (especially if the mic and line input jacks are beside each other), it sounds to me like a good idea to only use one channel carried in the tip (even if you PLAN to connect it to the line input jack where it doesn't matter)

Any thoughts?

Rob

"Bob Lewis" <aa4pb@erols.com> wrote in message
news:83hcepprq1@bob.news.rcn.net...
> > I heard that it is NOT a good idea to connect both channels (Left
> and Right)
> > of the sound card's line output to the Rig's mic input. It might
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> > distortion.
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> are shorting the outputs. Whether this causes any distortion depends
> on the sound card output circuit design and how well balanced the two
> outputs are. If, for example, you had the mixer balance all the way
> to one side, the dead side would attempt to short the output of the
> other. The output impedance *may* be high enough to prevent
> distortion or damage but you never know how it was designed. It's
> best not to do it and there's no advantage to it that I can think of.
> In pro audio a resistor is often inserted into each channel in order
> to provide a "resistive combiner" circuit to feed a stereo channel
> into a mono channel. With PSK31 both channels have the same signal so
> there's no reason to do it.
>
> > (On the other hand, I heard it doesn't matter whether the rig's

> > speaker output is connected to both channels of the sound card's
> line input
> > or mic input).
>
> It doesn't matter because because you are shorting two inputs. The
> load impedance drops to one-half but it's still plenty high enough
> not to overload the receiver's output.
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> > I also heard if you just used a mono plug for the sound card's line
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> > (or speaker output), it will short out one of the channels and may
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> > distortion. It is best to use a stereo plug and only use one of
> the
> > channels. Is this good advice?
>
> Good advice! A mono plug will short one output. It may not cause
> distortion in the other channel, but it's never good practice to
> short an output unless you know for sure that the circuit design can
> handle it.
>
>
>

4981. Wanted 2m, 6m xceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-18 00:00:00 UTC
From: grasmick@earthlink.net
Message-ID: <385C0825.90C36DD@earthlink.net>
Source record: 64756

I'm a newly minted no-code tech. I would like a real inexpensive
first radio. I have built electronic kits before. So if the design is
simple I can etch a pcb board and work from drawings. More complicated
rigs, would be best to go the kit route. Or I would be interested if
there is some decent used equipment. I just want a real cheap rig to
get started, spending hundreds for the new high powered commercial stuff
doesn't interest me.
I would really be interested in a card to plug in a computer. I
found the winradio card, but it costs too much and is only a receiver.
The goal is cheap, cheap, cheap.
Since I only have uhf privileges, the radio has to operate on 2m,
6m, or 220. thanks. Please send me e-mail, since I only check this
group once in a while.

73
Scott (no call sign yet)
--
"There are two ways to live your life.
One is as though nothing is a miracle.
The other is as though everything is a miracle."

- Albert Einstein (1879-1955)

4982. Re: Connecting sound card to Computer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-18 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.991218195211.10381C-100000@oso.slonet.org>
Source record: 64757
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

Which input, mic or line? I can not make any sence out of these
statements that do not define what is being said! Cliff K7RR

Sat, 18 Dec 1999, D. Stussy wrote:

> Depends on the soundcard. Most soundcards now have stereo inputs.
>
> On Sat, 18 Dec 1999, Clifford Buttschardt wrote:
> > Good comments these, but I am still confused. Is the line and microphone
> > inputs USUALLY stereo plugs? I think the mic input is always stereo but
> > does it use the "ring" in any way? I would guess the line input would be
> > mono in most cases. Is this true most of the time? Cliff K7RR
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> > On Sat, 18 Dec 1999, D. Stussy wrote:
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> > > On Sat, 18 Dec 1999, Rob wrote:
> > > > I heard that it is NOT a good idea to connect both channels (Left and Right)
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> > > > distortion. (On the other hand, I heard it doesn't matter whether the rig's
> > > > speaker output is connected to both channels of the sound card's line input
> > > > or mic input).
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> > > > Is this true? Will there be distortion?
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> > > > I also heard if you just used a mono plug for the sound card's line output
> > > > (or speaker output), it will short out one of the channels and may cause
> > > > distortion. It is best to use a stereo plug and only use one of the
> > > > channels. Is this good advice?
> > >
> > > ...If someone were smart, the soundcard driver software could be re-written so
> > > each audio channel were a different "port" thus creating a dual-port virtual
> > > TNC. Of course, there would have to be two PTT circuits, two DSP engines for
> > > RX, etc. Then the above situation would be moot.
>
>
>

4983. Re: Connecting sound card to Computer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-18 00:00:00 UTC
From: Rob <NoEmail@NoWay.com>
Message-ID: <QgZ64.199004$5r2.502636@tor-nn1.netcom.ca>
Source record: 64758
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

Hi Cliff,

Yes, both the mic and line input jacks of a sound card are stereo jacks.

The line input accepts a stereo input and uses the tip and ring for separate channels (e.g. left and right). You can supply a stereo signal to the computer ONLY using the LINE INPUT. In Ham radio applications, we typically only supply a mono audio output from the rig to ONE of the channels. (Even though you could connect to mono signal from the rig to both channels - BUT I do not recommend this approach -- see below)

The mic jack also uses a stereo jack even though the audio input is mono. The audio is on the tip. The ring is used to supply a DC voltage from the sound card to the mic. The DC voltage is used by some computer mics. I checked my computer, the ring supplies 3.5 mV of DC. Not very much but it is there.

IF YOU PLAN TO USE THE MIC INPUT JACK TO RECEIVE THE RIG's AUDIO OUTPUT, DO NOT USE THE RING (since the ring supplies some DC!)

HERE IS THE SAFE APPROACH: Wire the line input jack of the sound card using a stereo jack and ONLY using the tip. DO NOT CONNECT the ring (which is used by the other channel)

Why is this the safe approach?? Well Hams like me can easily plug in the cable to the mic jack by mistake especially considering that the mic jack is beside the line input jack. Using this approach to wiring the jack, you can safely connect your cable from the rig's audio output to EITHER the LINE INPUT or MIC of the sound card.

I think I have it all straight in my mind know. Thanks for all the input.

Does anyone else have any other ideas or comments?

73's

Rob

"Clifford Buttschardt" <cbuttsch@slonet.org> wrote in message news:Pine.GSO.3.95.991218132227.19452D-100000@oso.slonet.org...
> Good comments these, but I am still confused. Is the line and microphone
> inputs USUALLY stereo plugs? I think the mic input is always stereo but
> does it use the "ring" in any way? I would guess the line input would be
> mono in most cases. Is this true most of the time? Cliff K7RR
>
> On Sat, 18 Dec 1999, D. Stussy wrote:
>

> > On Sat, 18 Dec 1999, Rob wrote:
> > > I heard that it is NOT a good idea to connect both channels (Left and Right)
> > > of the sound card's line output to the Rig's mic input. It might cause
> > > distortion. (On the other hand, I heard it doesn't matter whether the rig's
> > > speaker output is connected to both channels of the sound card's line input
> > > or mic input).
> > >
> > > Is this true? Will there be distortion?
> > >
> > > I also heard if you just used a mono plug for the sound card's line output
> > > (or speaker output), it will short out one of the channels and may cause
> > > distortion. It is best to use a stereo plug and only use one of the
> > > channels. Is this good advice?
> >
> > ...If someone were smart, the soundcard driver software could be re-written so
> > each audio channel were a different "port" thus creating a dual-port virtual
> > TNC. Of course, there would have to be two PTT circuits, two DSP engines for
> > RX, etc. Then the above situation would be moot.
> >
> >
> >
>

4984. Got a question can any one help me

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-18 00:00:00 UTC
From: Jason Hopkins <jhopkins@csinet.net>
Message-ID: <01bf49d3$7a6f39e0$9f7317d0@jason-hopkins>
Source record: 64759

Just got a eprom burner from my dad. Its a old one ,but its a new toy to learn and play w/.

I was wanting to know is if there are any projects u guys can suggest that use eprom? So, I can play w/ it and learn how to use it..

Jason Hopkins

4985. Re: homebrew FM demod...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-18 00:00:00 UTC
From: AJ <alaje@sympatico.ca>
Message-ID: <385B01A6.7CC07BB0@sympatico.ca>
Source record: 64887

Thanks for the info...

Actually, that web site was one of the places I had looked for info already.. very cool to hear from the author :)

I would like to stay away from the IC solution at the moment so I can play with the parts etc to see the effect of everything. I'm trying to do a 'crystal set' for both AM and FM so I can have a low power receiver for both BCB (AM and FM).

Would you know why FM demod isn't normally done with an allpass network? It seems to me it would be easier to tune and easier to integrate... eg: 'most' IC solutions have an external quadrature circuit and a phase detector.. but why not use an allpass with a designed 90 degree phase shift at the centre frequency?

For older radios, would an allpass not have been easier to tune than the Foster Seeley or ratio detector circuits? The transformers look rather complex and lossy.. and they must have been a pain to keep tuned...

Any further comments?

aj

4986. Re: Speaking of TEK, why the 5000?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-18 00:00:00 UTC
From: Greg Werstiuk <greg_werstiuk@email.msn.com>
Message-ID: <JmVbOJoLP5cAgEL2oXoFe=swFDFf@4ax.com>
Source record: 64888

No typo. The Tek 500 series originated long prior to 1959. I don't have it at my fingertips, but as I recall, the 53x series was WWII vintage.

Several other vendors produced these under government contract. (The only one I remember is LeCroix, now LeCroy. I assume the name was changed to not off-put potential customers that didn't know how it was pronounced.)

Nice hardware. I owned a 555 (dual beam with separate power supply) about 20 years ago. For the price, it was an oustanding instrument. Most of us couldn't have personally afforded the current technology of that time (even single beam).

It doubled as an excellent forced air heater. Actually used it on rare occasions to heat part of our apartment. :)

On Fri, 17 Dec 1999 00:30:16 -0500, blackm00@cam.org (Michael Black) wrote:

>> Michael Black wrote:

>Is there a typo here? The manual that came with my 545A has a copyright
>of 1959. That makes it as old as I am. It does not seem like 30MHz
>is too shabby for 1959. Considering that many at the time would have
>been happy to have an oscilliscope, and if they got one it would
>be AC coupled and bandwidth in the KHz range, 30MHz seems downright
>great.
> ....

4987. FA on Ebay: Knight R-100A Shortwave Receiver In Excellent Condition

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-18 00:00:00 UTC
From: alg460@aol.com
Message-ID: <19991218082326.07829.00000224@ng-bj1.aol.com>
Source record: 64889

Knight R-100A Shortwave Receiver In Excellent Condition

For description and pictures see:

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=221894965

Tony

4988. FS amp builder parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-18 00:00:00 UTC
From: Matt Erickson <kk5dr@hotmail.com>
Message-ID: <385B99F8.5ADA4341@hotmail.com>
Source record: 64890

Filament transformer 7.5vac @ 21A. Great for;3-1000Z,
4-1000A,3CX1200A7, etc. $40 shipped

Kilovac KM-14 vac relay DPDT, 12 kv @ 10A. 12vdc coil, NIB. $100
shipped.

4989. WTB vac vari cap

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-18 00:00:00 UTC
From: Matt Erickson <kk5dr@hotmail.com>
Message-ID: <385B9A34.D4F01D5C@hotmail.com>
Source record: 64891

I need a 1500-2000pf @ 3kv or better cap.
"Lead screw type drive"

4990. !New Amateur Radio Website!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-18 00:00:00 UTC
From: compcnsult@aol.com
Message-ID: <19991218104301.22628.00000234@ng-fg1.aol.com>
Source record: 64892

New Amateur Radio Website!

Visit an online virtual Hamfest:

http://www.ehamfest.com

Open 24 Hrs a day, 365 Days a year!

4991. UK component suppliers ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-18 00:00:00 UTC
From: phil <phil@invest.fsbusiness.co.uk>
Message-ID: <mehnVFAvL7W4Ew8J@invest.fsbusiness.co.uk>
Source record: 64893

Can anyone on the ng suggest a UK based supplier of Amidon or similar ferrite cores?

Alternatively any other supplier that is willing to ship Internationally at competitive rates?

Similarly, are there any UK based component suppliers where one can select parts via a shopping basket on-line?

Many thanks.

Phil G4ZOW

4992. WTB 4CX350a

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-19 00:00:00 UTC
From: "Randall D. DuCharme" <randyd@tcainternet.com>
Message-ID: <385C93DE.B6FA2F40@tcainternet.com>
Source record: 64760

Greetings,

Looking for a pair of good pulls. Does anyone have some they'd like to
part with?

Thanks.

--
Randall D DuCharme

Proud to be 100% Microsoft Free!
Please remove "NO-SPAM" from my email address to reply.

4993. Need help building an ELECTRET mic for PC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-19 00:00:00 UTC
From: Gene <genes@texas.net>
Message-ID: <83j55netd1@nnrp1.deja.com>
Source record: 64761
Cross-posted to: rec.radio.amateur.homebrew,rec.audio.pro,rec.audio.tech

I want to see if I can use the +5v from my sound card's MIC IN to power a tiny ELECTRET MICROPHONE element. (I have not purchased the mic element as of now.)

I need a wiring diagram to connect the following items:
- a 1/8" male PC stereo jack (Radio Shack Cat. No. 274-284C) which has Ground and two connectors for a total of three wires total that attach to it. When this 1/8" stereo plug is plugged into the Soundblaster AWE64's MIC (RED) connector, the readings that I get are as follows:

with the BLACK(-) lead from my digital volt meter connected to the plug's GROUND and the RED(+) lead attached to the connector on the 1/8" plug that is the "TIP" of the plug and the center-most solder connection
on the back of the 1/8" plug, I get a reading of 0.0 mV.

with the BLACK(-) lead from my digital volt meter connected to the plug's GROUND and the RED(+) lead attached to the connector on the 1/8" plug that is the connector in the middle of the 1/8" plug - and the OUTSIDE solder connection on the back of the 1/8" plug, I get a reading of + 5.06 Volts (not mV).

I want to wire from the 1/8" plugs 3 wires (GROUND, +5.06V (DC - I assume?) and what I think must be the SIGNAL line ?)
to the RED & the GREEN wires on a "to be determined" ELECTRET MICROPHONE ELEMENT.

My goal is to build s QUALITY "POWERED" microphone for my PC that has a LOT of volume & sounds a lot better than the junky PC mics that I have tried.

As far as the metal housing, spit guard, etc. - I can handle that ... ;-)

THANKS in advance.

You may reach me at:
Gene genes@texas.net - leave a post here.

Have a safe & happy holidays.

--

Gene : genes@texas.net

Sent via Deja.com http://www.deja.com/
Before you buy.

4994. Re: Need help building an ELECTRET mic for PC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-19 00:00:00 UTC
From: Gene <genes@texas.net>
Message-ID: <83j5l2$f8i$1@nnrp1.deja.com>
Source record: 64762
Cross-posted to: rec.radio.amateur.homebrew,rec.audio.pro,rec.audio.tech

BTW: Here's a couple of links to ELECTRET MICROPHONE ELEMENTS, etc...
****
http://www.digikey.com/scripts/US/DKSUS.dll?Criteria?
Ref=78638&Cat=13435282

http://www.allelectronics.com/cgi-local/SoftCart.exe/online-
store/scstore/c-Electret_Microphones.html?L+scstore+rdig5125+953228712
****

In article <83j55netd1@nnrp1.deja.com>,
Gene <genes@texas.net> wrote:
> I want to see if I can use the +5v from my sound card's MIC IN to
power
> a tiny ELECTRET MICROPHONE element. (I have not purchased the mic
> element as of now.)
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> I need a wiring diagram to connect the following items:
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> with the BLACK(-) lead from my digital volt meter connected to the
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> plug that is the "TIP" of the plug and the center-most solder
> connection
> on the back of the 1/8" plug, I get a reading of 0.0 mV.
>
> with the BLACK(-) lead from my digital volt meter connected to the
> plug's GROUND and the RED(+) lead attached to the connector on the
1/8"
> plug that is the connector in the middle of the 1/8" plug - and the
> OUTSIDE solder connection on the back of the 1/8" plug, I get a
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> of + 5.06 Volts (not mV).
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> I want to wire from the 1/8" plugs 3 wires (GROUND, +5.06V (DC - I
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> to the RED & the GREEN wires on a "to be determined" ELECTRET
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>
> My goal is to build s QUALITY "POWERED" microphone for my PC that has
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> LOT of volume & sounds a lot better than the junky PC mics that I have
> tried.
>
> As far as the metal housing, spit guard, etc. - I can handle
> that ... ;-)
>
> THANKS in advance.
>
> You may reach me at:
> Gene genes@texas.net - leave a post here.
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> Have a safe & happy holidays.
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> Before you buy.
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Gene : genes@texas.net

Sent via Deja.com http://www.deja.com/
Before you buy.

4995. Re: Need help building an ELECTRET mic for PC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-19 00:00:00 UTC
From: Gene <genes@texas.net>
Message-ID: <83j7n5$gn6$1@nnrp1.deja.com>
Source record: 64763
Cross-posted to: rec.radio.amateur.homebrew,rec.audio.pro,rec.audio.tech

FYI: Here is a schematic to build a Sound Blaster Microphone Preamplifier:
http://www.hut.fi/Misc/Electronics/circuits/sbmicamp.html

In article <83j55netd1@nnrp1.deja.com>,
Gene <genes@texas.net> wrote:
> I want to see if I can use the +5v from my sound card's MIC IN to power
> a tiny ELECTRET MICROPHONE element. (I have not purchased the mic
> element as of now.)
>
> I need a wiring diagram to connect the following items:
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> on the back of the 1/8" plug, I get a reading of 0.0 mV.
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> with the BLACK(-) lead from my digital volt meter connected to the
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Gene : genes@texas.net

Sent via Deja.com http://www.deja.com/
Before you buy.

4996. Re: Need help building an ELECTRET mic for PC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-19 00:00:00 UTC
From: Gene <genes@texas.net>
Message-ID: <83j9qchub1@nnrp1.deja.com>
Source record: 64764
Cross-posted to: rec.radio.amateur.homebrew,rec.audio.pro,rec.audio.tech

FYI:
http://www.hut.fi/Misc/Electronics/docs/audio/multimedia_microphones.html

In article <83j55netd1@nnrp1.deja.com>,
Gene <genes@texas.net> wrote:
> I want to see if I can use the +5v from my sound card's MIC IN to power
> a tiny ELECTRET MICROPHONE element. (I have not purchased the mic
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> I need a wiring diagram to connect the following items:
> - a 1/8" male PC stereo jack (Radio Shack Cat. No. 274-284C) which has
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> AWE64's MIC (RED) connector, the readings that I get are as follows:
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> on the back of the 1/8" plug, I get a reading of 0.0 mV.
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> plug's GROUND and the RED(+) lead attached to the connector on the 1/8"
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Gene : genes@texas.net

Sent via Deja.com http://www.deja.com/
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4997. Re: Need help building an ELECTRET mic for PC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-19 00:00:00 UTC
From: Gene <genes@texas.net>
Message-ID: <83jduikld1@nnrp1.deja.com>
Source record: 64765
Cross-posted to: rec.radio.amateur.homebrew,rec.audio.pro,rec.audio.tech

Bet I can figgure this one out now ... ;-)

BTW: My SoundBlaster AWE64 has a DIFFERENT +5V than the Compaq 5360!!!!
How to design a power mic that will work on both?
Good link:
http://www.shure.com/app-soundcard.html

In article <83j55netd1@nnrp1.deja.com>,
Gene <genes@texas.net> wrote:
> I want to see if I can use the +5v from my sound card's MIC IN to
power
> a tiny ELECTRET MICROPHONE element. (I have not purchased the mic
> element as of now.)
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Gene : genes@texas.net

Sent via Deja.com http://www.deja.com/
Before you buy.

4998. Re: Got a question can any one help me

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-19 00:00:00 UTC
From: "Neal N." <nealn@alpha1.net>
Message-ID: <hl574.112845$7I4.2840978@news5.giganews.com>
Source record: 64766

Hi Jason,

How about a Morse code identifier. Make a binary counter to step through the addresses. Program the EPROM to output a "1" to turn on an audio oscillator and a "0" for silence. Three "1's" would make a DAH and one "1" would make a DIT. One "0" between dits and dahs, three"0's" between characters, five "0's" between words. For example here is my callsign -

11101000100010101010100010111000101110101

NE5AL

With an eight bit EPROM you could program eight different messages and have a selector switch. If you just send a callsign there will be a lot of empty space in the EPROM. If you look in some old ARRL handbooks or FM and repeaters handbooks, this circuit should be there - very popular in the late 70's and 80's.

73,

Neal N.

4999. Re: homebrew FM demod...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-19 00:00:00 UTC
From: Al Woodhull <aswNS@helios.hampshire.edu>
Message-ID: <385cec3f.0@news>
Source record: 64767

On 16 Dec 1999 10:56:12 EST Jim <jdport@concentric.net> wrote in rec.radio.amateur.homebrew:

: I built my own walkie-talkie using a 3 X 5 X 7" Bud minibox with a 1 watt
: VHF engineering 2M FM transmitter strip paired with a very simple 2 Meter
: converter that outputted to ~1600 KHZ(!), i.e. the broadcast band.
: It used a simple AM transistor radio as the tunable IF, and with slope
: detection it actually worked rather well. With this arrangement there was
...

It was nice to see your note. I did something similar, but a little more elaborate. I used one of the VHF Engineering strips as a transmitter and homebrewed a crystal controlled converter with output from 14 to 18 Mhz. I had an output jack so I could feed this i.f. into a communications receiver to listen to weak signal activity on the low end. For f.m. reception I had a tunable 2nd converter with output at 1600 khz, and used one of the f.m. detector phase-locked loop chips to make a detector. It worked rather well, the tunable converter was pretty rugged and stable, and I could stay on frequency quite well. The box was about the same size as yours. I used an external microphone and carried the unit with a collapsible whip antenna attached in an over-the shoulder pouch or hung it under the dash in my VW beetle for mobile work.

My major regret is that this marvel, along with some other electronic junk, got stolen from a locker in the basement of a house where I lived as a renter for a while after getting divorced. No way could I get the police interested in what sounded like a piece of junk and was in any case not identifiable by any brand name or serial number. The experience tempered my enthusiasm for big homebrew ham projects.

This project was done in the mid '70s and I used it until about '85. It attracted attention whenever I showed up at a ham event, for sure. I don't think I ever encountered anyone else with homebrew 2 meter f.m. gear, outside of repeater operators.

Back to the original query in this thead: The little chips that implement a.m./f.m. rceivers are hard to beat for simplicity and performance. But if you really want simplicity you might try using a superregenerative detector. They are incredibly sensitive and can do a good job of slope-detecting wide band f.m. at f.m. broadcast frequencies. Of course they have several problems -- they have an "anti-squelch" effect due to the very hign amplification of noise in the absence of a carrier, and they can radiate a wide interfering signal on the receiving channel.

Now, like many old ideas I suspect this one merits being revisited
with newer technology. I suspect a simple crystal controlled
downconverter to a superregen operating on a frequency in the
h.f. range would solve several problems. First the bandwidth of a
superregen in the h.f. range would be narrower and more suited to
slope detection of the f.m. bandwidths used by current ham
equipment. A converter isolating the detector from the antenna would
also help prevent radiation from the detector, and a modern
transistorized detector circuit would operate at a much lower power
level than the old tube circuits used by hams in the 40s and 50s. And
a squelch circuit based on detection of high frequency audio
components is relatively simple to devise.

73, Al N1AW

+----------------------------------+
| Albert S. Woodhull |
| Hampshire College, Amherst, MA |
| awoodhull@hampshire.edu |
| http://minix1.hampshire.edu/asw/ |
+----------------------------------+
94.3% of all statistics are made up on the spot

--

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| Albert S. Woodhull |
| Hampshire College, Amherst, MA |
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94.3% of all statistics are made up on the spot

5000. 5 NEW 16 AMP., 250 VOLT 2P/1T ROCKER SWITCHES FA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-19 00:00:00 UTC
From: KQ6UV <kq6uv@hamsnet.net>
Message-ID: <RK674.499$e3.18073@nuq-read.news.verio.net>
Source record: 64768
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.homebrew,rec.radio.swap

5 NEW 16 AMP., 250 VOLT 2P/1T ROCKER SWITCHES. I just opened the bag to take them out for the photo.
Need more than one? I have more of these I'm selling. Just ask.
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=219543233
Jim

5001. RADIO HANDBOOK 17TH EDITION BY WILLIAM I. ORR FA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-19 00:00:00 UTC
From: KQ6UV <kq6uv@hamsnet.net>
Message-ID: <SK674.501$e3.18073@nuq-read.news.verio.net>
Source record: 64769
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.homebrew,rec.radio.swap

RADIO HANDBOOK 17TH EDITION BY WILLIAM I. ORR, W6SAI. 847 pages chock full of really useful information copyrighted 1967. This is a much sought after treasure.
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=219540524
Jim

5002. NIB MILITARY SURPLUS FEEDTHROUGH INSULATORS FA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-19 00:00:00 UTC
From: KQ6UV <kq6uv@hamsnet.net>
Message-ID: <UK674.505$e3.18073@nuq-read.news.verio.net>
Source record: 64770
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.homebrew,rec.radio.swap

Feedthrough insulators. New in box, military surplus.
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=219520774
Jim

5003. 10 SOLID STATE RELAYS GRAYHILL 7052-04-B-04-F FA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-19 00:00:00 UTC
From: KQ6UV <kq6uv@hamsnet.net>
Message-ID: <RK674.500$e3.18073@nuq-read.news.verio.net>
Source record: 64771
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.homebrew,rec.radio.swap

10 solid state Grayhill 7052-04-B-04-F relays. Rated for 120 volt, 10 amps.
with 3-30 VDC coil.
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=219558379
Jim

5004. AMATEUR RADIO MOBILE HANDBOOK BY W6NJV FA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-19 00:00:00 UTC
From: KQ6UV <kq6uv@hamsnet.net>
Message-ID: <UK674.504$e3.18073@nuq-read.news.verio.net>
Source record: 64772
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.homebrew,rec.radio.swap

AMATEUR RADIO MOBILE HANDBOOK. Here's a great old book full of radio history, and useful information by Charles Caringella, W6NJV. Copyright 1965.Old, but good condition.
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=219527785
Jim

5005. FUNDAMENTALS OF ENGINEERING REF. HANDBOOK FA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-19 00:00:00 UTC
From: KQ6UV <kq6uv@hamsnet.net>
Message-ID: <VK674.506$e3.18073@nuq-read.news.verio.net>
Source record: 64773
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.homebrew,rec.radio.swap

Fundamentals of Engineering (FE) Discipline Specific Reference Handbook.
Copyright 1997 by the National Council of Examiners for Engineering and
Surveying. Contains all kinds of reference materials, including tables,
charts, and conversions for all disciplines of engineering. Like new
condition.
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=219517880
Jim

5006. 2 OHMITE DIVIDOHM 200 WATT RESISTORS FA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-19 00:00:00 UTC
From: KQ6UV <kq6uv@hamsnet.net>
Message-ID: <XK674.508$e3.18073@nuq-read.news.verio.net>
Source record: 64774
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.homebrew,rec.radio.swap

Ohmite Dividohm 200 watt vitreous enamel resistors. One is 50 ohms, and the other is 500. Includes two adjustable taps. They are about 1 &#65533;" in diameter, and 10 &#65533;" long.
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=219501895
Jim

5007. FLORIDA TEST EQUIPMENT ?????????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-19 00:00:00 UTC
From: Bob Greenacre <jmort@global.freeserve.co.uk>
Message-ID: <83j597foj1@newsg3.svr.pol.co.uk>
Source record: 64775
Cross-posted to: misc.industry.electronics.marketplace,sci.electronics.equipment,sci.electronics.design,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Will be touring Florida in the next couple of weeks.

Anyone know of any bargain / surplus / used test equipment outlets
or ham swap meets that might be worth a visit ??????

Bob Greenacre
London - UK

5008. Re: FLORIDA TEST EQUIPMENT ?????????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-19 00:00:00 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <TY874.14469$4r6.1746796@news.rdc1.il.home.com>
Source record: 64776
Cross-posted to: misc.industry.electronics.marketplace,sci.electronics.equipment,sci.electronics.design,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

> Anyone know of any bargain / surplus / used test equipment outlets
> or ham swap meets that might be worth a visit ??????

I'm not sure of the date, but the miami hamfest is in january somewhere.

5009. Re: FLORIDA TEST EQUIPMENT ?????????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-19 00:00:00 UTC
From: David Little <dalite01@sprynet.com>
Message-ID: <83j79n$fk5$1@nntp3.atl.mindspring.net>
Source record: 64777
Cross-posted to: misc.industry.electronics.marketplace,sci.electronics.equipment,sci.electronics.design,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Be sure to visit Skycraft in Orlando, Florida. It is one of the larger
surplus electronics centers in the South East.

Bob Greenacre wrote in message <83j597foj1@newsg3.svr.pol.co.uk>...
>Will be touring Florida in the next couple of weeks.
>
>Anyone know of any bargain / surplus / used test equipment outlets
>or ham swap meets that might be worth a visit ??????
>
>Bob Greenacre
>London - UK
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5010. Re: Yaesu ADMS-1 Software problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-19 00:00:00 UTC
From: David Little <dalite01@sprynet.com>
Message-ID: <83j7s0sdv1@nntp3.atl.mindspring.net>
Source record: 64778
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

RT is apparently using "destructive copy protection" where a sector of the original disk is unformatted and the software searches for that condition before accepting as original. This will rule out the image file being used to install from the laptop's hard drive.... The sharing across the network of the floppy sounds like the best deal going, unless RT systems put a block on accepting a redirected source.

If the ADMS-x software functioned as well as the copy protection, it would be nice.....

Scott Sybert wrote in message <8317pc$9rp$1@birch.prod.itd.earthlink.net>...
>Hi All,
> I recently purchased the Yaesu ADMS-1 Kit to program my FT-50R from my
>computer. It works great on my desktop, but I wanted to also get it
>installed on my laptop. Here's the problem. I bought the laptop used, and
>didn't get a floppy drive with it. I called to find out how much a floppy
>drive would cost and it was over $70.00. I decided that it was too much
>just to get the programming software on the old laptop. So I put the
laptop
>on my network in the house and copied he floppy to the HD on the laptop.
It
>wouldn't install. It told me there was a problem with the disk. Obviously
>it will not install unless it's from the floppy. So what I did instead was
>copy the installed version from my desktop, over the network to the laptop.
>Made the necessary changes to the registry and copy the ther appropriate
>.DLL files and it worked, but it tells me the hard drive serial numbers
>don't match and it will only work un DEMO mode. Demo mode means I do
>anything I want with the software, except transfer data to & from the
radio.
>A lot of good that does me!! So I guess my question would have to be, does
>anyone have a crack or know of another way to get this damn software to
work
>other than installing it from the A: drive from the original floppy?? I
>even tried to disable the drive letter on my laptop and map a network
drive,
>using the letter A: to my desktop so simulate a floppy, but was unable to
>get the A: off the reserved drive letter list. Oh well, If anyone knows of
>any ways around this, anything at all, please let me know, I'm desparate...
>Thanks in advance..
>
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>
> Scott
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5011. Re: Yaesu ADMS-1 Software problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-19 00:00:00 UTC
From: kk5yy@arrl.net
Message-ID: <385d2b4f.238050128@nntp.mindspring.com>
Source record: 64779
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

My best guess is that they use a check for a specific block. I have
used total disk copy programs like the old game hack programs with
reasonable success to archive the floppy. What is a real PITA is if
you defrag the hard disk you can disable the program.

Not withstanding what some west coast wags say the "E" version does
have some signifigant warts. I agree if RT spent as much effort on the

core code as they spend on copy protection it would be a truly great
piece of software.

73 Jerry

On Sun, 19 Dec 1999 13:30:19 -0500, "David Little"
<dalite01@sprynet.com> wrote:

>RT is apparently using "destructive copy protection" where a sector of the
>original disk is unformatted and the software searches for that condition
>before accepting as original. This will rule out the image file being used
>to install from the laptop's hard drive.... The sharing across the network
>of the floppy sounds like the best deal going, unless RT systems put a block
>on accepting a redirected source.
>
>If the ADMS-x software functioned as well as the copy protection, it would
>be nice.....
>
>Scott Sybert wrote in message <8317pc$9rp$1@birch.prod.itd.earthlink.net>...
>>Hi All,
>> I recently purchased the Yaesu ADMS-1 Kit to program my FT-50R from my
>>computer. It works great on my desktop, but I wanted to also get it
>>installed on my laptop. Here's the problem. I bought the laptop used, and
>>didn't get a floppy drive with it. I called to find out how much a floppy
>>drive would cost and it was over $70.00. I decided that it was too much
>>just to get the programming software on the old laptop. So I put the
>laptop
>>on my network in the house and copied he floppy to the HD on the laptop.
>It
>>wouldn't install. It told me there was a problem with the disk. Obviously
>>it will not install unless it's from the floppy. So what I did instead was
>>copy the installed version from my desktop, over the network to the laptop.
>>Made the necessary changes to the registry and copy the ther appropriate
>>.DLL files and it worked, but it tells me the hard drive serial numbers
>>don't match and it will only work un DEMO mode. Demo mode means I do
>>anything I want with the software, except transfer data to & from the
>radio.

>>A lot of good that does me!! So I guess my question would have to be, does
>>anyone have a crack or know of another way to get this damn software to
>work
>>other than installing it from the A: drive from the original floppy?? I
>>even tried to disable the drive letter on my laptop and map a network
>drive,
>>using the letter A: to my desktop so simulate a floppy, but was unable to
>>get the A: off the reserved drive letter list. Oh well, If anyone knows of
>>any ways around this, anything at all, please let me know, I'm desparate...
>>Thanks in advance..
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>> Scott
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5012. Re: 2 OHMITE DIVIDOHM 200 WATT RESISTORS FA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-19 00:00:00 UTC
From: Radios_R_Me@yahoo.com
Message-ID: <385d3133.4566221@news.earthlink.net>
Source record: 64780
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.homebrew,rec.radio.swap

Zero bids eh?

On Sun, 19 Dec 1999 07:22:31 -0800, "KQ6UV" <kq6uv@hamsnet.net> wrote:

>Ohmite Dividohm 200 watt vitreous enamel resistors. One is 50 ohms, and the
>other is 500. Includes two adjustable taps. They are about 1 ¬" in diameter,
>and 10 ¬" long.
>http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=219501895
>Jim

5013. Re: FLORIDA TEST EQUIPMENT ?????????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-19 00:00:00 UTC
From: Radios_R_Me@yahoo.com
Message-ID: <385d3151.4595705@news.earthlink.net>
Source record: 64781
Cross-posted to: misc.industry.electronics.marketplace,sci.electronics.equipment,sci.electronics.design,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

There's a hamfest in Gainesville, Florida on January the 7th, Bob.

There are some great places to see, but many Test Equipment places listed. They've got SOME test gear at SKYCRAFT in Orlando, but the prices are VERY steep there.

You can check all the other places listed at:

http://www.geocities.com/CapeCanaveral/Hall/8701/mega/boatanch.htm

Look at the Alphabetical listing as well as the listing BY STATE at the bottom.

Cheers

On Sun, 19 Dec 1999 17:36:34 -0000, "Bob Greenacre" <jmort@global.freeserve.co.uk> wrote:

>Will be touring Florida in the next couple of weeks.
>
>Anyone know of any bargain / surplus / used test equipment outlets
>or ham swap meets that might be worth a visit ??????
>
>Bob Greenacre
>London - UK
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5014. Commercial Mobile Mics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-19 00:00:00 UTC
From: Radios_R_Me@yahoo.com
Message-ID: <385d3025.4296201@news.earthlink.net>
Source record: 64782
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.misc

Does anyone have any experience converting Commercial Radio microphones over to amateur use?

I have both a G.E. mobile mic and a G.E. (made by Shure) desk mic, that both have unshielded wire (strange) and the mobile G.E. has some sort of single stage pre-amp.... Or maybe it is the power supply for a condenser mic? Not sure.

Can anyone advise?

It's getting old driving around talking with a Shure 444 on my HF rig! He he!

Thanks chums

5015. Re: WTB 4CX350a

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-19 00:00:00 UTC
From: hexter@blazenet.net
Message-ID: <zYa74.13149$Ke.707340@tw11.nn.bcandid.com>
Source record: 64783

In article <385C93DE.B6FA2F40@tcainternet.com>, randyd@tcainternet.com
says...
>
>Greetings,
>
>Looking for a pair of good pulls. Does anyone have some they'd like to
>part with?
>
>Thanks.
>
> I know you said you were looking for the 350's. I see them at the
Timonium, Md hamfest by the dozens every spring. 25 to 50 dollars
depending on condition. My comment is this, The 350's are so
difficult to cool, the fin area is reduced due to a fatter anode.
the air passage through the plate radiator area are smaller. Just
use 250's. They are cheaper, easier to find, and when it comes right
down to it, 350's really don't give you anything more.

5016. Re: Connecting sound card to Computer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-19 00:00:00 UTC
From: "D. Stussy" <kd6lvw@bde-arc.ampr.org>
Message-ID: <Pine.LNX.4.10.9912192112030.5987-100000@dns.bde-arc.ampr.org>
Source record: 64784
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

Both.

On Sat, 18 Dec 1999, Clifford Buttschardt wrote:

> Which input, mic or line? I can not make any sence out of these
> statements that do not define what is being said! Cliff K7RR
>
>
> Sat, 18 Dec 1999, D. Stussy wrote:
>
> > Depends on the soundcard. Most soundcards now have stereo inputs.
> >
> > On Sat, 18 Dec 1999, Clifford Buttschardt wrote:
> > > Good comments these, but I am still confused. Is the line and microphone
> > > inputs USUALLY stereo plugs? I think the mic input is always stereo but
> > > does it use the "ring" in any way? I would guess the line input would be
> > > mono in most cases. Is this true most of the time? Cliff K7RR
> > >
> > > On Sat, 18 Dec 1999, D. Stussy wrote:
> > >
> > > > On Sat, 18 Dec 1999, Rob wrote:
> > > > > I heard that it is NOT a good idea to connect both channels (Left and Right)
> > > > > of the sound card's line output to the Rig's mic input. It might cause
> > > > > distortion. (On the other hand, I heard it doesn't matter whether the rig's
> > > > > speaker output is connected to both channels of the sound card's line input
> > > > > or mic input).
> > > > >
> > > > > Is this true? Will there be distortion?
> > > > >
> > > > > I also heard if you just used a mono plug for the sound card's line output
> > > > > (or speaker output), it will short out one of the channels and may cause
> > > > > distortion. It is best to use a stereo plug and only use one of the
> > > > > channels. Is this good advice?
> > > > >
> > > > ...If someone were smart, the soundcard driver software could be re-written so
> > > > each audio channel were a different "port" thus creating a dual-port virtual
> > > > TNC. Of course, there would have to be two PTT circuits, two DSP engines for
> > > > RX, etc. Then the above situation would be moot.
> > >
> > >
> > >
> >

5017. Re: FLORIDA TEST EQUIPMENT ?????????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-19 00:00:00 UTC
From: John Watson <jwatson@cde.com>
Message-ID: <385D4AD5.FA718C86@cde.com>
Source record: 64785
Cross-posted to: misc.industry.electronics.marketplace,sci.electronics.equipment,sci.electronics.design,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hi Bob;

In Orlando, there is a place called Skylab, or, skytech, I
forget which. As we call it skyjunk for short. They have most anything
you could ask for, and more at reasonable prices. They have test
equipment also.
As to hamfests, i'm not sure. Are you looking for anything in
particular?

John Watson KC4TBH

Bob Greenacre wrote:

> Will be touring Florida in the next couple of weeks.
>
> Anyone know of any bargain / surplus / used test equipment outlets
> or ham swap meets that might be worth a visit ??????
>
> Bob Greenacre
> London - UK

5018. s:XC5202-6PC84C

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-19 00:00:00 UTC
From: Martin Rozwadowski <ea0537@stud.uni-wuppertal.de>
Message-ID: <83jmit$h3q$1@wrfsm1.urz.uni-wuppertal.de>
Source record: 64786
Cross-posted to: comp.sys.ibm.pc.hardware.networking,de.comp.os.unix.linux.hardware,de.markt.comp.hardware,maus.markt.suche,rec.radio.amateur,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rhein.markt,zer.z-netz.telecom.amateurfunk,z-netz.netzwerke.all

Hello !

I am looking for the XC5202-6PC84C IC, it is needed for the YAM Modem
Packet Radio multimode)

someone who know, where to buy ? I need about 6 pieces

thanx

Martin

ea0537@stud.uni-wuppertal.de

5019. Re: homebrew FM demod...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-19 00:00:00 UTC
From: AJ <alaje@sympatico.ca>
Message-ID: <385D616E.24F905F0@sympatico.ca>
Source record: 64787

Thanks for the replies...

I sense that there may be a reason to stay away from a home brew Foster Seeley or ratio detector as no one has mentioned that method yet :)

If I create a crystal AM detector circuit, no power used, I'm thinking I can just detune the input slightly to get FM demod correct? trade off is output signal level, correct?

That would be the ultra simple way to do what you guys are talking about ..yes?

remember, at the moment, I'm not necessarily going for high quality, just proper operation, and proof of concept...

aj

5020. Re: Need help building an ELECTRET mic for PC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-19 00:00:00 UTC
From: William Sommerwerck <williams@nwlink.com>
Message-ID: <385D7628.E129D6E4@nwlink.com>
Source record: 64788
Cross-posted to: rec.radio.amateur.homebrew,rec.audio.pro,rec.audio.tech

Why does this remind me of the Bob & Ray sketch in which Mr. Fixit demonstrates how you can make a metal washer by drilling a hole in a quarter?

5021. Re: FLORIDA TEST EQUIPMENT ?????????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-19 00:00:00 UTC
From: John Bohnovic <bohnovic@att.net>
Message-ID: <hl4r5scbb796gvel15g0bffmtfdfti4rhf@4ax.com>
Source record: 64789
Cross-posted to: misc.industry.electronics.marketplace,sci.electronics.equipment,sci.electronics.design,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

On Sun, 19 Dec 1999 17:53:55 GMT, "Dave VanHorn" <dvanhorn@cedar.net>
wrote:

>
>> Anyone know of any bargain / surplus / used test equipment outlets
>> or ham swap meets that might be worth a visit ??????
>
>
>I'm not sure of the date, but the miami hamfest is in january somewhere.
>
>
The Miami Hamboree is the first weekend in February, NOT January.

de John/K4WJ

5022. 2 meter amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-19 00:00:00 UTC
From: TomMedlin <tcmedlin@concentric.net>
Message-ID: <385D9F9D.BC332012@concentric.net>
Source record: 64790
Cross-posted to: alt.ham-radio.vhf-uhf,alt.ham-radio.marketplace,rec.radio.amateur.homebrew

I am looking for a 150-250 watt 2 meter amp. I hear there are some surplus motorola amps out there with 4cx250s in them. I am wanting this amp for a two meter repeater. I know I will have to cut the power back to a safe level and even place cooling fans on it for repeater use. My final goal is to come out with 75-150 watts of power. I would also consider a solid state amp if it would handle the job. does anyone know of where I might locate such amps and also Im looking for your reccomendations and ideas on this.

Thanks, Tom WA5KUB please email me at tcmedlin@cris.com

--
Check out our Homepage at http://www.concentric.net/~tcmedlin

5023. SB-200 Bandswitch

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-19 00:00:00 UTC
From: Jeff Weinberg W8CQ <w8cq@comsys.net>
Message-ID: <9Oh74.9472$Wc.401728@tw12.nn.bcandid.com>
Source record: 64791

Hello All,
Well, I bought an SB-200 that "just needed a little work" and found out why
I got such a good deal. The bandswitch is toast. I need the front and
middle wafers for an SB-200 bandswitch.

Can anyone help?

Thanks,
Jeff Weinberg W8CQ
w8cq@comsys.net

5024. Re: Simple method for variable brightness Xmas lights

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-19 00:00:00 UTC
From: Sofie <sofie@olypen.com>
Message-ID: <QNk74.104736$5W2.2889176@news6.giganews.com>
Source record: 64792
Cross-posted to: sci.electronics.repair,rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.homebrew

Or......a cheap light dimmer works very nicely.
==========

Robert Casey <wa2ise@netcom.com> wrote in message
news:83kd6c$s7v$1@nntp2.atl.mindspring.net...
> Here at this web page is a very simple method of making variable
> brightness Xmas lights. Series/parallel connection. Go to:
> http://pweb.netcom.com/~wa2ise/radios/xmassp.html
>
> Merry Xmas and Happy Y2K!

5025. FS:JPS Nir12,$225

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-19 00:00:00 UTC
From: Steve Massey <N6TT@jps.net>
Message-ID: <385cec54@news1.jps.net>
Source record: 64793

In the original box the Jps Communications Inc., Model NIR-12 Dsp filter with manual $225 Shipped in 48... Its a Great filter, I have two and only need one. thanks,
Steve N6TT@jps.net

5026. Re: plans for simplex repeater

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-20 00:00:00 UTC
From: Stephen 'Grumpy' Lombard <devil@hell.org>
Message-ID: <385d887b@news.wilpat.com.au>
Source record: 64694

Phillips F490 Okay?

VHF Repeater in 2M Band

Stephane Laviolete <dn307@FreeNet.Carleton.CA> wrote in message
news:83bpnlspo1@freenet9.carleton.ca...
>
> looking for plans to build my own simplex repeater, only looking for
> something basic, my experience in electronic building is limited but i am
> getting better each day !
>
> thank you !
>
> note: if someone has one for sale... let me know
>

5027. Simple method for variable brightness Xmas lights

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-20 00:00:00 UTC
From: wa2ise@netcom.com
Message-ID: <83kd6c$s7v$1@nntp2.atl.mindspring.net>
Source record: 64695
Cross-posted to: sci.electronics.repair,rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.homebrew

Here at this web page is a very simple method of making variable brightness Xmas lights. Series/parallel connection. Go to: http://pweb.netcom.com/~wa2ise/radios/xmassp.html

Merry Xmas and Happy Y2K!

5028. RADIOEXPEDITION on Southern Altai

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-20 00:00:00 UTC
From: altai-es <altai-es@ukg.kz>
Message-ID: <83kl8q$964$23@mail.nursat.net>
Source record: 64696

What you think of idea of realization of radioexpedition on Southern Altai?

Southern Altai - highland is on the board of Kazakhstan, Russia, China and Mongoly.
Land of lakes and waterfalls, mountain taiga and stormy rivers, deserts and snowy peaks...
In time of Soviet Union this territory had been absolutelly inaccessible for foreign tourists (and furthermore for radioexpedition) - in locale
It is not enough of ham stations.

The base camp of expedition is planned to place in region by highest Fastigiums of Siberia and Altai of a mountain Belooha, lake Markakol and Zaisan.

If you were interested by our proposal, we can be found on ranges 21Mhz, 28Mhz call sign UN8JZZ (collective radio station)

email: altai-es@ukg.kz
phone: 8 (3232) 26 77 97
P.o. 243
Eastern Kazakhstan,
Ust-Kamenogorsk
M.Gorky Str. 21-314

Yours faithfully,
Kairzhan (UN7JJL)

5029. look

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-20 00:00:00 UTC
From: jporter_69@hotmail.com
Message-ID: <385deef3.57418476@news.core.com>
Source record: 64697

jporter_69@hotmail.com
--
jporter_69@hotmail.com

5030. Re: Need these parts for homebrew project

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-20 00:00:00 UTC
From: n2cqr@erols.com
Message-ID: <385e54a5.88172585@news.erols.com>
Source record: 64698

I think you are going to have to be a bit flexible in getting your parts. Realize that there isn't necessarily anything special about the brand names you list -- in most cases "generic" parts or equivalent parts from another company will do. The key to successful parts scrounging and substitution is fully understanding the circuit and each of the components. Good luck! Bill N2CQR

On 19 Dec 1999 23:01:56 GMT, johnr43867@aol.comcom (JohnR43867) wrote:

>x-no-archive: Yes
>
> Where to buy these components in small quantity for custom MW receiver
>application:
>Siemens BB112 Varactor Diode
>Sanyo SVC321 Varactor Diode
>Motorola LV1235M3 Varactor Diode
>Toko KV1281 Varactor Diode
>Sanyo DPA05 PIN Diode
>250 uH MW Loop Antenna Inductor (Eight-Inch Length Ferrite Rod Bar)
>BL-70 Antenna Tuning Block (Kohringiken Limited)
>Murata BFU455C
>Murata CFWS455BY
>0.01 uFd Mylar Capacitor
>
> Newsgroup/Internet searches have not found anything.
>Pulling my hair out. Thank you very much for your trouble!
>

5031. HELP! Kenwood TS-940S to computer interface.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-20 00:00:00 UTC
From: Charlie Burgstahler <ka8blo@net-link.net>
Message-ID: <385e121a$0$84810@news.net-link.net>
Source record: 64699

Is it possible to interface my Kenwood TS-940S with my computer and what will I need to do it? I can't fine anything in the 940 manual about an interface.

Thanks for your help,

Charlie - KA8BLO
ka8blo@net-link.net

5032. G whip loading coil question.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-20 00:00:00 UTC
From: John <john@mm1dsp.freeserve.co.uk>
Message-ID: <83l3lt$d1q$1@newsg2.svr.pol.co.uk>
Source record: 64700

I have just purchased 2 G whip mobile loading coils. One for 80m and one for 40m. Can anyone out there shed any light on what is required in the way of whips to complete these antennas Please?

Many thanks in advance and please reply direct to the address below.

john@mm1dsp.freeserve.co.uk

5033. Re: Need help building an ELECTRET mic for PC

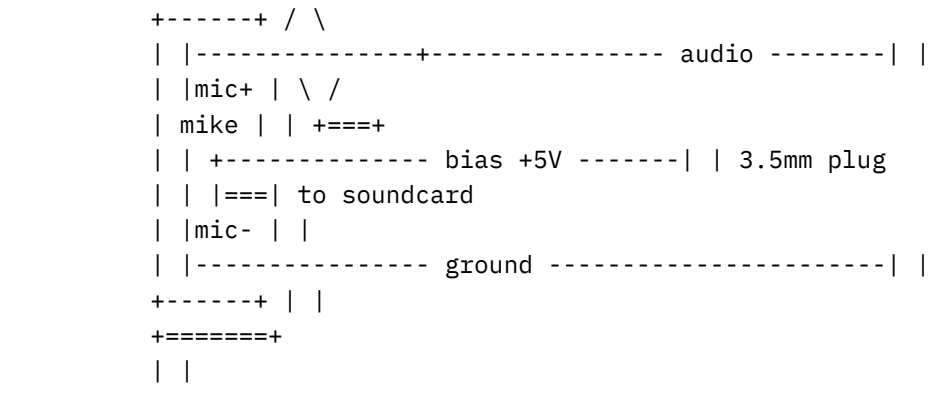
Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-20 00:00:00 UTC
From: Tomi Holger Engdahl <then@nospam.jolly.cs.hut.fi>
Message-ID: <lajln6per2m.fsf@jolly.cs.hut.fi>
Source record: 64701
Cross-posted to: rec.radio.amateur.homebrew,rec.audio.pro,rec.audio.tech

Gene <genes@texas.net> writes:

> I want to see if I can use the +5v from my sound card's MIC IN to power
> a tiny ELECTRET MICROPHONE element. (I have not purchased the mic
> element as of now.)
>
> I need a wiring diagram to connect the following items:
> - a 1/8" male PC stereo jack (Radio Shack Cat. No. 274-284C) which has
> Ground and two connectors for a total of three wires total that attach
> to it. When this 1/8" stereo plug is plugged into the Soundblaster
> AWE64's MIC (RED) connector, the readings that I get are as follows:
>>
> I want to wire from the 1/8" plugs 3 wires (GROUND, +5.06V (DC - I
> assume?) and what I think must be the SIGNAL line ?)
> to the RED & the GREEN wires on a "to be determined" ELECTRET
> MICROPHONE ELEMENT.

You can find necessary wiring diagrams for this kind of projects at
http://www.hut.fi/Misc/Electronics/circuits/microphone_powering.html#soundcard

The simples wiring scheme (use fixed font to view this):



--
Tomi Engdahl (http://www.iki.fi/then/)
Take a look at my electronics web links and documents at
http://www.epanorama.net/

5034. Re: G whip loading coil question.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-20 00:00:00 UTC
From: Mike <m.j.willis@rl.ac.uk>
Message-ID: <83larb$11l8@newton.cc.rl.ac.uk>
Source record: 64702

John <john@mm1dsp.freeserve.co.uk> wrote in message
news:83l3lt$d1q$1@newsg2.svr.pol.co.uk...
> I have just purchased 2 G whip mobile loading coils. One for 80m and one
for
> 40m. Can anyone out there shed any light on what is required in the way of
> whips to complete these antennas Please?

Good question. I have a full set too. It depends what type you have, but I have never been able to get them to work well. They take a whip 6ft or so long, tuned to your favourite part of the band. Good grounding to the car body is essential. Don't expect a small car, a Maclaren F1 or a Reliant Robin to work as a ground.

5035. Re: Simple method for variable brightness Xmas lights

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-20 00:00:00 UTC
From: kenreed@geocities.com
Message-ID: <385f2922.1959980@news.newsguy.com>
Source record: 64703
Cross-posted to: sci.electronics.repair,rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.homebrew

On Sun, 19 Dec 1999 23:21:20 -0800, "Sofie" <sofie@olypen.com> wrote:

You could bung a diode in one side of the mains to make a half wave
rectifier - this would dim the lights - but they would flicker. This
was a common mehod of dimming household lights in the 60's and 70's in
Australia

>Or......a cheap light dimmer works very nicely.
>==
>
>Robert Casey <wa2ise@netcom.com> wrote in message
>news:83kd6c$s7v$1@nntp2.atl.mindspring.net...
>> Here at this web page is a very simple method of making variable
>> brightness Xmas lights. Series/parallel connection. Go to:
>> http://pweb.netcom.com/~wa2ise/radios/xmassp.html
>>
>> Merry Xmas and Happy Y2K!
>

"In Paradise - everyone is happy
In Utopia - some people are still unhappy"

5036. LF13741

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-20 00:00:00 UTC
From: JW <jdwalton@home.com>
Message-ID: <385E72FE.10B1BC64@home.com>
Source record: 64704

I saw this posted a few months ago, but didn't think that I would need the answer (until now) - what is the difference between the LM741 and the LF13741?

5037. Re: Need these parts for homebrew project

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-20 00:00:00 UTC
From: n0za <n0zaNOn0SPAM@gj.net.invalid>
Message-ID: <062b7d42.6c858d15@usw-ex0109-066.remarq.com>
Source record: 64705

You might find some of it at:
http://www.fixnet/dans.html
The guy is a small parts dealer; most of the items are not
brand names, but that should not matter. 73, Ross

* Sent from AltaVista http://www.altavista.com Where you can also find related Web Pages, Images, Audios, Videos, News, and Shopping. Smart is Beautiful

5038. need info on low power am or fm transmitters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-20 00:00:00 UTC
From: George Gleason <ibmoas@earthlink.net>
Message-ID: <83l93omtf1@ash.prod.itd.earthlink.net>
Source record: 64706

Dear group I own a pro sound co. and have been asked to provide am or fm broadcast to parking area at motorcycle race I provide loudspeaker system to. It is in very remote part of SW NY and only need to cover 1-2miles . not really a bench tech would like info on buying or renting. please no expensive solutions as this is only worth maybe 250$ to the promoter to accomplish. Thank you bmoas@yahoo.com

5039. Re: 2 meter amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-20 00:00:00 UTC
From: "Shannon P. McGauley" <mcgauley@onramp.net>
Message-ID: <BFt74.38524$43.52726@dfw-read.news.verio.net>
Source record: 64707
Cross-posted to: alt.ham-radio.vhf-uhf,alt.ham-radio.marketplace,rec.radio.amateur.homebrew

Try:
http://www.qth.com

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NCTUSBEA - DFW - Texas Bail Bond Enforcement Reward Page
http://rampages.onramp.net/~mcgauley/bounty
^^^

5040. Re: RG58/U or RG8/U for magnetic antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-20 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <JYt74.115439$7I4.2896507@news5.giganews.com>
Source record: 64708

Such a small antenna will be a poor performer. An antenna needs to be an appreciable fraction of a wave length in size to be a good radiator.

I don't think the choice of coaxial cable will make much difference. However, the radiation resistance would be very low and you need to do matching at the antenna, not at the radio.

73, Bob K6DDX

5041. Re: homebrew FM demod...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-20 00:00:00 UTC
From: Tom Bruhns <tom_bruhns@agilent.com>
Message-ID: <385E79FD.4C62296B@agilent.com>
Source record: 64709

AJ wrote:
>
> Thanks for the info...
>
> Actually, that web site was one of the places I had looked for info
> already.. very cool to hear from the author :)

Well...I'm not the author. :-) I just did a quick web search and
pointed to that schematic so I wouldn't have do draw some silly ASCII
art that would look awful. ;-)
>
> I would like to stay away from the IC solution at the moment so I can play
> with the parts etc to see the effect of everything. I'm trying to do a
> 'crystal set' for both AM and FM so I can have a low power receiver for both
> BCB (AM and FM).
>
> Would you know why FM demod isn't normally done with an allpass network?
> It seems to me it would be easier to tune and easier to integrate... eg:
> 'most' IC solutions have an external quadrature circuit and a phase detector..
> but why not use an allpass with a designed 90 degree phase shift at the centre
> frequency?

I 'spose cuz it's so easy to get the 90 degree phase shift with a
lightly-coupled tuned circuit. You want fairly rapid phase shift with
frequency, so that you get good detector sensitivity, so you're faced
with fairly high Q poles anyway; with a single tank, you only have one
thing to tune, not two (or more). Actually, the quadrature detector's
linearity can be improved with something more sophisticated than a
single tuned circuit, but what I've seen is a double-tuned. I don't
recall the details, but I believe it was a Macintosh FM tuner that used
a transmission line as the phase shift network to get extremely good
linearity in the detector. I don't recall if it was really a quadrature
detector, or some other scheme. Tuning a single tuned circuit to the
center frequency is pretty straightforward: just put in a test signal
and tune for zero DC out of the detector. If you have even so poor as
one part per thousand stability, that's only half a kilohertz at 455kHz,
and 10kHz at 10.7MHz. Both of those are small compared with the
bandwidth typically being detected at those IFs.

If you have enough signal, I guess you can do a ratio detector directly
at the frequency of BBC you want to receive...you'll want reasonable
stability there, but that really shouldn't be all that difficult. You
might even be able to make it tuneable over a limited range. Literally
an FM crystal set! (I'll be someone has already done this, and likely
will pop out of the woodwork and add to the discussion...)

>
> For older radios, would an allpass not have been easier to tune than the
> Foster Seeley or ratio detector circuits? The transformers look rather complex
> and lossy.. and they must have been a pain to keep tuned...

Well, by the time that FM receivers became popular, we had a lot of collective experience building IF transformers. I don't recall that re-peaking IFs was required very often! In fact, in an FM receiver, because of the importance of phase linearity, you wouldn't even want someone to be messing with the IF strip unless they knew what they were doing (assuming the design really did pay attention to phase linearity). The F-S or ratio detector transformers wasn't so different from other IF transformers, just different coupling. Just because coupling is fairly loose doesn't mean the transformer is particularly lossy, and in any event, at that relatively large-signal point in the circuit, a little loss isn't devastating.

Anyway, that's my $.02 on the subject...

Cheers,
Tom

5042. Re: Filter/Ground question with HT

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-20 00:00:00 UTC
From: tmelcon@mit.edu
Message-ID: <385e89bb$0$22874@senator-bedfellow.mit.edu>
Source record: 64710

In article <lq6l5s0mil5iu0bfuef8961artijs4ekdr@4ax.com>,
Nick <nick.foot@dial.pipex.com> wrote:

>How long is the piece of wire to earth??? if it is more than a fraction there
>will be inductance preventing it being a short.

Thanks. I don't have much experience with RF, and I had in fact
neglected that. I've calculated the approximate inductance of the
wire, and it was in fact substantial.

5043. Re: RG58/U or RG8/U for magnetic antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-20 00:00:00 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <945729493.1928648076@news.indigo.ie>
Source record: 64711

On Wed, 19 Jan 2000, J M Noeding wrote:
>Made a magnetic RX-antenna for 160/80m using RG-58CU, but Q-value
>seems to be rather low (tuning is far from critical), anybody having
>experience of how much improvement it is to use RG-8 or RG-6 instead?
<snip>

A 1 Metre loop will have a very low radiation resistance on 160M.
The 2 Metre loop will be more efficient. Use RG8 or some metal
tubing. You might get better results with a multi-turn loop.

Have a look at Reg Edwards (G4FGQ) web site. You can
download his magnetic loop program from there. I can't
remember the URL but there's a link on my page:
http://www.qsl.net/ei9gq

73, Ed. EI9GQ.

--

Remove 'X' to reply.

Linux 2.2.5-15

5044. Re: FLORIDA TEST EQUIPMENT ?????????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-20 00:00:00 UTC
From: Paul Stavrou <pcstavrou@enter.net>
Message-ID: <385ED130.C4364864@enter.net>
Source record: 64712
Cross-posted to: misc.industry.electronics.marketplace,sci.electronics.equipment,sci.electronics.design,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

You MUST go to Skycraft Parts. It's a few miles north of the center of Orlando (About 30~45 minutes from Disneyworld). Thake I-4 north of the city to Fairbanks exit. The store is a few hundred yards from the exit, with a small drop tank mounted on a pole out front. It is the place that every tinkerer, engineer and radio operator wishes was in his neighborhood. They have everything electronic/mechanical, new and surplus. It's a must see. I get to the area a few times a year on business and a stop at Skycraft is manditory and always fit into the schedule.

PS

Bob Greenacre wrote:

> Will be touring Florida in the next couple of weeks.
>
> Anyone know of any bargain / surplus / used test equipment outlets
> or ham swap meets that might be worth a visit ??????
>
> Bob Greenacre
> London - UK

5045. Antenna Tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-20 00:00:00 UTC
From: hooha <markbone@accessus.net>
Message-ID: <385ee70b.0@news.accessus.net>
Source record: 64713

I am looking for a diagram or a homebrew 300 watt antenna tuner for 80 though 10 meter bands. Can anyone help?

Mark KG9JZ reply to markbone@accessus.net

5046. Wtd: Heathkit Items !

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-20 00:00:00 UTC
From: W5IDX <W5IDX@worldnet.att.net>
Message-ID: <83mu9s$5pj$1@bgtnsc03.worldnet.att.net>
Source record: 64714
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

I Am In Need Of A Few Heathkit Items To Get A HW-16 Up And Running.
I Need The Following.

1 Meter For The HW-16
1 Large Crystal Socket. (Bottom One)
1 HG-10B VFO
Manual For The HW-16
Manual For The HG-10B
Manual For A HW-8
Matching External Speaker
Possibly Some Crystals

Please Nothing Expensive I Am Trying To Fix Up An Old Junker For The Fun Of
It.
73's W5IDX

P.S. I Have A Bunch Od NOS Tubes To Trade.

5047. Re: Connecting sound card to Computer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-20 00:00:00 UTC
From: Rob <NoEmail@NoWay.com>
Message-ID: <VOD74.199353$5r2.505252@tor-nn1.netcom.ca>
Source record: 64715
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

IMPORTANT -- CORRECTION -- PLEASE READ

The mic jack on a sound card is a MONO circuit but uses a STEREO JACK with one channel carrying the audio to the sound card from the mic and the other channel carrying a DC voltage to power a mic.

I made a big mistake. THE TIP OF THE MIC CONNECTOR CARRIES THE DC NOT THE AUDIO AS I SUGGESTED IN MY LAST POSTING!

Most people use one of the channels of the sound card's LINE INPUT and do NOT use the sound card's mic input for good reason.

IN ANY EVENT, EVEN IF one is going to connect a cable from a Radio's audio output to the Computer's sound card LINE INPUT, I strongly suggest that one uses a STEREO connector and ONLY use the centre ring which carries the audio to the sound card and the lower ring for the mic ground return.

DO NOT USE the TIP of the connector. Leave it unconnected!

This is the best approach! If you accidentally plug this cable into the MIC jack of the sound card instead of the LINE INPUT, you will not cause any damage to your sound card! In fact, the cable will even work and provide an audio signal from the radio to your sound card!

(If you don't follow this recommendation, you MIGHT damage your sound card. It depends on whether your sound card has any short circuit protection etc)

73's
Rob
VA2FB

"Rob" <NoEmail@NoWay.com> wrote in message
news:NcX64.198992$5r2.503233@tor-nn1.netcom.ca...
> Bob,
>
> Many thanks for the info.
>
> I understand that it is alright to fed both channels of the sound card
line
> input.
>
> BUT I heard it is a different story for the MIC input. I was told that
the
> mic jack on a sound card is a MONO circuit but uses a STEREO JACK with one
> channel carrying the audio and the other carrying a DC voltage for the
mic.

> It was suggested that I use a STEREO connector and ONLY use the TIP which
> carries the audio. (AND DON'T USE the RING which carries the polarizing
> voltage).
>
> Since HAMS like me sometimes plug cables in the wrong jack (especially if
> the mic and line input jacks are beside each other), it sounds to me like
a
> good idea to only use one channel carried in the tip (even if you PLAN to
> connect it to the line input jack where it doesn't matter)
>
> Any thoughts?
>
> Rob
>
> "Bob Lewis" <aa4pb@erols.com> wrote in message
> news:83hcepprq1@bob.news.rcn.net...
> > > I heard that it is NOT a good idea to connect both channels (Left
> > and Right)
> > > of the sound card's line output to the Rig's mic input. It might
> > cause
> > > distortion.
> >
> > It is NOT a good idea. When you connect the two outputs together you
> > are shorting the outputs. Whether this causes any distortion depends
> > on the sound card output circuit design and how well balanced the two
> > outputs are. If, for example, you had the mixer balance all the way
> > to one side, the dead side would attempt to short the output of the
> > other. The output impedance *may* be high enough to prevent
> > distortion or damage but you never know how it was designed. It's
> > best not to do it and there's no advantage to it that I can think of.
> > In pro audio a resistor is often inserted into each channel in order
> > to provide a "resistive combiner" circuit to feed a stereo channel
> > into a mono channel. With PSK31 both channels have the same signal so
> > there's no reason to do it.
> >
> > > (On the other hand, I heard it doesn't matter whether the rig's
> > > speaker output is connected to both channels of the sound card's
> > line input
> > > or mic input).
> >
> > It doesn't matter because because you are shorting two inputs. The
> > load impedance drops to one-half but it's still plenty high enough
> > not to overload the receiver's output.
> >
> > > I also heard if you just used a mono plug for the sound card's line
> > output
> > > (or speaker output), it will short out one of the channels and may
> > cause
> > > distortion. It is best to use a stereo plug and only use one of
> > the

> > > channels. Is this good advice?
> >
> > Good advice! A mono plug will short one output. It may not cause
> > distortion in the other channel, but it's never good practice to
> > short an output unless you know for sure that the circuit design can
> > handle it.
> >
> >
> >
>
>

5048. FEDS RAID ELECTRONIC HOBBY VENDORS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-20 00:00:00 UTC
From: Raw Power Radio <rawpowerradioNOraSPAM@go.com.invalid>
Message-ID: <28bc935d.ba4167e2@usw-ex0101-003.remarq.com>
Source record: 64716

Story at:

http://www.2600.com/news/1999/1218.html

* Sent from RemarQ http://www.remarq.com The Internet's Discussion Network *
The fastest and easiest way to search and participate in Usenet - Free!

5049. need design/kit for 50-100w HF amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-21 00:00:00 UTC
From: gagnon@gagnon.fakeu-net.com
Message-ID: <385fea37.181848@news.u-net.com>
Source record: 64644

I am looking for a relatively simple circuit (and preferably a kit)
for a 50-100 watt HF amplifier (3.5-30Mhz) for a QRP rig (ie 2-3 watts
input). I am aware of the 1995 ARRL handbook 50 watt circuit design
but this uses rather expensive MRF477 transistors. Anyone out there
know of others?

Larry MW0AWC

5050. Re: Connecting sound card to Computer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-21 00:00:00 UTC
From: Rob <NoEmail@NoWay.com>
Message-ID: <RYS74.199462$5r2.506595@tor-nn1.netcom.ca>
Source record: 64645
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

I am just curious. Are the big 1/4 inch stereo jacks and plugs better than the smaller mini stereo jacks and plugs? That is, are the big stereo jacks better designed than the smaller 3.5 mm jacks such that the big 1/4 jacks not to"short out" some of the circuits when plugging them in and out of the jack?

Rob

"Chris Smolinski" <csmolinski@erols.com> wrote in message news:385F80DF.9C6816B@erols.com...
> Apple avoided this problem by using a modified (longer) plug for the
> microphone. The DC power is at the tip, but since the jack is designed
> for a longer plug, a normal plug won't reach it. The center ring is
> longer, and connects to both left and right channels, for blended mono
> recording. Yet a stereo plug could also be used, for true stereo
> recording.
>
> 73's
> Chris
> N3JLY
>
>
> Rob wrote:
> >
> > IMPORTANT -- CORRECTION -- PLEASE READ
> >
> > The mic jack on a sound card is a MONO circuit but uses a STEREO JACK with
> > one channel carrying the audio to the sound card from the mic and the other
> > channel carrying a DC voltage to power a mic.
> >
> > I made a big mistake. THE TIP OF THE MIC CONNECTOR CARRIES THE DC NOT THE
> > AUDIO AS I SUGGESTED IN MY LAST POSTING!
> >
> > Most people use one of the channels of the sound card's LINE INPUT and do
> > NOT use the sound card's mic input for good reason.
> >
> > IN ANY EVENT, EVEN IF one is going to connect a cable from a Radio's audio
> > output to the Computer's sound card LINE INPUT, I strongly suggest that one

> > uses a STEREO connector and ONLY use the centre ring which carries the
> > audio to the sound card and the lower ring for the mic ground return.
> >
> > DO NOT USE the TIP of the connector. Leave it unconnected!
> >
> > This is the best approach! If you accidentally plug this cable into the
MIC
> > jack of the sound card instead of the LINE INPUT, you will not cause any
> > damage to your sound card! In fact, the cable will even work and
provide an
> > audio signal from the radio to your sound card!
> >
> > (If you don't follow this recommendation, you MIGHT damage your sound
card.
> > It depends on whether your sound card has any short circuit protection
etc)
> >
> > 73's
> > Rob
> > VA2FB

5051. Re: Antenna Tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-21 00:00:00 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <945822766.108435599@news.indigo.ie>
Source record: 64646

> "hooha" <markbone@accessus.net> wrote:
>> I am looking for a diagram or a homebrew 300 watt antenna tuner for 80
>> though 10 meter bands. Can anyone help?
>>
>> Mark KG9JZ reply to markbone@accessus.net

There's a simple t-match at:

http://www.qsl.net/ei9gq/atu.html

73, Ed. EI9GQ

--

Remove 'X' to reply.

Linux 2.2.5-15

5052. Re: Do I need mica?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-21 00:00:00 UTC
From: Matt Erickson <kk5dr@hotmail.com>
Message-ID: <38601F49.BFF6B144@hotmail.com>
Source record: 64647

Mica caps are not really needed, unless you plan on transmitting through
it. NPO, type disk caps should do fine.

1victor@iname.com wrote:

> Hi. Would it greatly affect the performance of a 32MHz 3rd order
> bandpass filter
> if I used ceramic disk caps instead of mica ones?

5053. Re: Icom band switching question.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-21 00:00:00 UTC
From: Matt Erickson <kk5dr@hotmail.com>
Message-ID: <38601F74.80361B05@hotmail.com>
Source record: 64648

None....

John wrote:

> Hello everyone,
>
> I would like to know what rigs in the Icom range use the same type of rotary
> relay for band switching as is in my IC-720A?
>
> Christmas greetings to all from,
> John (MM1DSP) Scotland.
>
> john@mm1dsp.freeserve.co.uk

5054. FS/FT KLM KT34A

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-21 00:00:00 UTC
From: Chris Fox <ni4l@bellsouth.net>
Message-ID: <38603B85.B0FAE1E3@bellsouth.net>
Source record: 64649

make me an offer you pick up kernersville. north carolina
KT34A tri bander 4 element 10-15-20 meters

5055. Re: Do I need mica?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-21 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <38604D56.EEF0281E@eznec.com>
Source record: 64650

None of these factors is particularly troublesome with NPO multilayer ceramic capacitors. I've used them with good results for many filters, including narrowband designs. X7R or similar "stable" ceramics are not as good in all these respects, but still are good enough for many applications where bandwidth isn't narrow and/or Q isn't very high. Z5U or similar "high-K" types are very bad in all these respects and shouldn't be used for filters (or much else except bypassing or perhaps blocking).

Roy Lewallen, W7EL

Bob wrote:
>
> Problems with ceramic disc capacitors:
>
> 1. Magnetostrictive effect; they can generate signals from vibration, like
> crystals
> 2. Temperature coefficient isn't very good
> 3. Initial tolerance poor
> 4. Long term stability not good
>
> If you can live with these disadvantages, go for it.
>
> 73, Bob K6DDX

5056. Re: need design/kit for 50-100w HF amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-21 00:00:00 UTC
From: "Neal N." <nealn@alpha1.net>
Message-ID: <y4Y74.106826$5W2.2977163@news6.giganews.com>
Source record: 64651

I just received my Y2K ARRL handbook a few days ago and it has a HF amplifier project using two IRF510 power MOSFETS. I bet you could find those for less that 2 bucks a piece. However, it requires a 28 volt supply to achieve a max output of 75 watts on 40 meters (with 1 watt drive). Output is only about 20 watts with a 13.8 volt supply and 1 watt of drive.

Now I am assuming you need a linear amplifier. If you just need an amplifier for CW, we can come up with class C designs out the wazoo.

Regards,

Neal N.
NE5AL

5057. North Carolina Electronic/Surplus outlets

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-21 00:00:00 UTC
From: bfayette@aol.com
Message-ID: <19991220192005.05606.00000415@ng-fr1.aol.com>
Source record: 64717

I just moved to Raleigh and am surprised to find that there seem to be no electronic/surplus outlets in the area. Does anybody know of anything within reasonable driving distance? Thanks.

Brad

5058. Re: HELP! Kenwood TS-940S to computer interface.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-21 00:00:00 UTC
From: janbden@aol.com
Message-ID: <19991220201222.28138.00000150@ng-fc1.aol.com>
Source record: 64718

Have you look in the ARRL handbook? They describe a project for interfacing
Kenwoods to a PC but not sure if it will work with yours.
-John-

5059. WTB cabinet, SB series or similar

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-21 00:00:00 UTC
From: ny1e@server.nlbbs.com
Message-ID: <Fn2oGA.MG4@server.nlbbs.com>
Source record: 64719

I'm looking for a cabinet for a homebrew project, a Heath SB series rcvr, xmtr or xcvr, or another brand that goes all the way around the front panel. A front panel to use as a template would be nice, but not nesassary.
Thanks, Dick NY1E

5060. Re: antenna tubing sourse?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-21 00:00:00 UTC
From: Art Paton <artp721466@aol.com>
Message-ID: <385F249F.CBD78609@aol.com>
Source record: 64720

Hi Chuck:
You might try Texas Towers. They offer aluminum tubing in a variety of diameters that slide together to make tapered elements.

Art

Chuck Calloway wrote:

> Im looking for a sourse of light weight aluminum tubing for maiking
> antennas,Ive tried old TV elements but there not tubing just folded
> aluminum that cant be adjusted.
> Ive tried department stores & outlets with no luck.Out here were I live
> there are no hobby supply stores. Thanks Chuck

5061. Do I need mica?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-21 00:00:00 UTC
From: 1victor@iname.com
Message-ID: <385F2710.6732D03F@iname.com>
Source record: 64721

Hi. Would it greatly affect the performance of a 32MHz 3rd order
bandpass filter
if I used ceramic disk caps instead of mica ones?

5062. Re: Do I need mica?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-21 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <dXG74.143153$y45.2970765@news4.giganews.com>
Source record: 64722

Problems with ceramic disc capacitors:

1. Magnetostrictive effect; they can generate signals from vibration, like crystals
2. Temperature coefficient isn't very good
3. Initial tolerance poor
4. Long term stability not good

If you can live with these disadvantages, go for it.

73, Bob K6DDX

5063. Re: Need help building an ELECTRET mic for PC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-21 00:00:00 UTC
From: Gene <genes@texas.net>
Message-ID: <83o4sk$r2o$1@nnrp1.deja.com>
Source record: 64723
Cross-posted to: rec.radio.amateur.homebrew,rec.audio.pro,rec.audio.tech

Thanks, Tomi. "You have a really neat web site!"

Question:
(1.) I do not see a resistor in the circuit, why not?
(2.) Please advise the specific Panasonic (or?) quality electret mic element part number for the SoundBlaster AWE64 mic using the design below. I want the BEST one for voice recording. Directional, I assume. THANKS

Now I understand why users have such a problem with making applications like Microsoft NetMeeting, etc. work with a "normal PC mic". They simply do not understand that not all microphones are created equal and above all else "not all MIC OUT soundcard ports are created equal". For example, my SB AWE64 "has a DIFFERENT" pin-out from the Compaq 5360 - geesh, the +5 is NOT in the same place! To make matters worse, the AWE64's speaker out is amplified - while the Compaq's is not. What a mess. To make a long story short - to get GOOD voice recordings , I am 100 percent sure that you MUST first get out your old oHm/volt meter & determine where your +5 , Ground & signal are - then you have to build a powered mic of some sort to FIT your specific sound card. The mics that most folks buy for a PC are junk - "that, in some cases, do not even work because of pin-outs". My testing indicates that until you do the above - you simply do not understand the problem. I will build a few electret mics of different designs (using my SB AWE65's +5) - and do the same for the Compaq (which also has a +5). I will try & remember to post the results. BTW: I "think" that I found the solution to amplifying the un-amplified "speaker out" from the Compaq - it's a NEC Drive Bay Amplifier Equalizer" - will install & test it shortly. It connects directly to the AWE64 & provides up to 6 amplified stereo speakers, a woofer out port, & a LOT more. Never heard of it until yesterday ... we'll see.

In article <lajln6per2m.fsf@jolly.cs.hut.fi>,
Tomi Holger Engdahl <then@nospam.jolly.cs.hut.fi> wrote:
> Gene <genes@texas.net> writes:
>
> > I want to see if I can use the +5v from my sound card's MIC IN to power
> > a tiny ELECTRET MICROPHONE element. (I have not purchased the mic
> > element as of now.)
> >
> > I need a wiring diagram to connect the following items:
> > - a 1/8" male PC stereo jack (Radio Shack Cat. No. 274-284C) which has

```
> > Ground and two connectors for a total of three wires total that
attach
> > to it. When this 1/8" stereo plug is plugged into the Soundblaster
> > AWE64's MIC (RED) connector, the readings that I get are as follows:
> >>
> > I want to wire from the 1/8" plugs 3 wires (GROUND, +5.06V (DC - I
> > assume?) and what I think must be the SIGNAL line ?)
> > to the RED & the GREEN wires on a "to be determined" ELECTRET
> > MICROPHONE ELEMENT.
>
> You can find necessary wiring diagrams for this kind of projects at
>
http://www.hut.fi/Misc/Electronics/circuits/microphone_powering.html#sou
ndcard
>
> The simples wiring scheme (use fixed font to view this):
>
> +------+ / \
> | |---------------+---------------- audio --------| |
> | |mic+ | \ /
> | mike | | +===+
> | | +-------------- bias +5V -------| |
3.5mm plug
> | | |===| to
soundcard
> | |mic- | |
> | |---------------- ground ----------------------| |
> +------+ | |
> +=======+
> | |
> --
> Tomi Engdahl (http://www.iki.fi/then/)
> Take a look at my electronics web links and documents at
> http://www.epanorama.net/
>

--

Gene : genes@texas.net

Sent via Deja.com http://www.deja.com/
Before you buy.
```

5064. Re: Antenna Tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-21 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <83o5ui$ru7$1@nnrp1.deja.com>
Source record: 64724

In article <385ee70b.0@news.accessus.net>,
"hooha" <markbone@accessus.net> wrote:
> I am looking for a diagram or a homebrew 300 watt antenna tuner for 80
> though 10 meter bands. Can anyone help?
>
> Mark KG9JZ reply to markbone@accessus.net
>
>

Look at the Radioamateur Handbook or The ARRL Antenna Book. They have
good designs.
--
Greetings,

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Before you buy.

5065. Re: Connecting sound card to Computer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-21 00:00:00 UTC
From: nomail@pe1chl.demon.nl
Message-ID: <slrn85ujcs.du5.nomail@linux.pe1chl.ampr.org>
Source record: 64725
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

Rob <NoEmail@NoWay.com> wrote:
>DO NOT USE the TIP of the connector. Leave it unconnected!

>This is the best approach! If you accidentally plug this cable into the MIC
>jack of the sound card instead of the LINE INPUT, you will not cause any
>damage to your sound card! In fact, the cable will even work and provide an
>audio signal from the radio to your sound card!

>(If you don't follow this recommendation, you MIGHT damage your sound card.
>It depends on whether your sound card has any short circuit protection etc)

I presume that anything that uses a (mini-)jack connector has some form
of short circuit protections, as these connectors routinely short out their
connections when plugging in/out or fondling with the connector to find
the spot of good ground contact.

Normally there is a small regulator on the card to provide the voltage,
and it is short-circuit protected. It could run a little hot when left
shorted all the time.

A better recommendation seems to always use AC-coupling on the soundcard
inputs, so if you use a transformer, put a (say 1uF) nonpolarized cap
in series. Or a resistor of sufficient value to reduce the current,
and small enough in relation to the input impedance. 4k7 or so.

In fact, this is always a good thing to do. When I make connections
to transceivers for 9k6 modification, where AC coupling is a bad idea,
I always put in a small series resistor directly at the connection point,
to avoid damage to the transceiver when the outgoing lead is shorted to
ground or to small voltages like +5 or +12. Better to have some percent
of signal loss than a blown-out 3357.

Rob
--
+----------------------------------+--------------------------------------+
| Rob Janssen pe1chl@amsat.org | WWW: http://www.knoware.nl/users/rob |
| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
+----------------------------------+--------------------------------------+

5066. Re: HELP! Kenwood TS-940S to computer interface.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-21 00:00:00 UTC
From: n0za <n0zaNOn0SPAM@gj.net.invalid>
Message-ID: <0c2f8d6a.9a509e44@usw-ex0110-076.remarq.com>
Source record: 64726

I don't have all the information at hand, but as I recall
you must have a unit IC-10B which plugs into the radio;
this requires some digging in, but no soldering. etc. Then
you need an external unit IC-232C. Then some simple
software is required. The two units can be somewhat
expensive, and may have to be obtained used. Some homebrew
units have been described to be used in lieu of the IC-232C
The fact the manual says nothing about these units or
computer interfacing is a clue to how old the TS-940 is
getting to be. I think I went to a company who handled
Kenwood's older parts for the IC-10B. Check with Kenwood
for availability. If I can be of help, let me know.
73, Ross N0ZA

* Sent from AltaVista http://www.altavista.com Where you can also find related Web Pages,
Images, Audios, Videos, News, and Shopping. Smart is Beautiful

5067. Re: SB-200 Bandswitch

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-21 00:00:00 UTC
From: n0za <n0zaNOn0SPAM@gj.net.invalid>
Message-ID: <0062c5dd.9b49b8c3@usw-ex0110-076.remarq.com>
Source record: 64727

There is a new SB-200 bandswitch offered on e-bay; it may
cost more than a new Cadillac by the time the bidding is
over. 73, Ross N0ZA

* Sent from AltaVista http://www.altavista.com Where you can also find related Web Pages, Images, Audios, Videos, News, and Shopping. Smart is Beautiful

5068. Re: LF13741

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-21 00:00:00 UTC
From: py1ll@my-deja.com
Message-ID: <83o7ma$t9q$1@nnrp1.deja.com>
Source record: 64728

In article <385E72FE.10B1BC64@home.com>,
JW <jdwalton@home.com> wrote:
> I saw this posted a few months ago, but didn't think that I would need
> the answer (until now) - what is the difference between the LM741 and
> the LF13741?
>
>

LF13741 is a 741 op amp with FET inputs.
--
Greetings,

Luiz - PY1LL

Sent via Deja.com http://www.deja.com/
Before you buy.

5069. Inexpensive V & I panel meters ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-21 00:00:00 UTC
From: phil <phil@invest.fsbusiness.co.uk>
Message-ID: <bf5alBAWE3X4EwT0@invest.fsbusiness.co.uk>
Source record: 64729

Does anyone on the ng have a suggested source for some inexpensive panel meters?

I'm looking for something similar to the one's supplied with the Skywalker HF amp kits.

Thanks

Phil G4ZOW

5070. Re: Connecting sound card to Computer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-21 00:00:00 UTC
From: Chris Smolinski <csmolinski@erols.com>
Message-ID: <385F80DF.9C6816B@erols.com>
Source record: 64730
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

Apple avoided this problem by using a modified (longer) plug for the
microphone. The DC power is at the tip, but since the jack is designed
for a longer plug, a normal plug won't reach it. The center ring is
longer, and connects to both left and right channels, for blended mono
recording. Yet a stereo plug could also be used, for true stereo
recording.

73's
Chris
N3JLY

Rob wrote:
>
> IMPORTANT -- CORRECTION -- PLEASE READ
>
> The mic jack on a sound card is a MONO circuit but uses a STEREO JACK with
> one channel carrying the audio to the sound card from the mic and the other
> channel carrying a DC voltage to power a mic.
>
> I made a big mistake. THE TIP OF THE MIC CONNECTOR CARRIES THE DC NOT THE
> AUDIO AS I SUGGESTED IN MY LAST POSTING!
>
> Most people use one of the channels of the sound card's LINE INPUT and do
> NOT use the sound card's mic input for good reason.
>
> IN ANY EVENT, EVEN IF one is going to connect a cable from a Radio's audio
> output to the Computer's sound card LINE INPUT, I strongly suggest that one
> uses a STEREO connector and ONLY use the centre ring which carries the
> audio to the sound card and the lower ring for the mic ground return.
>
> DO NOT USE the TIP of the connector. Leave it unconnected!
>
> This is the best approach! If you accidentally plug this cable into the MIC
> jack of the sound card instead of the LINE INPUT, you will not cause any
> damage to your sound card! In fact, the cable will even work and provide an
> audio signal from the radio to your sound card!
>
> (If you don't follow this recommendation, you MIGHT damage your sound card.
> It depends on whether your sound card has any short circuit protection etc)
>
> 73's
> Rob
> VA2FB

5071. Icom band switching question.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-21 00:00:00 UTC
From: John <john@mm1dsp.freeserve.co.uk>
Message-ID: <83o1be$rm7$2@newsg1.svr.pol.co.uk>
Source record: 64731

Hello everyone,

I would like to know what rigs in the Icom range use the same type of rotary relay for band switching as is in my IC-720A?

Christmas greetings to all from,
John (MM1DSP) Scotland.

john@mm1dsp.freeserve.co.uk

5072. Re: Need help building an ELECTRET mic for PC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-21 00:00:00 UTC
From: "Chris G." <chrisgie@txdirect.net>
Message-ID: <s5v6095srg322@corp.supernews.com>
Source record: 64732
Cross-posted to: rec.radio.amateur.homebrew,rec.audio.pro,rec.audio.tech

Gene <genes@texas.net> wrote in message news:83j7n5$gn6$1@nnrp1.deja.com...
> FYI: Here is a schematic to build a Sound Blaster Microphone
> Preamplifier:
> http://www.hut.fi/Misc/Electronics/circuits/sbmicamp.html
>
>

Yeah but does it sound as good as a Macke mic preamp?
That's what we want to know!!! :)

Chris G.

5073. Re: Need help building an ELECTRET mic for PC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-21 00:00:00 UTC
From: Arny Kr&#65533;ger <arnyk@flash.net>
Message-ID: <L6N74.16876$kX4.87665@news.rdc2.mi.home.com>
Source record: 64733
Cross-posted to: rec.radio.amateur.homebrew,rec.audio.pro,rec.audio.tech

"Gene" <genes@texas.net> wrote in message
news:83j55netd1@nnrp1.deja.com...
> I want to see if I can use the +5v from my sound card's MIC IN to
power
> a tiny ELECTRET MICROPHONE element. (I have not purchased the mic
> element as of now.)

Please see http://www.linkwitzlab.com/sys_test.htm for some proposed
improvements to the classic design.

5074. Re: Poor Man's Spectrum Analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-21 00:00:00 UTC
From: "Theodore C. Trostle" <ttrostle@penn.com>
Message-ID: <E2N74.696$PY3.3808@newsfeed.slurp.net>
Source record: 64734

I have had one for several years. It is a great device and is a good tool
for receiver and preamp work. I have used it to also confirm that I fully
suppressed a troubling 6 meter harmonic in an amplifier.

With the freq display I find it a neat full coverage radio too!

Raw Power Radio <rawpowerradioNOraSPAM@go.com.invalid> wrote in message
news:109aa7be.0e7d4517@usw-ex0101-003.remarq.com...
> As described at:
> http://www.science-workshop.com/
>
> Anyone bought/used this? Comments?
>
> Thanks.
>
> rawpowerradio at go dot com
>
>
> * Sent from RemarQ http://www.remarq.com The Internet's Discussion Network
*
> The fastest and easiest way to search and participate in Usenet - Free!
>

5075. Re: Need help building an ELECTRET mic for PC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-21 00:00:00 UTC
From: szekeres+@pitt.edu
Message-ID: <83ob7i$422$1@usenet01.srv.cis.pitt.edu>
Source record: 64735
Cross-posted to: rec.radio.amateur.homebrew,rec.audio.pro,rec.audio.tech

In article <s5v6095srg322@corp.supernews.com>,
Chris G. <chrisgie@txdirect.net> wrote:
>
>Gene <genes@texas.net> wrote in message news:83j7n5$gn6$1@nnrp1.deja.com...
>> FYI: Here is a schematic to build a Sound Blaster Microphone
>> Preamplifier:
>> http://www.hut.fi/Misc/Electronics/circuits/sbmicamp.html
>>
>>
>
>Yeah but does it sound as good as a Macke mic preamp?
>That's what we want to know!!! :)

Is Soundblaster good enough to tell.
This dynamic mic circuit is not going to work well
with an electret.
greg

5076. Re: Need help building an ELECTRET mic for PC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-21 00:00:00 UTC
From: szekeres+@pitt.edu
Message-ID: <83obog$43o$1@usenet01.srv.cis.pitt.edu>
Source record: 64736
Cross-posted to: rec.radio.amateur.homebrew,rec.audio.pro,rec.audio.tech

In article <L6N74.16876$kX4.87665@news.rdc2.mi.home.com>,
Arny Kr&#65533;ger <arnyk@flash.net> wrote:
>
>"Gene" <genes@texas.net> wrote in message
>news:83j55netd1@nnrp1.deja.com...
>> I want to see if I can use the +5v from my sound card's MIC IN to
>power
>> a tiny ELECTRET MICROPHONE element. (I have not purchased the mic
>> element as of now.)
>
>
>
>Please see http://www.linkwitzlab.com/sys_test.htm for some proposed
>improvements to the classic design.

D'Appolito covered these mods in Speaker Builder, some time
ago. I wonder who was the originator of the idea for the Panasonic
capsule mod.
greg

5077. Operating Console Plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-21 00:00:00 UTC
From: "R. J. Scott" <kf7qz@yahoo.com>
Message-ID: <385FBFD2.B4CAF9FF@yahoo.com>
Source record: 64737

Any Sites/Links to desk plans. Ive got a few ideas but Im looking
for that Oh So Right one (you know the one that doesnt exist)

Rick KF7QZ
Everett, Washington

5078. Re: FEDS RAID ELECTRONIC HOBBY VENDORS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-21 00:00:00 UTC
From: Jake Brodsky <frussle@erols.com>
Message-ID: <24gv5s0ge1om0nkjs0dun6ru902idhmped@4ax.com>
Source record: 64738

On Mon, 20 Dec 1999 21:34:59 -0800, Raw Power Radio
<rawpowerradioNOraSPAM@go.com.invalid> wrote:

>http://www.2600.com/news/1999/1218.html

Anyone from the EFF reading this? Comments?

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

5079. Re: Connecting sound card to Computer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-21 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <385FC879.869DB13D@erols.com>
Source record: 64739
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

> BUT I heard it is a different story for the MIC input.
> I was told that the mic jack on a sound card is a MONO
> circuit but uses a STEREO JACK with one channel carrying
> the audio and the other carrying a DC voltage for the mic.
> It was suggested that I use a STEREO connector and ONLY
> use the TIP which carries the audio. (AND DON'T USE the
> RING which carries the polarizing voltage).
>
> Since HAMS like me sometimes plug cables in the wrong jack
> (especially if the mic and line input jacks are beside each
> other), it sounds to me like a good idea to only use one
> channel carried in the tip (even if you PLAN to connect it to
> the line input jack where it doesn't matter)
>
> Any thoughts?
>
> Rob

If your mike is set up that way then you do want to use the tip only and you are right, it's best to do it that way for consistancy. I don't know of any benefit to feeding both channels.

5080. Re: HOW To Make: Notch, High Pass, Low Pass, etc Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-21 00:00:00 UTC
From: William Ricker <wdr@world.std.com>
Message-ID: <Fn3uGz.M86@world.std.com>
Source record: 64740

Tom,

I for one would be interested in references to books on using
helical filters. I am very impressed by the intermod resistance of
my one radio that has one, and would like to make an accessory to
switch one in and out of line on other radios. (Kind of hard to get
NOAA Weather Radio on the 2m receiver with a filter in line ... but
is QRO enough it would probably bleed through :-)

73 and ARL SIXTY ONE,

BILL N1VUX
--
Bill Ricker N1VUX wdr@world.std.com "The freedom of the press belongs
http://world.std.com/~wdr/ to those who own one."--A.J.Liebling

5081. Re: Connecting sound card to Computer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-21 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <83ok84$1kq$1@bob.news.rcn.net>
Source record: 64741
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

I would guess that in most sound cards the mike bias voltage is
supplied via a large value resistor so that shorting it to ground
will not do any damage to the sound card. In most cases the drive
impedance of your receiver's audio circuit is low enough that there
won't be any problems there either. Still, it's a good practice to
not connect the mike tip connection.

Rob Janssen <nomail@pe1chl.demon.nl> wrote in message
news:slrn85ujcs.du5.nomail@linux.pe1chl.ampr.org...
> Rob <NoEmail@NoWay.com> wrote:
> >DO NOT USE the TIP of the connector. Leave it unconnected!
>
> >This is the best approach! If you accidentally plug this cable
into the MIC
> >jack of the sound card instead of the LINE INPUT, you will not
cause any
> >damage to your sound card! In fact, the cable will even work and
provide an
> >audio signal from the radio to your sound card!
>
> >(If you don't follow this recommendation, you MIGHT damage your
sound card.
> >It depends on whether your sound card has any short circuit
protection etc)
>
> I presume that anything that uses a (mini-)jack connector has some
form
> of short circuit protections, as these connectors routinely short
out their
> connections when plugging in/out or fondling with the connector to
find
> the spot of good ground contact.
>
> Normally there is a small regulator on the card to provide the
voltage,
> and it is short-circuit protected. It could run a little hot when
left
> shorted all the time.
>
> A better recommendation seems to always use AC-coupling on the
soundcard
> inputs, so if you use a transformer, put a (say 1uF) nonpolarized
cap

> in series. Or a resistor of sufficient value to reduce the
current,
> and small enough in relation to the input impedance. 4k7 or so.
>
> In fact, this is always a good thing to do. When I make
connections
> to transceivers for 9k6 modification, where AC coupling is a bad
idea,
> I always put in a small series resistor directly at the connection
point,
> to avoid damage to the transceiver when the outgoing lead is
shorted to
> ground or to small voltages like +5 or +12. Better to have some
percent
> of signal loss than a blown-out 3357.
>
> Rob
> --
>
+----------------------------------+----------------------------------
-----+
> | Rob Janssen pe1chl@amsat.org | WWW:
http://www.knoware.nl/users/rob |
> | AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS:
PE1CHL@PI8WNO.#UTR.NLD.EU |
>
+----------------------------------+----------------------------------
-----+

5082. Re: FEDS RAID ELECTRONIC HOBBY VENDORS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-21 00:00:00 UTC
From: William Ricker <wdr@world.std.com>
Message-ID: <Fn3v7t.7zo@world.std.com>
Source record: 64742

> http://www.2600.com/news/1999/1218.html

Ramsey has a "good and longstanding reputations for selling inexpensive, quality educational kits and components"?

The raid on Bill Cheek, for possession of Op-Amps with intent to distribute, is absurd -- and given his health situation, cruel and pointless. Regulations on reception of un-encrypted broadcasts was previously (act of 1937) recognized as absurd and unenforceable in the large, so they used to regulate release of privileged information, which is actionable. This new law and new interpretation is baloney.

But this is the first time I've heard of anyone other than Ramsey refer to Ramsey as puveyors of quality goods. I've never quite understood what loophole it was that kept their kits for building devices that one could only vainly hope might comply with FCC emissions regulations from being open-and-shut illegal.

--
Bill Ricker N1VUX wdr@world.std.com "The freedom of the press belongs
http://world.std.com/~wdr/ to those who own one."--A.J.Liebling

5083. Re: FLORIDA TEST EQUIPMENT ?????????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-21 00:00:00 UTC
From: hale@fc.hp.com
Message-ID: <83ooanbth1@fcnews.fc.hp.com>
Source record: 64743
Cross-posted to: misc.industry.electronics.marketplace,sci.electronics.equipment,sci.electronics.design,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Paul Stavrou (pcstavrou@enter.net) wrote:
: You MUST go to Skycraft Parts. It's a few miles north of the center of
: Orlando (About 30~45 minutes from Disneyworld). Thake I-4 north of the
: city to Fairbanks exit. The store is a few hundred yards from the exit,

The world's greatest surplus store. But no bargains on test
eqt. They should reduce the prices and move it out.

: with a small drop tank mounted on a pole out front. It is the place
: that every tinkerer, engineer and radio operator wishes was in his
: neighborhood. They have everything electronic/mechanical, new and
: surplus. It's a must see. I get to the area a few times a year on
: business and a stop at Skycraft is manditory and always fit into the
: schedule.

Always!! Bill Hale in Colorado

: PS

: Bob Greenacre wrote:

: > Will be touring Florida in the next couple of weeks.
: >
: > Anyone know of any bargain / surplus / used test equipment outlets
: > or ham swap meets that might be worth a visit ??????
: >
: > Bob Greenacre
: > London - UK

5084. WTB: HEATHKIT ITEMS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-22 00:00:00 UTC
From: W5IDX <W5IDX@worldnet.att.net>
Message-ID: <83psem$2b0$1@bgtnsc01.worldnet.att.net>
Source record: 64652
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

I Am In Need Of A Few Heathkit Items To Get A HW-16 Up And Running.
I Need The Following.

1 Meter For The HW-16
1 HG-10B VFO
Manual For The HW-16
Manual For The HG-10B
Manual For A HW-8
Matching External Speaker
Possibly Some Crystals

Please Nothing Expensive I Am Trying To Fix Up An Old Junker For The Fun Of
It.
73's W5IDX

P.S. I Have A Bunch Od NOS Tubes To Trade.
73'S W5IDX@worldnet.att.net

5085. Re: Connecting sound card to Computer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-22 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <3860D8DC.A844C299@erols.com>
Source record: 64653
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

1/4-inch plugs & jacks have the same basic construction thus the same problem. Sound system instrument cables sometimes use a 1/4-inch plug which contains an internal switch to short the tip and sleave until the plug is fully inserted. This prevents hums and buzzes while connecting cables.

Rob wrote:
>
> I am just curious. Are the big 1/4 inch stereo jacks and plugs better than
> the smaller mini stereo jacks and plugs? That is, are the big stereo jacks
> better designed than the smaller 3.5 mm jacks such that the big 1/4 jacks
> not to"short out" some of the circuits when plugging them in and out of the
> jack?
>
> Rob
>
> "Chris Smolinski" <csmolinski@erols.com> wrote in message
> news:385F80DF.9C6816B@erols.com...
> > Apple avoided this problem by using a modified (longer) plug for the
> > microphone. The DC power is at the tip, but since the jack is designed
> > for a longer plug, a normal plug won't reach it. The center ring is
> > longer, and connects to both left and right channels, for blended mono
> > recording. Yet a stereo plug could also be used, for true stereo
> > recording.
> >
> > 73's
> > Chris
> > N3JLY
> >
> >
> > Rob wrote:
> > >
> > > IMPORTANT -- CORRECTION -- PLEASE READ
> > >
> > > The mic jack on a sound card is a MONO circuit but uses a STEREO JACK
> with
> > > one channel carrying the audio to the sound card from the mic and the
> other
> > > channel carrying a DC voltage to power a mic.
> > >
> > > I made a big mistake. THE TIP OF THE MIC CONNECTOR CARRIES THE DC NOT
> THE
> > > AUDIO AS I SUGGESTED IN MY LAST POSTING!

> > >
> > > Most people use one of the channels of the sound card's LINE INPUT and
> do
> > > NOT use the sound card's mic input for good reason.
> > >
> > > IN ANY EVENT, EVEN IF one is going to connect a cable from a Radio's
> audio
> > > output to the Computer's sound card LINE INPUT, I strongly suggest that
> one
> > > uses a STEREO connector and ONLY use the centre ring which carries the
> > > audio to the sound card and the lower ring for the mic ground return.
> > >
> > > DO NOT USE the TIP of the connector. Leave it unconnected!
> > >
> > > This is the best approach! If you accidentally plug this cable into the
> MIC
> > > jack of the sound card instead of the LINE INPUT, you will not cause any
> > > damage to your sound card! In fact, the cable will even work and
> provide an
> > > audio signal from the radio to your sound card!
> > >
> > > (If you don't follow this recommendation, you MIGHT damage your sound
> card.
> > > It depends on whether your sound card has any short circuit protection
> etc)
> > >
> > > 73's
> > > Rob
> > > VA2FB

5086. Re: sound card / Computer GROUNDS AND STEREO PLUGS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-22 00:00:00 UTC
From: John Dewey <KA9CAR@NS.arrl.net>
Message-ID: <83qorq$57d1@news.tis-in.trb>
Source record: 64654
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

My 2 cents worth. Since I get reports of 25 to 32 on my signal quality, I feel my method has worked.

On both tx and rx I am using the only the tip (and sleeve) of a stereo connector.

On my IBM Mwave audio card, I have connected ONLY the Tip. Due to the audio level available, I am using the MIC input to the card. THERE IS 5 V DC ON THIS TIP. Until I isolated it (capacitor) it caused the squelch in my radio to act funny.

I use a Transformer with a capacitor in the transmit line to keep the radio mike bias dc from saturating the transformer secondary. The transformer is wired to JUST the Radio MIC + and - on the radio side, and to the PC Audio out, AND THE PC OUT AUDIO NEGATIVE INSIDE THE SHEILD of the BALANCED type wire I used from the PC to the control box. This was done to Keep the RF, (if any) flowing on the Sheild of the audio line, and cause the audio energy to flow ONLY on the two balanced wires and not the sheild. At the PC end ONLY the sheild is common with the Audio - line on the PRIMARY side of the transformer. I put a POT in the Primary side of this circuit to adjust transmit levels.

There are several paths, includding the PTT line and both of the audio sheilds that connect the pc case to the radio case.

I have the PC and the radio plugged into the same power outlet. The radio Power supply internally connects the DC minus to the Power line Ground, and the radio internally connects the DC - to the radio case ground. These are two items I can't change, so I made sure the rest of the grounding followed along.

I do have one annoying Ground Loop on one band, but it is Caused by a separate piece of equipment that is not used when On psk or SSTV so I just unplug that piece of equipment when on 20 meters.

KA9CAR

Rob wrote in message ...
>I heard that it is NOT a good idea to connect both channels (Left and Right)
>of the sound card's line output to the Rig's mic input. It might cause
>distortion. (On the other hand, I heard it doesn't matter whether the rig's
>speaker output is connected to both channels of the sound card's line input
>or mic input).
>

>Is this true? Will there be distortion?
>
>I also heard if you just used a mono plug for the sound card's line output
>(or speaker output), it will short out one of the channels and may cause
>distortion. It is best to use a stereo plug and only use one of the
>channels. Is this good advice?
>
>73's
>
>Rob
>VA2FB
>
>
>

5087. Re: Sound card grounds are common you cant stop it. my method of dealing with it.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-22 00:00:00 UTC
From: John Dewey <KA9CAR@NS.arrl.net>
Message-ID: <83qpf4$57d2@news.tis-in.trb>
Source record: 64655
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

My set up has yielded a (G3PLX) "signal cleanliness" value in excess of 30 db, so I feel it has been effective. I use this for my SSTV and My PSK31.

GIVEN
The Computer case has 3 wire ground, AND DC power supply connects radio case to 3 wire ground via DC- The radio case and the PC case are connected via the 110 volt line third wire.

Things I can control.
All wires between my Radio and My pc and my switch box, have outer sheilds that are connected to the cases on their respective ends.

I used a BALANCED audio line from PC to Transformer (INCLUDING a capacitor to block the 5 v dc voltage that IS on the TIP of the MY sound card Mic Input). The transformer Primary is connected through a POT to the BALANCED wires only. This way AUDIO energy flows INSIDE the sheild, even though the sheild and one of the balanced lines are common at the PC.

On the PC side I ran the Balanced lines from the transformer to the Mic + and MIC-. The Shield is connected to case ground on both sides.

On recieve, I simply used a Capacitor in the audio line to block the RADIO's DC Mic bias from the sound card input.

KA9CAR

Rob wrote in message ...
>I heard that it is NOT a good idea to connect both channels (Left and Right)
>of the sound card's line output to the Rig's mic input. It might cause
>distortion. (On the other hand, I heard it doesn't matter whether the rig's
>speaker output is connected to both channels of the sound card's line input
>or mic input).
>
>Is this true? Will there be distortion?
>
>I also heard if you just used a mono plug for the sound card's line output
>(or speaker output), it will short out one of the channels and may cause
>distortion. It is best to use a stereo plug and only use one of the
>channels. Is this good advice?
>
>73's
>

>Rob
>VA2FB
>
>
>

5088. Re: Operating Console Plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-22 00:00:00 UTC
From: pmunsel@aol.com
Message-ID: <19991222101009.06664.00000442@ng-bg1.aol.com>
Source record: 64656

Hello Rick, I have seen some articles and plans for operating desks in older ARRL Hints and Kinks. They were somewhat simple, but were pretty efficient appearing. I have a table made like a bench of 2 X 4's, and 5/8" plywood. On that I have two old Motorola consoles that were surplus from the Police Dept, and Sheriff's Dept. bought at auction. I have removed the original internal gear, made panel's for them, and installed my own gear. These consoles are about 4' long, 20" deep, and 10" tall. They house my solid state Ham / CB gear, as well as my tube type Ham/CB gear. Hope this helps a bit.
73,
Paul Munsel N5XMV
Hearne, Tx. 77859

5089. Re: Operating Console Plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-22 00:00:00 UTC
From: "R. J. Scott" <kf7qz@yahoo.com>
Message-ID: <3860F383.E2619CFE@yahoo.com>
Source record: 64657

PMunsel wrote:
>
> Hello Rick, I have seen some articles and plans for operating desks in older
> ARRL Hints and Kinks. They were somewhat simple, but were pretty efficient
> appearing. I have a table made like a bench of 2 X 4's, and 5/8" plywood. On
> that I have two old Motorola consoles that were surplus from the Police Dept,
> and Sheriff's Dept. bought at auction. I have removed the original internal
> gear, made panel's for them, and installed my own gear. These consoles are
> about 4' long, 20" deep, and 10" tall. They house my solid state Ham / CB gear,
> as well as my tube type Ham/CB gear. Hope this helps a bit.
> 73,
> Paul Munsel N5XMV
> Hearne, Tx. 77859
OOOO, Paul I never thought of that, what a brilliant Idea. Ive seen
those consoles that the Departments use. they are Gorgeous (well some
are). I think Ill check my local departments and see what they have/had

Rick KF7QZ

5090. Re: Do I need mica?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-22 00:00:00 UTC
From: Tom Bruhns <tom_bruhns@agilent.com>
Message-ID: <386103C1.1622E2F7@agilent.com>
Source record: 64658

"NPO" or "C0G" type ceramics should be fine. Those are simply the "old" and "new" designations for essentially the same thing. They should be commonly available in the values you'll need for the bandpass filter...I use them up to 4.7nF as surface mount parts and they are available in larger values than that. Regardless of whether you use ceramic or mica, be sure the leads are extremely short, especially on larger value capacitors where a tiny inductive reactance can significantly alter the overall reactance seen by the circuit it's connected to.

Cheers,
Tom

1victor@iname.com wrote:
>
> Hi. Would it greatly affect the performance of a 32MHz 3rd order
> bandpass filter
> if I used ceramic disk caps instead of mica ones?

5091. Re: RG58/U or RG8/U for magnetic antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-22 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <m9884.147329$y45.3030356@news4.giganews.com>
Source record: 64659

You are correct of course that the small antennas have a very low radiation resistance, so low that even a fraction of an Ohm makes a substantial difference. That of itself shows how poor an antenna it is, that pretty much all of the impedance is loss rather than radiation.

Perhaps some sort of transformer would work, increasing the impedance from an Ohm or so to 50 Ohms, a simple 7:1 ratio should do that. If the frequency is low enough an audio transformer could work, or something similar with a core appropriate for the frequency.

Why is your message dated one month from now? My screen shows January 2000 for the time stamp.

73, Bob K6DDX

5092. Re: Sound card grounds are common you cant stop it. my method of dealing with it.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-22 00:00:00 UTC
From: Rob <NoEmail@NoWay.com>
Message-ID: <kRb84.199617$5r2.508667@tor-nn1.netcom.ca>
Source record: 64660
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

Hi John,

I am curious why you choose to use the TIP of the Mic connector for the sound card (where there is DC) and not the middle ring for the audio input. If you connect the middle ring and the outer ring of a stereo jack to the Mic+ and Mic- lines (via audio isolation transformer), you won't need to use a DC blocking cap.

I am also curious what is the capacitance of the DC blocking capacitor that you use?? (10 MF??). The value obviously works well for you.

Yes, I have heard that using balanced lines inside a shielded cable may help with RFI. It is a really good idea to use this type of shielded cable! But I doubt it will solve a ground loop problem!

It is NOT a very good idea to ground the shields of all the cables from the PC to the switching box AND to ground the shields of ALL the cables from the radio to the switching box. You WILL NOT break up the GROUND LOOPS this way even if you use balanced lines inside a shielded cable.

The purpose of the audio isolation transformers is to break up the ground loops on the audio lines. Yes there will always be a ground connection via the AC lines but that it is okay. The ground loop interference is NOT caused by the indirect ground connection via the AC line. It is caused by the generally SHORTER ground path from your PC to your Radio via the audio and PTT lines.

If all the shields of ALL the cables connected to the switching box are grounded to the switching box, you will provide a SHORT ground path from the radio to the PC (via the switching box). In other words, you will NOT have broken up the ground loop. You have defeated the purpose of using the audio isolation transformers in the first place!

It sounds like your audio is great nonetheless. But I suspect that you would also have great audio if you DID NOT EVEN USE the audio isolation transformers. Many Hams have great audio without any ground loop problems WITHOUT using audio isolation transformers and opto coupler PTT circuits. They are lucky.

I suggest that you disconnect the shields of ALL the cables coming EITHER from the PC OR the radio to the switching box. This will at least break up the ground loops on the audio lines. (These shields disconnected at the switching box will be grounded at the PC or Radio but the ground loop will be broken at the switching box).

Try it. You may find it cures your ground loop problem on 20 meters.

Don't get me wrong. The use of the shielded cables (with balanced lines inside) is a great idea to help prevent RFI problems! But if you have a REAL ground loop problem, in my view, it is not a great idea to provide a DIRECT SHORT ground path from the PC to the radio via the shields of these cables connected to the switching box.

73's

Rob

"John Dewey" <KA9CAR@NS.arrl.net> wrote in message
news:83qpf4$57d2@news.tis-in.trb...
> My set up has yielded a (G3PLX) "signal cleanliness" value in excess of 30
> db, so I feel it has been effective. I use this for my SSTV and My PSK31.
>
> GIVEN
> The Computer case has 3 wire ground, AND DC power supply connects radio
case
> to 3 wire ground via DC- The radio case and the PC case are connected via
> the 110 volt line third wire.
>
> Things I can control.
> All wires between my Radio and My pc and my switch box, have outer sheilds
> that are connected to the cases on their respective ends.
>
> I used a BALANCED audio line from PC to Transformer (INCLUDING a capacitor
> to block the 5 v dc voltage that IS on the TIP of the MY sound card Mic
> Input). The transformer Primary is connected through a POT to the
BALANCED
> wires only. This way AUDIO energy flows INSIDE the sheild, even though
the
> sheild and one of the balanced lines are common at the PC.
>
> On the PC side I ran the Balanced lines from the transformer to the Mic +
> and MIC-. The Shield is connected to case ground on both sides.
>
> On recieve, I simply used a Capacitor in the audio line to block the
RADIO's
> DC Mic bias from the sound card input.
>
> KA9CAR
>
>
> Rob wrote in message ...
> >I heard that it is NOT a good idea to connect both channels (Left and
> Right)
> >of the sound card's line output to the Rig's mic input. It might cause
> >distortion. (On the other hand, I heard it doesn't matter whether the
> rig's
> >speaker output is connected to both channels of the sound card's line

input
> >or mic input).
> >
> >Is this true? Will there be distortion?
> >
> >I also heard if you just used a mono plug for the sound card's line
output
> >(or speaker output), it will short out one of the channels and may cause
> >distortion. It is best to use a stereo plug and only use one of the
> >channels. Is this good advice?
> >
> >73's
> >
> >Rob
> >VA2FB
> >
> >
> >
>
>

5093. Re: Filter/Ground question with HT

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-22 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <3861686E.6D2D@arrl.net>
Source record: 64661

Dale Parfitt wrote:

> Check our WEB site for some near ideal V/U filters. For instance,
> Insertion loss at 146 MHz= 0.24 dB, Return loss >25 dB and loss at the
> pager freqs (152-153 MHz) > 50 dB. http://www.parelectronics.com

The ARRL Lab has tested those filters and they work as advertised. For a general writeup on intermod, and a discussion of various techniques to filter intermod problems, see:

http://www.arrl.org/tis/info/intermod/

73,
Ed Hare, W1RFI
ARRL Lab

5094. Re: Need help building an ELECTRET mic for PC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-22 00:00:00 UTC
From: Rich Peet <peet@citilink.com>
Message-ID: <Gbe84.117$2O6.18208@ptah.visi.com>
Source record: 64662
Cross-posted to: rec.radio.amateur.homebrew,rec.audio.pro,rec.audio.tech

no it won't sound as good.
here is a cheap solution that will.
see: http://products.analog.com/products/info.asp?product=SSM2017

"Chris G." <chrisgie@txdirect.net> wrote in message
news:s5v6095srg322@corp.supernews.com...
>
> Gene <genes@texas.net> wrote in message
news:83j7n5$gn6$1@nnrp1.deja.com...
> > FYI: Here is a schematic to build a Sound Blaster Microphone
> > Preamplifier:
> > http://www.hut.fi/Misc/Electronics/circuits/sbmicamp.html
> >
> >
>
> Yeah but does it sound as good as a Macke mic preamp?
> That's what we want to know!!! :)
>
> Chris G.
>
>
>

5095. Re: FLORIDA TEST EQUIPMENT ?????????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-22 00:00:00 UTC
From: Martin Plourde <maplourde@videotron.ca>
Message-ID: <38619216.42D3BBDB@videotron.ca>
Source record: 64663
Cross-posted to: misc.industry.electronics.marketplace,sci.electronics.equipment,sci.electronics.design,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Come in and see our store, units are not piled but placed in racking and we
have scopes starting at $150 U.S. We are located in Montreal but you can visit
our web site;
Http://www.select-test.com
We have over 250 scopes in stock. See for yourself on our web page.

Regards,

Martin Plourde
(514) 326-5261
Gordon Wedman wrote:

> <But no bargains on test eqt. They should reduce the prices and move it
> out.>
> Sounds like Michael Marchand at Toronto Scientific and Surplus. Has scopes
> piled up from the floor to the ceiling (20 feet) but you can't buy one for
> less than $400. And that's just his scope section.
>
> Bill Hale wrote in message <83ooanbth1@fcnews.fc.hp.com>...
> >Paul Stavrou (pcstavrou@enter.net) wrote:
> >: You MUST go to Skycraft Parts. It's a few miles north of the center of
> >: Orlando (About 30~45 minutes from Disneyworld). Thake I-4 north of the
> >: city to Fairbanks exit. The store is a few hundred yards from the exit,
> >
> >The world's greatest surplus store. But no bargains on test
> >eqt. They should reduce the prices and move it out.
> >
> >: with a small drop tank mounted on a pole out front. It is the place
> >: that every tinkerer, engineer and radio operator wishes was in his
> >: neighborhood. They have everything electronic/mechanical, new and
> >: surplus. It's a must see. I get to the area a few times a year on
> >: business and a stop at Skycraft is manditory and always fit into the
> >: schedule.
> >
> >Always!! Bill Hale in Colorado
> >
> >: PS
> >
> >
> >
> >: Bob Greenacre wrote:
> >
> >: > Will be touring Florida in the next couple of weeks.

> >: >
> >: > Anyone know of any bargain / surplus / used test equipment outlets
> >: > or ham swap meets that might be worth a visit ??????
> >: >
> >: > Bob Greenacre
> >: > London - UK
> >
> >

5096. Re: Connecting sound card to Computer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-22 00:00:00 UTC
From: Hamish Moffatt <hamish@rising.com.au>
Message-ID: <83p5bdcgh2@arachne.labyrinth.net.au>
Source record: 64664
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

In rec.radio.amateur.digital.misc Bob Lewis <aa4pb@erols.com> wrote:
> I would guess that in most sound cards the mike bias voltage is
> supplied via a large value resistor so that shorting it to ground
> will not do any damage to the sound card. In most cases the drive
> impedance of your receiver's audio circuit is low enough that there
> won't be any problems there either. Still, it's a good practice to
> *not* connect the mike tip connection.

Why would you want to use the mic input anyway? My experience has
been that that input distorts any signal of interest except
when connected to a microphone; from memory it usually contains
internal preamps. I always use the line-in instead (and even my laptop
has one).

Hamish VK3SB
--
Hamish Moffatt Mobile: +61 412 011 176 hamish@rising.com.au
Rising Software Australia Pty. Ltd. http://www.risingsoftware.com/
Phone: +61 3 9894 4788 Fax: +61 3 9894 3362 USA: 1 888 667 7839

5097. OMNI-VI TEN TEC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-23 00:00:00 UTC
From: jose luis <grukain@teleline.es>
Message-ID: <38615cdc@es.classicweb.com>
Source record: 64665

Estoy interesado en conseguir el manual en castellano del transceptor
omni-VI y del acoplador ten-tec modelo 238 , pagaria lo que fuese necesario
Muchas gracias por leer este mensaje
jbartu@teleline.es

Mensaje publicado desde http://www.ibernews.com
--------> No has visto nada igual! <----------

5098. Re: FLORIDA TEST EQUIPMENT ?????????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-23 00:00:00 UTC
From: Gordon Wedman <gordwedman@attcanada.net>
Message-ID: <1if84.11531$j%2.773@cabot.ops.attcanada.net>
Source record: 64666
Cross-posted to: misc.industry.electronics.marketplace,sci.electronics.equipment,sci.electronics.design,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

<But no bargains on test eqt. They should reduce the prices and move it
out.>
Sounds like Michael Marchand at Toronto Scientific and Surplus. Has scopes
piled up from the floor to the ceiling (20 feet) but you can't buy one for
less than $400. And that's just his scope section.

Bill Hale wrote in message <83ooanbth1@fcnews.fc.hp.com>...
>Paul Stavrou (pcstavrou@enter.net) wrote:
>: You MUST go to Skycraft Parts. It's a few miles north of the center of
>: Orlando (About 30~45 minutes from Disneyworld). Thake I-4 north of the
>: city to Fairbanks exit. The store is a few hundred yards from the exit,
>
>The world's greatest surplus store. But no bargains on test
>eqt. They should reduce the prices and move it out.
>
>: with a small drop tank mounted on a pole out front. It is the place
>: that every tinkerer, engineer and radio operator wishes was in his
>: neighborhood. They have everything electronic/mechanical, new and
>: surplus. It's a must see. I get to the area a few times a year on
>: business and a stop at Skycraft is manditory and always fit into the
>: schedule.
>
>Always!! Bill Hale in Colorado
>
>: PS
>
>
>
>: Bob Greenacre wrote:
>
>: > Will be touring Florida in the next couple of weeks.
>: >
>: > Anyone know of any bargain / surplus / used test equipment outlets
>: > or ham swap meets that might be worth a visit ??????
>: >
>: > Bob Greenacre
>: > London - UK
>
>

5099. Walkie Talkie plans?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-23 00:00:00 UTC
From: Paul <paulposluszny@hotmail.com>
Message-ID: <Zuh84.11085$ak.12301@news20.bellglobal.com>
Source record: 64667

I want to build a walkie talkie type thing but dont have the slightest clue on how to make one if it can be made. I took apart old radios, phones, and stuff like that for parts that may be needed. I dont need something too high tech just something that has a larger range than my brothers cheap set. Are there any info sources for stuff like this? Having channels would be nice too although not that important. Thanks

5100. (none)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-23 00:00:00 UTC
From: w6ors@juno.COM
Message-ID: <19991222.221417.-216029.9.w6ors@juno.com>
Source record: 64668

```
restore

----------------------------------------------------------------------
Why pay more to get Web access?
Try Juno for FREE -- then it's just $9.95/month if you act NOW!
Get your free software today: http://dl.www.juno.com/dynoget/tagj.
```

5101. WTB Heathkit Items & Parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-23 00:00:00 UTC
From: W5IDX <W5IDX@worldnet.att.net>
Message-ID: <83sk73lmr1@bgtnsc01.worldnet.att.net>
Source record: 64669
Cross-posted to: rec.ham-radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

I Am In Need Of A Few Heathkit Items To Get A HW-16 Up And Running.
I Need The Following.

1 Meter For The HW-16
1 HG-10B VFO
Manual For The HW-16
Manual For The HG-10B
Manual For A HW-8
Matching External Speaker
Possibly Some Crystals

Please Nothing Expensive I Am Trying To Fix Up An Old Junker For The Fun Of
It.
73's W5IDX

P.S. I Have A Bunch Od NOS Tubes To Trade.
73'S W5IDX@worldnet.att.net

5102. FS/FT: 10 Amp variac

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-23 00:00:00 UTC
From: ovrreactor@aol.com-nospam
Message-ID: <19991223034145.02467.00001294@ng-fv1.aol.com>
Source record: 64670

Like the subject heading says, I have a General Radio 10 Amp variac that needs a new home.

For a pic and info;

http://members.aol.com/Reactor001

$50 plus shipping (trades considered...whaddya got?).

Interested? Please respond by email.

Regards,
Tom Mitchell
email - OvrReactor@aol.com

5103. Re: Need help building an ELECTRET mic for PC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-23 00:00:00 UTC
From: Gene <genes@texas.net>
Message-ID: <83tdbo$hr1$1@nnrp1.deja.com>
Source record: 64671
Cross-posted to: rec.radio.amateur.homebrew,rec.audio.pro,rec.audio.tech

Anyone have a mic design using the SSM2017 (or similar)
that "uses the +5v from my SoundBlaster AWE64" ?

In article <Gbe84.117$2O6.18208@ptah.visi.com>,
"Rich Peet" <peet@citilink.com> wrote:
> no it won't sound as good.
> here is a cheap solution that will.
> see: http://products.analog.com/products/info.asp?product=SSM2017
>
> "Chris G." <chrisgie@txdirect.net> wrote in message
> news:s5v6095srg322@corp.supernews.com...
> >
> > Gene <genes@texas.net> wrote in message
> news:83j7n5$gn6$1@nnrp1.deja.com...
> > > FYI: Here is a schematic to build a Sound Blaster Microphone
> > > Preamplifier:
> > > http://www.hut.fi/Misc/Electronics/circuits/sbmicamp.html
> > >
> > >
> >
> > Yeah but does it sound as good as a Macke mic preamp?
> > That's what we want to know!!! :)
> >
> > Chris G.
> >
> >
> >
>
>

--

Gene : genes@texas.net

Sent via Deja.com http://www.deja.com/
Before you buy.

5104. Re: Connecting sound card to Computer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-23 00:00:00 UTC
From: "Rob K." <NoEmail@Pse.com>
Message-ID: <OEr84.199758$5r2.509686@tor-nn1.netcom.ca>
Source record: 64672
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

Hi Hamish,

Yes the preferred route is the line input jack of your sound card. But sometimes the Line Input doesn't work well (e.g. defective computer etc). Instead of paying for an expensive computer repair, the easiest solution is to use the mic input jack of your sound card.

But as you pointed out many mic input jacks have preamplifiers which can distort the signal. Fortunately, many sound card mixer programs (or other programs on your Windows Control Panel) have the option to TURN OFF the mic preamplifier which I highly recommend!

Many thanks for raising the mic preamplifier issue!

73's
Rob
"Hamish Moffatt" <hamish@rising.com.au> wrote in message
news:83p5bdcgh2@arachne.labyrinth.net.au...
> In rec.radio.amateur.digital.misc Bob Lewis <aa4pb@erols.com> wrote:
> > I would guess that in most sound cards the mike bias voltage is
> > supplied via a large value resistor so that shorting it to ground
> > will not do any damage to the sound card. In most cases the drive
> > impedance of your receiver's audio circuit is low enough that there
> > won't be any problems there either. Still, it's a good practice to
> > *not* connect the mike tip connection.
>
> Why would you want to use the mic input anyway? My experience has
> been that that input distorts any signal of interest except
> when connected to a microphone; from memory it usually contains
> internal preamps. I always use the line-in instead (and even my laptop
> has one).
>
>
> Hamish VK3SB
> --
> Hamish Moffatt Mobile: +61 412 011 176 hamish@rising.com.au
> Rising Software Australia Pty. Ltd. http://www.risingsoftware.com/
> Phone: +61 3 9894 4788 Fax: +61 3 9894 3362 USA: 1 888 667 7839

5105. Re: Simple method for variable brightness Xmas lights

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-23 00:00:00 UTC
From: Hagstar <yonny@worldnet.att.net>
Message-ID: <38625030.37610B5C@worldnet.att.net>
Source record: 64673
Cross-posted to: sci.electronics.repair,rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.homebrew

Sofie wrote:
>
> Or......a cheap light dimmer works very nicely.
> ==
>

Except for the monsterous amount of RF hash it generates.

John H.

5106. Re: Need help building an ELECTRET mic for PC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-23 00:00:00 UTC
From: Rich Peet <peet@citilink.com>
Message-ID: <LNs84.672$2O6.39113@ptah.visi.com>
Source record: 64674
Cross-posted to: rec.radio.amateur.homebrew,rec.audio.pro,rec.audio.tech

Top of page 6 of this link will give you the design. I added a capacitor at outputs but is not strictly needed. You can use the 5 volt center ring of the SoundBlaster to give the voltage to the third wire of a electret mic element if that is the type you are using. Radio Shack has a $2.00 electret mic element that is not to bad for this. I used a 10,000 ohm pot. to adjust the gain but you can vary that if you have something else laying around. I will e-mail you direct a .jpeg of a finished hand wired board. You need at least 12 Volts to supply to the chip itself on pins 4 and 7. Usually you can pull that from a serial port if you want it on the same cable from the computer but I used 2 9 volt batteries. Pins 5 and 6 go to the SoundBlaster card. Pins 2 and 3 go to the mic. Pins 1 and 8 have a 10,000K resister. My application was to get as much gain as possible and it works well. A single chirp from a little Nuthatch bird will overpower the input at 15 feet at full gain.

see http://www.analog.com/pdf/1782_c.pdf this is a large pdf file.

"Gene" <genes@texas.net> wrote in message
news:83tdbo$hr1$1@nnrp1.deja.com...
>
>
> Anyone have a mic design using the SSM2017 (or similar)
> that "uses the +5v from my SoundBlaster AWE64" ?
>
>
>
> In article <Gbe84.117$2O6.18208@ptah.visi.com>,
> "Rich Peet" <peet@citilink.com> wrote:
> > no it won't sound as good.
> > here is a cheap solution that will.
> > see: http://products.analog.com/products/info.asp?product=SSM2017
> >
> > "Chris G." <chrisgie@txdirect.net> wrote in message
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> > >
> > > Gene <genes@texas.net> wrote in message
> > news:83j7n5$gn6$1@nnrp1.deja.com...
> > > > > FYI: Here is a schematic to build a Sound Blaster Microphone
> > > > > Preamplifier:
> > > > > http://www.hut.fi/Misc/Electronics/circuits/sbmicamp.html
> > > > >
> > > > >
> > > >
> > > Yeah but does it sound as good as a Macke mic preamp?

> > > That's what we want to know!!! :)
> > >
> > > Chris G.
> > >
> > >
> > >
> >
> >
>
> --
>
> Gene : genes@texas.net
>
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

5107. Re: Simple method for variable brightness Xmas lights

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-23 00:00:00 UTC
From: wa2ise@netcom.com
Message-ID: <83ttqkprj1@nntp1.atl.mindspring.net>
Source record: 64675
Cross-posted to: sci.electronics.repair,rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.homebrew

In article <38625030.37610B5C@worldnet.att.net>,
Hagstar <yonny@worldnet.att.net> wrote:
>Sofie wrote:
>>
>> Or......a cheap light dimmer works very nicely.
>> ==
>>
>
>Except for the monsterous amount of RF hash it generates.
>
To first responder:
You miss the point of the scheme. The system is self varying
over time. Gets brighter, then dimmer, etc. Different light
strings brighten and others dim at the same time.

5108. WANT ---> 861 <--- transmitting tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-23 00:00:00 UTC
From: randy@poker.rdrc.rpi.edu
Message-ID: <83tnslrfk1@poker.rdrc.rpi.edu>
Source record: 64676

Looking for one or more examples of 861 transmitting tubes.
This is for a restoration project of the USS Slater, now docked
as a museum at Albany NY. This WWII vintage ship is being made
operational (!!) by some nutcase volunteers who are also restoring
the radio room and the transmitters and antennas.

This can be a charitable donation.

If you have a similar tube that might fit into the same slot
like a TL-750 or TL 1000 (as a retrofit) that might be of
interest too...

Please contact me via email.

Thanks in advance!

_-_-randy
BEAR Labs

5109. Squelch Circuit problems

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-23 00:00:00 UTC
From: Robin Staebler <Robin@k3fp.com>
Message-ID: <3862A16E.2E8A395F@k3fp.com>
Source record: 64677

We (I) have assumed responsibility for a homebrew GE Master II repeater
that has a Kendecom MR-4 reciever.. We are having problems with the
squelch circuit which controls the COS .. It goes through a SPDT relat
with a diade bleeder to ground ..

DOES ANYONE HAVE A SPEC AND CIRCUIT DIAGRAM PLEASE

--
Robin Staebler, K3FP
Belfast Maine 04915
http://www.k3fp.com

Please visit this site and donate food to the hungry it's Free!
http://www.hungersite.com

5110. Re: Connecting sound card to Computer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-23 00:00:00 UTC
From: Rich Peet <peet@citilink.com>
Message-ID: <LFx84.723$2O6.50034@ptah.visi.com>
Source record: 64678
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

no, most sound cards are mono on the mic input. The center ring is either
not connected or is 5 volts for those with electret mics.

"D. Stussy" <kd6lvw@bde-arc.ampr.org> wrote in message
news:Pine.LNX.4.10.9912192112030.5987-100000@dns.bde-arc.ampr.org...
> Both.
>
> On Sat, 18 Dec 1999, Clifford Buttschardt wrote:
>
> > Which input, mic or line? I can not make any sence out of these
> > statements that do not define what is being said! Cliff K7RR
> >
> >
> > Sat, 18 Dec 1999, D. Stussy wrote:
> >
> > > Depends on the soundcard. Most soundcards now have stereo inputs.
> > >
> > > On Sat, 18 Dec 1999, Clifford Buttschardt wrote:
> > > > Good comments these, but I am still confused. Is the line and
microphone
> > > > inputs USUALLY stereo plugs? I think the mic input is always stereo
but
> > > > does it use the "ring" in any way? I would guess the line input
would be
> > > > mono in most cases. Is this true most of the time? Cliff K7RR
> > > >
> > > > On Sat, 18 Dec 1999, D. Stussy wrote:
> > > >
> > > > > On Sat, 18 Dec 1999, Rob wrote:
> > > > > > I heard that it is NOT a good idea to connect both channels
(Left and Right)
> > > > > > of the sound card's line output to the Rig's mic input. It
might cause
> > > > > > distortion. (On the other hand, I heard it doesn't matter
whether the rig's
> > > > > > speaker output is connected to both channels of the sound card's
line input
> > > > > > or mic input).
> > > > > >
> > > > > > Is this true? Will there be distortion?
> > > > > >
> > > > > > I also heard if you just used a mono plug for the sound card's
line output

> > > > > > (or speaker output), it will short out one of the channels and
may cause
> > > > > > distortion. It is best to use a stereo plug and only use one of
the
> > > > > > channels. Is this good advice?
> > > > > >
> > > > > > ...If someone were smart, the soundcard driver software could be
re-written so
> > > > > > each audio channel were a different "port" thus creating a
dual-port virtual
> > > > > > TNC. Of course, there would have to be two PTT circuits, two DSP
engines for
> > > > > > RX, etc. Then the above situation would be moot.
> > > >
> > > >
> > > >
> > >
>

5111. FS: NPN Photo Xstors and IR LEDs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-23 00:00:00 UTC
From: Bob <bmiller@calweb.com>
Message-ID: <3862b0cc_4@news.calweb.com>
Source record: 64679
Cross-posted to: sci.electronics.components,rec.radio.swap,rec.radio.amateur.homebrew

For Sale:

Item 1. Siemens (Infineon) SFA 487-2 IR LED, 3 mm package 880 nm, half angle +/- 20 degrees, 25 mw radiant power. 100 ma forward current. see infineon web site for more details. 200 for 10 dollars post paid conus

Item 2. Siemens (Infineon) SFH-2 IR LED, 5 mm, 880 nm, half angle +/- 20 degrees, 25 mw radiant power, 100 ma forward current. See Infineon web site for mor data
200 for 10 dollars post paid conus

Item 3. Siemens (Infineon) SFH 309-2/3 NPN Silicon Phototransistor, 380-1180 nm, 3 mm plastic package, +/- 12 degrees

100 for 10 dollars post paid conus

Item 4. Siemens (Infineon) SFH 300FA, NPN Silicon Phototransistor, 5mm plastic package, 880 nm (dark case) +/- 25 degrees

100 for 10 dollars post paid conus

Siemens (Infineon) multi-led LYG 3350-FO, dual color, yellow/green, 3mm frosty diffused case, two wire unit, apply voltage in one direction for yellow and reverse polarity and get green.

200 for 10 dollars post paid conus or 1000 for 40 dollars post paid conus

All units described are new and current production. See Infineon web site for detailed data.

Tnx for the read

Bob, KE6F

5112. cloning software for 706mk2g

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-23 00:00:00 UTC
From: WebMonkey <webmonkey@mad.scientist.com>
Message-ID: <3862DF15.25AF@mad.scientist.com>
Source record: 64680
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.swap

i'm looking for cloning software for an icom 706mk2g

i just want to program memory slots with all the options

haven't found anything to fit the bill yet.

thanks for your time
--
A.C. Curtis
KBï¿½WLF
53.45 and 442.45, 77.0Hz enc/dec [multi-cast repeater system]
mailto:demoman@rollanet.org
http://www.rollanet.org/~demoman

5113. WTB: National Coil Socket XB-16

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-23 00:00:00 UTC
From: CMF40 <c415a@mashell.com>
Message-ID: <3862FD3B.84ED0910@mashell.com>
Source record: 64681
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Looking for National coil socket XB-16 for exciter coil series AR-16.
These are circa late 40's and early 50's.

Please contact by direct e-mail.

Jon WR7JM

5114. Electronic Rainbow AD-8 Manual and software wanted!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-23 00:00:00 UTC
From: Randy and Cara Randall <crrandal@seidata.com>
Message-ID: <3862D69C.C9DD330C@seidata.com>
Source record: 64682

Hello all. I have an AD-8 kit that I now have the time to assemble, but have misplaced the assembly manual and software. I have written the kit manufacturer, but have not yet received a reply. I guess they are out of town for Christmas. Any how do any of you out there have what I am looking for? If so could you e-mail me the manual and software?

Thanks in advance + 73

Randy KB8ASO Milan, IN.

5115. Re: Simple method for variable brightness Xmas lights

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-24 00:00:00 UTC
From: wa2ise@netcom.com
Message-ID: <840n97$b24$1@nntp8.atl.mindspring.net>
Source record: 64594
Cross-posted to: sci.electronics.repair,rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.homebrew

In article <38636616.B3F4D60A@worldnet.att.net>,
Hagstar <yonny@worldnet.att.net> wrote:
>Robert Casey wrote:
>>
>
>> To first responder:
>> You miss the point of the scheme. The system is self varying
>> over time. Gets brighter, then dimmer, etc. Different light
>> strings brighten and others dim at the same time.
>
>Cool, wow. But Robert, how does it work ? It seems almost too simple.
>
Imagine 8 sets of Xmas lights, in sets of 4. Each group of 4
are connected in parallel, and then (by use of a special pair
of series wired plugs) the two groups are in series. Now, when
a blinker bulb in the first group switches off, current can only
flow thru 3 light strings in the first group, but the same
current flows thru all 4 strings of the second group. This will
make the lights that are still on in the first group glow brighter,
and all teh lights in the second group will glow dimmer. Add
more light strings (with blinkers) to both groups, and the
amount of blinkers switching off will become random. And that
makes the various different light strings glow with different and
random levels of brightness.

5116. Component source ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-24 00:00:00 UTC
From: phil <phil@invest.fsbusiness.co.uk>
Message-ID: <hrZ2YnA0E+Y4Ew+I@invest.fsbusiness.co.uk>
Source record: 64595

Two questions for all the constructors out there.

I'm trying to find a manufacturer or failing that a supplier of some inexpensive inductive coupled ammeters and volt meters similar to what are used on the Skywalker amp kits.

They are somewhat cheap and nasty looking but do the job and retail for around 10 bucks a piece?

Also, can anyone tell me which manufacturers produce TO-220 package power resistors in a 30 or 40 watt rating?

If I can find the producers I can then trace a UK distributor or import direct.

Any help greatly appreciated.

Merry Christmas everyone.

Phil G4ZOW

5117. Powermodules..

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-24 00:00:00 UTC
From: "Robert <DC6XS> Eckelmann" <robert.eckelmann@netsurf.de>
Message-ID: <3863EA89.7A23CD03@netsurf.de>
Source record: 64596

Hello!

I am wondering if there exist any EAGLE-Libaries with components like
THe M57714 UHF-Powermodul..

Marry Xmas and a happy New Year 2000!
Robert

5118. WTD: ANT RELAY FOR KENWOOD TS-830S

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-24 00:00:00 UTC
From: Dennis Griffin <w4dg@arrl.net>
Message-ID: <iTR84.835$Fj5.8423@typhoon1.tampabay.rr.com>
Source record: 64597
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Looking for the exact replacement antenna relay for the TS-830S Transceiver.

This relay was manufactured by OMRON and has a 12v coil, DPDT, plug-in type
with a manufactures number of G2E.

Kenwood's part number was S51-1404-05, reference RL1.

Please e-mail me if you have one or more of these relays available for sale.

TNX & 73.

Dennis W4DG

5119. amp wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-24 00:00:00 UTC
From: steve miller <swm332@earthlink.net>
Message-ID: <3862FE72.5B9BBB03@earthlink.net>
Source record: 64598

Looking for single band 4 400 3 500 amp homebrew priced as such.
What do you have that you want to get rid of?

E mail

Thanks,
Steve K4JRC

5120. Re: Need help building an ELECTRET mic for PC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-24 00:00:00 UTC
From: Bob Cain <arcane@znet.com>
Message-ID: <38645018.5D89B2F4@znet.com>
Source record: 64599
Cross-posted to: rec.radio.amateur.homebrew,rec.audio.pro,rec.audio.tech

This nice little baby was designed for boxes with power cords and split supplys unfortunately.

Bob

--

"Things should be described as simply as possible, but no simpler."

A. Einstein

5121. Re: Connecting sound card to Computer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-24 00:00:00 UTC
From: Hamish Moffatt <hamish@rising.com.au>
Message-ID: <83ue3j$1vpb$3@arachne.labyrinth.net.au>
Source record: 64600
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

In rec.radio.amateur.digital.misc Rob K. <NoEmail@Pse.com> wrote:
> But as you pointed out many mic input jacks have preamplifiers which can
> distort the signal. Fortunately, many sound card mixer programs (or other
> programs on your Windows Control Panel) have the option to TURN OFF the mic
> preamplifier which I highly recommend!

Excellent advice. I was not aware that you could usually turn these off.
In W98, I can see an advanced option called "Microphone Gain Control"
(on or off) which might be it.

> Many thanks for raising the mic preamplifier issue!

Cheers
Hamish
--
Hamish Moffatt Mobile: +61 412 011 176 hamish@rising.com.au
Rising Software Australia Pty. Ltd. http://www.risingsoftware.com/
Phone: +61 3 9894 4788 Fax: +61 3 9894 3362 USA: 1 888 667 7839

5122. Motorola trans. ID Help???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-24 00:00:00 UTC
From: dmuthcuz@amauta.rcp.NET.pe
Message-ID: <38639872.58A0AE79@amauta.rcp.net.pe>
Source record: 64601

Can anyone help with this one?

This darlinton transistor in a T48-1 case is the high speed switching transistor for the engine control module in a 95 Jeep Cherokee.

The original only has the markings T 415 on it.

Any help would be much apprciated.

Dan KB0GSI \ OA7ABZ

5123. S meter from MC3359 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-24 00:00:00 UTC
From: Stephen Wilson <stephen.wilson@cmr.uq.edu.au>
Message-ID: <3862BE73.DB4FC83A@cmr.uq.edu.au>
Source record: 64683

Hi All,

Is it possible to derive a signal strength voltage from a pin on the Motorola MC3359 NBFM IC ? I have a commercial transceiver with the above IC and would like an S meter if possible.

All the best for Christmas and New Year.

Steve

5124. ISO RF Medium Power *Production* Transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-24 00:00:00 UTC
From: wb4lnm@aol.com
Message-ID: <19991223200243.25280.00001200@ng-cq1.aol.com>
Source record: 64684

Our club has been working on a low (2 Watt) 222 MHz FM transceiver project. The power device that we had designed in to the unit was a Motorola MRF555 plastic device, which has now been discontinued by Motorola Semiconductor Products along with the great majority of their RF power device line. We are having to redesign that part of the PWB because of Motorola's decision.

We do not want to release the project with obsolete devices, and are looking for a replacement device. Obviously, it would be nice to have it not single-sourced, but that might be asking too much in this day and age of proprietary RF parts. Cost is a great concern - the MRF555 was about $5 in our quantities, and any SOE ceramic part, stud mount or otherwise, is too expensive.

Under investigation right now are a couple of Mitsubishi parts in the TO-39 can with case / emitter grounded. They appear to be duplicates of the MRF237 and MRF629 (which have also been discontinued by Motorola), and are available from RF Parts for $4 - 6. There appear to be NTE equivalents of these, so some "second sourcing" may be possible.

We need something that will put out about 2 watts to the antenna minus T/R relay and LPF filter losses, which are minimal, but do need to be accounted for.

Any assistance in identifying *production* (NOT SURPLUS) parts and suppliers for this application would be appreciated. If you will post the information here in response to this message, then maybe additional homebrewers will be able to benefit also. Thanks and 73.

John...
WB4LNM

5125. Re: Need help building an ELECTRET mic for PC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-24 00:00:00 UTC
From: Roland Burgan <rburgan@up.net>
Message-ID: <386301C9.16CB699F@up.net>
Source record: 64685
Cross-posted to: rec.radio.amateur.homebrew,rec.audio.pro,rec.audio.tech

Just remember, for opamps, such as the 2017, you'll need
at least +/- 15 vdc, preferably +/- 20 vdc for better headroom.

Rich Peet wrote:

> no it won't sound as good.
> here is a cheap solution that will.
> see: http://products.analog.com/products/info.asp?product=SSM2017
>
> "Chris G." <chrisgie@txdirect.net> wrote in message
> news:s5v6095srg322@corp.supernews.com...
> >
> > Gene <genes@texas.net> wrote in message
> news:83j7n5$gn6$1@nnrp1.deja.com...
> > > FYI: Here is a schematic to build a Sound Blaster Microphone
> > > Preamplifier:
> > > http://www.hut.fi/Misc/Electronics/circuits/sbmicamp.html
> > >
> > >
> >
> > Yeah but does it sound as good as a Macke mic preamp?
> > That's what we want to know!!! :)
> >
> > Chris G.
> >
> >
> >

5126. 4-1000 amplfier

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-24 00:00:00 UTC
From: nickg@wi.net
Message-ID: <38630586.5903754@news.inc.net>
Source record: 64686

Does anyone have a MODERN schematic along with part layout pictorals to homebrew a 160-10m amp using this old tube? Any and all info appreciated. TNX de WA3SCI...Nick

5127. HFL1000

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-24 00:00:00 UTC
From: "Krizias S." <caelsec@otenet.gr>
Message-ID: <83v2s2$n2m$1@newssrv.otenet.gr>
Source record: 64687

Hello!
looking for the service/operating manual for Gates HFL1000
Linear 1KW amplifier,will pay top dollar,thank you!!
Simeon caelsec@otenet.gr

5128. Amidon cores

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-24 00:00:00 UTC
From: "Krizias S." <caelsec@otenet.gr>
Message-ID: <83v3lq$nd1$1@newssrv.otenet.gr>
Source record: 64688

there isa company based in Greece with large inventory of
Amidon,try caelsec@otenet.gr

5129. Re: Simple method for variable brightness Xmas lights

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-24 00:00:00 UTC
From: Hagstar <yonny@worldnet.att.net>
Message-ID: <38636616.B3F4D60A@worldnet.att.net>
Source record: 64689
Cross-posted to: sci.electronics.repair,rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.homebrew

Robert Casey wrote:
>

> To first responder:
> You miss the point of the scheme. The system is self varying
> over time. Gets brighter, then dimmer, etc. Different light
> strings brighten and others dim at the same time.

Cool, wow. But Robert, how does it work ? It seems almost too simple.

John H.

5130. Electronic Rainbow AD-8 Manual and software wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-24 00:00:00 UTC
From: "Randy E. Randall" <randy_randall@hotmail.com>
Message-ID: <s673a2cih4574@corp.supernews.com>
Source record: 64690
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.swap

Hello. I have one of these I purchased a while back and have the time to assemble now over the hollidays, but I have misplaced the manual and software diskette. I have E-mailed Elect Rainbow, but I suspect they are gone for the holidays. Does anyone have the software and manual they could E-mail me. A quickie scan of the manual would be great. Please send to: crrandal@seidata.com.

Thanks in advance
Randy KB8ASO Milan, IN.

5131. Any Radio Hamfests or Surpuls Stores in Connecticut??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-24 00:00:00 UTC
From: jsoft@Mercury.mcs.net
Message-ID: <840co1$2mjd$1@Mercury.mcs.net>
Source record: 64691
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

Will be in Connecticut (Stamford) a few months and curious if any surplus stores or hamfests in the next few months... maybe have to take a train south :)

Joe
KB9LZB

5132. WTB SPR-4 5 pin power plug

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-24 00:00:00 UTC
From: Ken Diaz <kenjd@email.msn.com>
Message-ID: <OlatXQkT$GA.276@cpmsnbbsa05>
Source record: 64692

Source Wanted:
Drake SPR-4 5 pin power plug.
This is the one which insets into the back panel.

Actually, I really need a power cord, but doubt I will find one, so I will have to construct it. The challenge is finding a source for the 5 pin plug or it's equivalent.
Thanks, 73,
Ken, WB9YCJ/6

5133. Re: Commercial Mobile Mics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-24 00:00:00 UTC
From: MC 10kW Jesus <qsl27@hotmail.com>
Message-ID: <3863D466.2725DCE1@hotmail.com>
Source record: 64693
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.misc

Radios 'R Me wrote:

> Does anyone have any experience converting Commercial Radio
> microphones over to amateur use?

Yes.

> I have both a G.E. mobile mic and a G.E. (made by Shure) desk mic,
> that both have unshielded wire (strange)

On the contrary. These microphones are obviously intended for use with FM transmitters. RF feedback is seldom an issue with an FM transmitter. Even the most horrific installations are unlikely to cause squealing and howling on FM. The easiest way to confirm is to see if the hanger/nubby on the back of the microphone has a wire attached to it. This is for tone squelch which I've never seen used on any other service.

> and the mobile G.E. has some
> sort of single stage pre-amp.... Or maybe it is the power supply for a
> condenser mic? Not sure.

Not a GE expert, but it is quite likely a pre-amp of some description. It could be a circuit that injects a DC bias from another one of the microphone leads though.

> Can anyone advise?

FM microphones are either dynamic or condenser (duh!). The dynamic units are either unpowered or have a built-in preamplifier. This preamplifier is almost always powered from the microphone line. If they are condenser they will also require a + bias on the microphone line. However, many radios also have a V output pin that could be used to generate the bias in the microphone. The voltage could be between 6V and 13.8V - it all depends upon the unit. A typical ham radio uses a condenser microphone also with bias on the microphone line so using the GE microphone on it shouldn't be too large of an engineering exersize. Of course, you may want to replace that un shielded cable!

MC

5134. Re: North Carolina Electronic/Surplus outlets

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-25 00:00:00 UTC
From: NI4L <ni4l@bellsouth.net>
Message-ID: <38645BE9.9CD3C3C5@bellsouth.net>
Source record: 64602

delks military surplus hwy 64 in ashboro nc about 50 miles from you

Bfayette wrote:

> I just moved to Raleigh and am surprised to find that there seem to be no
> electronic/surplus outlets in the area. Does anybody know of anything within
> reasonable driving distance? Thanks.
>
> Brad

5135. Re: WTB Heathkit Items & Parts (Thanks)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-25 00:00:00 UTC
From: W5IDX <W5IDX@worldnet.att.net>
Message-ID: <841v5e$pd6$1@bgtnsc01.worldnet.att.net>
Source record: 64603
Cross-posted to: rec.ham-radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

I Am In Need Of A Few Heathkit Items To Get A HW-16 Up And Running.
I Need The Following.

1 Meter For The HW-16
Manual For The HW-16

73's W5IDX

The Rest Of The Items I Needed Have Been Located
Thanks To All Whom Replied.

P.S. I Have A Bunch Od NOS Tubes To Trade Or Sale
W5IDX@worldnet.att.net

5136. Re: amp wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-25 00:00:00 UTC
From: techham@my-deja.com
Message-ID: <8426tf$lc7$1@nnrp1.deja.com>
Source record: 64604

In article <3862FE72.5B9BBB03@earthlink.net>,
steve miller <swm332@earthlink.net> wrote:
> Looking for single band 4 400 3 500 amp homebrew priced as such.
> What do you have that you want to get rid of?
>
> E mail
>
> Thanks,
> Steve K4JRC
> I have a pair of 813's desktop unit which cover from 160 meters thru 20 meters...I built it about 6 years ago and have used extensively.... Works fine. picture available. email me at jtravis@buncombe.main.nc.us. thanks!
>

Sent via Deja.com http://www.deja.com/
Before you buy.

5137. HP 8640 OPT. 002

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-25 00:00:00 UTC
From: Peter Bolch <nc-bolchpe@netcologne.de>
Message-ID: <8424ok$6k5$1@news.netcologne.de>
Source record: 64605

Hi,

I have bought a used HP 8640A signal generator and have fitted the 512 - 1024 MHz Option 002 afterwards. Unfourtenately I got no installation instruction with the option 002 but only a few hints. Checking the generator's frequency response with a calibrated R&S URV 3 RF mV-meter I found that the generator's output voltage decreases with increasing frequency (beginning at 30 MHz). The maximum deviation is - 3 dB in the 512 - 1024 MHz range. Adjusting the + 13 dBm pot (on the A26 board) doesn't show any effect.

Does anyone here have the installation and calibration instructions for the OPT. 002 or the schematic of the circuit around the option?

Peter

5138. Ten-Tec 1253 Regen Kit?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-25 00:00:00 UTC
From: "Guillermo C.W." <kd7bfx@mindspring.com>
Message-ID: <3864966F.DFE7D63D@mindspring.com>
Source record: 64606

While not an *honest* homebrew issue, I am intrigued buy both the price and what the ads say you get for that $59. The receiver kit I am talking about is the Model 1253 Regen 9-band SW Receiver Kit. Anyone around here built or listened much to one of these? How does it perform receiving the major SWBC signals? Basically, I am just looking for "official" permission to buy another toy, hi. Yeah, I know already it aint no R8-B or even SW-3, but what it *is*, as the spider asked the fly?

Will
KD7BFX

5139. Ham Radio Web Site

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-25 00:00:00 UTC
From: RH <w4et@arrl.net>
Message-ID: <I5494.190$Rj.3362@news.apex.net>
Source record: 64607
Cross-posted to:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.packet,rec.radio.amateur.policy,rec.radio.amateur.space

I would like to invite you to visit my Ham Radio Web Site

URL http://www.geocities.com/CapeCanaveral/Lab/3076

thanks and 73
Ron - W4ET

5140. Re: Connecting sound card to Computer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-25 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <842mmcifm1@bob.news.rcn.net>
Source record: 64608
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

Do the sound card mike preamplifiers distort the signal even if you don't overdrive them or are you saying it's best not to use them because they are easy to overdrive? If the sound card design is that poor, doesn't it call into question the remainder of it's audio chain? On one setup I have a very low audio output and use the mike input. I've not noticed any problem but of course that's a sample of only one sound card and others could perform quite differently.

5141. Motorola GM300 @ 9600 baud ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-25 00:00:00 UTC
From: "colinlowe@jet" <colinlowe@jet.es>
Message-ID: <842npo$t81$1@lola.ctv.es>
Source record: 64609
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

I have a Motorola GM300 and would like to use it on 9600 packet radio.

Here is the mod that I found on the internet......

The Maxtrac/Radius Series are 9600 baud packet capable. They do need a minor modification though. For RX, its no big deal, just take RX audio from PIN 11 of the Accessory Connector and swing JU551 to the (A) position (Flat RX Unmuted). For TX audio, you will have to run a jumper to the junction of R223,C228,R222 on the RF board to inject the data (if applicable you may need to set the deiation pot in the radio to maximum). You might want to put a pot on your TX line somewhat like the setup Motorola uses (voltage divider) to adjust the deviation. It would be wise to do some measurements to make sure you have the deviation correct. You might also want run the RX and TX pins to the unused pins on the front mic connector after the mods are done.

OK I have opened up the radio and found Jumper JU551 and moved it to the new "A" position.

I now need to find the junction of R223,C228,R222 on the RF board to inject the TX data.

Please can you let me know were the juncion of R223,C228,R222 is. The PCB is not marked and I don't have a diagram for the radio.....Can you help please.

73 de Colin
http://personales.jet.es/colinlowe/index.htm (For Motorola GP300 and GM300 mods etc.....

5142. 116 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-25 00:00:00 UTC
From: t <t@t.t>
Message-ID: <P4694.140$uG.5407@news.siol.net>
Source record: 64610

I need schematics for 116 MHz oscillator. I made VF part for 10 to 2 meters transverter and now I need the LO.

5143. Transverter 2/10 m

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-25 00:00:00 UTC
From: C Andersson <sm6pxj@hotmail.com>
Message-ID: <yw894.6336$W33.12911@nntpserver.swip.net>
Source record: 64611

I have plans to build a 2/10 m transverter.
Any recommended designs out there?

/Chris
SM6PXJ

5144. Re: Transverter 2/10 m

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-25 00:00:00 UTC
From: "Robert <DC6XS> Eckelmann" <robert.eckelmann@netsurf.de>
Message-ID: <38651A26.ED81710F@netsurf.de>
Source record: 64612

Hello!

1. Marry Xmas!

2.
> I have plans to build a 2/10 m transverter.
> Any recommended designs out there?
Why dont u have a look at the old UKW-Berichte or at the UHF-UNTERLAGE
(i dont know the english name of it .. ;-)))

73 de Robert dc6xs

5145. Re: Connecting sound card to Computer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-25 00:00:00 UTC
From: Hamish Moffatt <hamish@rising.com.au>
Message-ID: <843fb8etj2@arachne.labyrinth.net.au>
Source record: 64613
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

In rec.radio.amateur.digital.misc Bob Lewis <aa4pb@erols.com> wrote:
> Do the sound card mike preamplifiers distort the signal even if you
> don't overdrive them or are you saying it's best not to use them
> because they are easy to overdrive? If the sound card design is that

The latter. I've never tried to work with them.

Hamish vk3sb
--
Hamish Moffatt Mobile: +61 412 011 176 hamish@rising.com.au
Rising Software Australia Pty. Ltd. http://www.risingsoftware.com/
Phone: +61 3 9894 4788 Fax: +61 3 9894 3362 USA: 1 888 667 7839

5146. What do these parts do?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-26 00:00:00 UTC
From: Paul <paulposluszny@hotmail.com>
Message-ID: <7Ef94.5682$Ke.2734@news21.bellglobal.com>
Source record: 64614

I have no knowledge in radio or any other electronics, although I am intersted by this sort of stuff. I have a couple of questions to ask those that are willing to give some time to help me out. I want to know what the following parts in a radio do and what they are.
1) A long magnetic bar with copper wire wrapped many times around it. The bar is cylinrical in shape.
2) A cube shaped part that is transparent and inside are many thin disks pilled on top of each other. The box has four screw on the top and is made by mitsumi. The disks on the inside move in a circular fashion and dont turn all the way around. The box is about 3/4 of an inch cubed.
3) Many small cylindrical parts that are blue in colour. Most are about 1 cm in height with a width of maybe 1/4 of a cm. There is one large one about an inch high and 1/2 wide, as well as one that is in between these two sizes. All of them say L85 degreesC and have a plus sign on the top (the larger ones)
4) small staple like parts, some of which have small beige bars things on them with bands of various colous. two of them have black cylinders on them. They are the size of well, staples.
5)rectangular parts that stand up at about one centimeter and have a width and length of about half a centimter. They have round holes at the top with what looks to be a flat head screwdriver slot on the top.
6) A part with two small wires coming from a brown circular object at the top. There are many different sizes. Most are brown a few are green, there are two green ones that look like chicklets and black ones that look like 3/4 of a circle on the top. The look like circles with legs.
7) Long black parts with many "legs" coming from the side. They are rectangular and vary in size, but in general they look to be about 3/4 of an inch long and 1/4 inch wide. They look like centipedes if you look at the top and use your imagination.

I know that is alot to ask but when you are just learning you have to start somewhere. I have been looking inside electrical things since I was about 6 and now that I am at the age, I may take some courses in college. Thanks to those who help and I hope I was descriptive enough.

5147. Re: What do these parts do?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-26 00:00:00 UTC
From: Jonesy <jonesy@rmi.nospam.net>
Message-ID: <FIf94.790$wv4.72092@den-news1.rmi.net>
Source record: 64615

Well, this one wins the prize!

Here I was waiting for the first idiot to post

"I just got a Yacomwood TRX-99000 for Christmas
and I need someone to tell me how to turn it on!"

-- and then this shows up.

Troll or not -- this one has to be better than what I was expecting!

Jonesy

5148. Re: FEDS RAID ELECTRONIC HOBBY VENDORS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-26 00:00:00 UTC
From: "David M. Brodbeck" <dmbrodbe@mtu.edu>
Message-ID: <84452rprk2@campus3.mtu.edu>
Source record: 64616

William Ricker <wdr@world.std.com> wrote:
> But this is the first time I've heard of anyone other than Ramsey refer
> to Ramsey as puveyors of quality goods. I've never quite understood
> what loophole it was that kept their kits for building devices that one
> could only vainly hope might comply with FCC emissions regulations from
> being open-and-shut illegal.

--> My guess is that the components are not illegal, and neither is the information on building the devices. It's only the use or sale of the device *itself* that's illegal. If they were selling those FM transmitters pre-assembled in the US, they'd be acting illegally. Selling them as kits is okay.

David Brodbeck, N8SRE dmbrodbe@mtu.edu
finger gull@cyberspace.org for my public key block.

"The god of Static Friction smiled upon me, and the glory of All Season Radials shown round about me. And I made it back up to the highway."

5149. Re: Need help building an ELECTRET mic for PC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-26 00:00:00 UTC
From: Roland Burgan <rburgan@up.net>
Message-ID: <3865C352.94CC9236@up.net>
Source record: 64617
Cross-posted to: rec.radio.amateur.homebrew,rec.audio.pro,rec.audio.tech

Actually, very easy to build as either external power supply boxes,
or , internal boxes...as long as you use center tapped secondary
Xmfrs.

Bob Cain wrote:

> This nice little baby was designed for boxes with power cords and split
> supplys unfortunately.
>
> Bob
>
> --
>
> "Things should be described as simply as possible, but no simpler."
>
> A. Einstein

5150. Tubes For Sale Or Trade

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-26 00:00:00 UTC
From: W5IDX <W5IDX@worldnet.att.net>
Message-ID: <844t0p$d3c$1@bgtnsc03.worldnet.att.net>
Source record: 64618
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.cb,rec.radio.swap

Tubes For Sale http://home.att.net/~gregg.e/tubes.html

NOS TUBES FOR SALE OR TRADE
SYLVANIA, RCA, RAYTHEON, ITT, CBS, AMPEREX, ZENITH
ALL TUBES ARE BELIEVED TO BE NEW.
THEY ARE IN THERE ORIGINAL BOXES EXCEPT WHEN A * IS NOTED BY THE PRICE. I
WILL TEST ALL TUBES THAT I CAN, PRIOR TO SHIPPING OR AT YOUR REQUEST.
TNX. W5IDX, GREGG

DISCOUNTS AVAILABLE FOR PURCHASES OVER $ 25.00 U.S.
73'S W5IDX

5151. Re: What do these parts do?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-26 00:00:00 UTC
From: "Laszlo I. Morocz" <kf4pv@SPAMMENOTlmorocz.com>
Message-ID: <TVo94.5$hA5.723@jump.innerx.net>
Source record: 64619

Paul,

This is fun - a pop quiz on the innards of a transistor radio. OK, here's my entry:

1. A loopstick antenna.
2. A variable capacitor.
3. Electrolytic capacitors
4. Resistors
5. RF/IF transformers & coils
6. Miscellaneous capacitors
7. Integrated circuits

Do I win? :-) OK, as to what they do and how they work, a detailed and complete explanation would take way too long for me to write up and post, but I'll do a quickie. Once you've read it, go to your nearest Radio Shack and poke through the "Engineer's Mini-Notebook" series (by Forrest M. Mims III). Find the most basic one you can (I recommend the one called "Basic Semiconductor Circuits" - catalogue number 62-5013 - it starts out with explanations of what resistors and capacitors are and how to use them and goes on to describe semiconductors and some basic circuits). Read through the book for a day or two (it's only 48 pages) and then go back to the Shack and buy some parts and tools and build a few of the circuits. When you're comfortable with what's going on and want to know more and get impatient with the simple books, get a copy of the "ARRL Handbook for Radio Amateurs" (check out the ARRL website). It goes into a lot more detailed information and is a good basis for a non-formal study of electronics, especially RF communications.

OK, here's the instant gratification part:

1. The loopstick antenna picks up the radio waves that are all around you and feeds them to the receiver. The ferrite bar and many-turn wire loop make an antenna that is much more compact, and therefore more portable, than the typical dipole antenna that a fixed station would use.

2. A variable capacitor is used to tune the input of the receiver. The frequency that the radio listens on is usually inversely proportional to the square root of the tuning capacitor value. That is, doubling the capacitance make the received frequency cut in half. The metal plates are the parts of the capacitor that hold the charge and the layers of polyethelene are the insulating dielectric. As you turn the plates relative to each other, the amount of charge they hold changes, changing the capacitance of the unit.

3. Electrolytic capacitors also hold charge, but much greater amounts than the variable capacitor. They are typically used to filter noise from power

supplies and to make low frequency (audio) circuits.

4. Resistors can be thought of as current and voltage restrictors. They are used to put specific values of current and/or voltage into specific points of a circuit.

5. Read the handbook section on inductance and AC circuits and superheterodyne receivers. Just be aware that turning the screws can cause your radio to tune all over different parts of the band

6. Like #3, except probably less capacitance so higher frequencies (IF & RF). They're also used to tune AC circuits.

7. These devices contain anywhere from several to several million transistors in one package, depending on the device. They're also known as chips because they contain a chip of doped silicon that actually holds the transistors and other components. In the old days, amplifiers and other circuits would be built of individual tubes or transistors and took up lots of room with lots of complex (error-prone) wire connections between the parts. Now, all the active parts are on the chip and all you have to do is to add a few capacitors, resistors and coils to have a working circuit. They're physically smaller, use less power and have fewer connections. In your radio these chips may implement amplifiers, oscillators, demodulators, etc.

Now that you have this, go get the books and do your homework. The most important thing you can do right now is to read, read and read. And as a break from reading, build a few circuits (simple ones) to try out what you've learned. At your stage, no circuit is too simple. A battery and a resistor make a good start. Use a voltmeter to measure the voltages at various parts of the circuit, and ammeter to measure the currents. Wire resistors in series and/or parallel, etc. And if you're feeling more ambitious, buy one of the simple kits and build your own crystal set. Then add a transistor or integrated circuit amplifier. Have fun,

73 de KF4PV/3, Laszlo

--
To reply, remove the text SPAMMENOT from the e-mail address.
Paul wrote in message <7Ef94.5682$Ke.2734@news21.bellglobal.com>...
>I have no knowledge in radio or any other electronics, although I am
>intersted by this sort of stuff. I have a couple of questions to ask those
>that are willing to give some time to help me out. I want to know what the
>following parts in a radio do and what they are.
>1) A long magnetic bar with copper wire wrapped many times around it. The
>bar is cylinrical in shape.
>2) A cube shaped part that is transparent and inside are many thin disks
>pilled on top of each other. The box has four screw on the top and is made
>by mitsumi. The disks on the inside move in a circular fashion and dont
>turn all the way around. The box is about 3/4 of an inch cubed.
>3) Many small cylindrical parts that are blue in colour. Most are about 1
>cm in height with a width of maybe 1/4 of a cm. There is one large one

>about an inch high and 1/2 wide, as well as one that is in between these
two
>sizes. All of them say L85 degreesC and have a plus sign on the top (the
>larger ones)
>4) small staple like parts, some of which have small beige bars things on
>them with bands of various colous. two of them have black cylinders on
>them. They are the size of well, staples.
>5)rectangular parts that stand up at about one centimeter and have a width
>and length of about half a centimter. They have round holes at the top
with
>what looks to be a flat head screwdriver slot on the top.
>6) A part with two small wires coming from a brown circular object at the
>top. There are many different sizes. Most are brown a few are green,
there
>are two green ones that look like chicklets and black ones that look like
>3/4 of a circle on the top. The look like circles with legs.
>7) Long black parts with many "legs" coming from the side. They are
>rectangular and vary in size, but in general they look to be about 3/4 of
an
>inch long and 1/4 inch wide. They look like centipedes if you look at the
>top and use your imagination.
>
>I know that is alot to ask but when you are just learning you have to start
>somewhere. I have been looking inside electrical things since I was about
6
>and now that I am at the age, I may take some courses in college. Thanks
to
>those who help and I hope I was descriptive enough.
>
>

5152. Re: What do these parts do?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-26 00:00:00 UTC
From: Valter Hilden <vhilden@infolink.com.br>
Message-ID: <38661A44.8E25F777@infolink.com.br>
Source record: 64620

Paul wrote:
>
> I have no knowledge in radio or any other electronics, although I am
> intersted by this sort of stuff. I have a couple of questions to ask those
> that are willing to give some time to help me out. I want to know what the
> following parts in a radio do and what they are.
> 1) A long magnetic bar with copper wire wrapped many times around it. The
> bar is cylinrical in shape.

That's a ferrite antenna. It's a coil that captures AM radio waves.

> 2) A cube shaped part that is transparent and inside are many thin disks
> pilled on top of each other. The box has four screw on the top and is made
> by mitsumi. The disks on the inside move in a circular fashion and dont
> turn all the way around. The box is about 3/4 of an inch cubed.

It's a variable capacitor. Together with a coil, it allows you to select
the frequency of the station you want to hear.

> 3) Many small cylindrical parts that are blue in colour. Most are about 1
> cm in height with a width of maybe 1/4 of a cm. There is one large one
> about an inch high and 1/2 wide, as well as one that is in between these two
> sizes. All of them say L85 degreesC and have a plus sign on the top (the
> larger ones)

These are electrolytic capacitors. They are used to block direct current
(DC) electricity, used to power the circuits, and let the alternating
current (AC) part, which carries the signal you want to hear, pass
through.

> 4) small staple like parts, some of which have small beige bars things on
> them with bands of various colous. two of them have black cylinders on
> them. They are the size of well, staples.

These are resistors. They allow one to regulate the current that passes
through a given circuit. The current is given by Ohm's formula: I = E /
R, where I is the current in amperes, E is the voltage in volts, and R
is the reistance in ohms. The colored bands are a code that tells the
resistance.

> 5)rectangular parts that stand up at about one centimeter and have a width
> and length of about half a centimter. They have round holes at the top with
> what looks to be a flat head screwdriver slot on the top.

Shielded coils. Work based on the same principle as the ferrite antenna,
but have this metal shielding because they should not receive the radio
signals, but just select some frequencies inside the circuits. The slot

is used for adjusting the frequency, by inserting a ferrite nucleus more
or less in the coil.

> 6) A part with two small wires coming from a brown circular object at the
> top. There are many different sizes. Most are brown a few are green, there
> are two green ones that look like chicklets and black ones that look like
> 3/4 of a circle on the top. The look like circles with legs.

They are probably capacitors. They have the same use as the electrolytic
capacitors mentioned above, but a somewhat different internal
composition.

Those 3/4 circle black ones, if they have three legs, they are
transistors. A small variation of current in the "base" wire will cause
a much larger variation (about 100x bigger) in the "collector" wire. The
third wire is the "emitter", used as the return wire for both input and
output circuits. This "common emmiter" circuit is the most usual
configuration in AM radios, both "common base" and "common collector"
combinations are also possible and used in other types of circuits.

> 7) Long black parts with many "legs" coming from the side. They are
> rectangular and vary in size, but in general they look to be about 3/4 of an
> inch long and 1/4 inch wide. They look like centipedes if you look at the
> top and use your imagination.
>

Integrated circuits, IC's for short, also known as "chips". They contain
complete circuits in them, containing transistors, resistors, and
capacitors etched in a silicon crystal.

> I know that is alot to ask but when you are just learning you have to start
> somewhere. I have been looking inside electrical things since I was about 6
> and now that I am at the age, I may take some courses in college. Thanks to
> those who help and I hope I was descriptive enough.

5153. Re: What do these parts do?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-26 00:00:00 UTC
From: "Laszlo I. Morocz" <kf4pv@SPAMMENOTlmorocz.com>
Message-ID: <2%o94.6$hA5.603@jump.innerx.net>
Source record: 64621

Thank you for the fine lesson in how to keep the hobby vital and active by making the newbies feel welcome.

Happy New Year,

de KF4PV/3

--
To reply, remove the text SPAMMENOT from the e-mail address.
Jonesy wrote in message ...
>Well, this one wins the prize!
>
>Here I was waiting for the first idiot to post
>
> "I just got a Yacomwood TRX-99000 for Christmas
> and I need someone to tell me how to turn it on!"
>
> -- and then this shows up.
>
>Troll or not -- this one has to be better than what I was expecting!
>
>Jonesy

5154. WTB 10meter coil from B&W 850

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-26 00:00:00 UTC
From: ny1e@server.nlbbs.com
Message-ID: <FnCw4o.4M7@server.nlbbs.com>
Source record: 64622

I need just the 10 meter coil from a B&W 850 pi-net coil. Please respond with price shipped to Maine. Thanks, Dick NY1E

homebrew photos: www.nlbbs.com/~ny1e

5155. Re: chicken mesh satisfactorily as coaxial screen

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-26 00:00:00 UTC
From: Jim Potter <jpotter@jpaw.com>
Message-ID: <crjc6sgshrdntk1al1748td34oc4s9guif@4ax.com>
Source record: 64623

LA8AK@online.no (J M Noeding) wrote:

>does somebody have theoretical backgound to tell if chicken mesh will
>work as satisfactorily coaxial screen. It is supposed to be used to
>screen a frame antenna

Chicken mesh can be a satisfactory screen provided that teh wavelength
of interest is much larger (five to 10 times) than the mesh size and
that the joints remain conductive.

For shorter wavelengths and where joint corrosion might pose a problem
one can use hardware cloth. In the US it comes in 0.5 inch, .25 inch
and .125 inch sizes. The joints are condcuting by virtue of the
hot-dip galvanize coating. It is more expensive than chicken mesh, but
still relatively easy to use.

Jim Potter

5156. vhf transmitter and receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-26 00:00:00 UTC
From: TomMedlin <tcmedlin@concentric.net>
Message-ID: <386664C5.AA58AC2@concentric.net>
Source record: 64624
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.homebrew,alt.hem-radio.marketplace

I am wanting to build a new 2 meter repeater and looking for advice on a good receiver and transmitter to use. I presently am using a GE master pro. Put that repeater on about 17 years ago. Looking for something a little more modern and better receiver for selectivity, sensitivity, and intermod rejection. Any sources for equipment and suggetions would be appreciated. Does anyone know the address for Maggorie Electronic Labs? I was told they sell receivers, transmitters in addition to entire ham repeaters.
Thanks, Tom WA5KUB please email at tcmedlin@cris.com

--
Check out our Homepage at http://www.concentric.net/~tcmedlin

5157. Re: 4-1000 amplfier

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-26 00:00:00 UTC
From: Harry Brown <hbrown@voicenet.com>
Message-ID: <3Ft94.93$Be.5389@news3.voicenet.com>
Source record: 64625

Nick,

Check the following web page for photos of amps: http://207.108.137.61

There are at least two there using 4-1000A's, on a single tube and one a
dual tube. Check with the photo submitters.

73, Harry, W3IIT

<nickg@wi.net> wrote in message news:38630586.5903754@news.inc.net...
> Does anyone have a MODERN schematic along with part layout pictorals
> to homebrew a 160-10m amp using this old tube? Any and all info
> appreciated. TNX de WA3SCI...Nick

5158. Connect Spec 8200 help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-26 00:00:00 UTC
From: Robin Staebler <Robin@k3fp.com>
Message-ID: <3866739E.4D24BF79@k3fp.com>
Source record: 64626

I am trying to locate:

1. A manual for the 8200 .. for programming
2. CTCSS board for 8200 and installation instructions

BUT I would like to correspond with someone who has one and can "email"
me thru a couple of things
thanks,

--
Robin Staebler, K3FP
Belfast Maine 04915

http://www.k3fp.com
Please visit this site and donate food to the hungry it's Free!
http://www.hungersite.com

5159. Re: What do these parts do?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-26 00:00:00 UTC
From: Jonesy <jonesy@rmi.nospam.net>
Message-ID: <6gv94.811$wv4.79002@den-news1.rmi.net>
Source record: 64627

Paul <paulposluszny@hotmail.com> wrote:

<-- snip -->

> I have been looking inside electrical things since I was about 6
> and now that I am at the age, I may take some courses in college.

Come on, folks! This is a either a bad troll or a lazy dolt
that hasn't bothered to vist a library in 10-11-12 years to
attempt to learn a little about what he is 'interested' in.

In either case, we've wasted far too much bandwidth on THIS thread.

Jonesy

5160. Wanted: TLR-313

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-26 00:00:00 UTC
From: Matt Krick <dcflux@yahoo.com>
Message-ID: <3866876F.3E524B1F@yahoo.com>
Source record: 64628

Wanted:

TLR-313
7 segment LED display used in Tempo VHF-1 radio, Common anode, 10 pin dip arangment. What I know is Pin 5 and 10 are common anode, 7 is decimal point. I need at least 3 of them but more would be better, The unit is no longer made by toshiba and all the replacement numbers I have

found are not the same pin pattern.

Actually if anyone has a VHF-1 that doesnt work, the board that the modules are on would be nice.

Please contact me if you have said modules.
Thanks.
--Matt Krick
DCFluX@yahoo.com

5161. **FREE** you pay shipping: misc microwave waveguides & stuff

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-26 00:00:00 UTC
From: wa2ise@netcom.com
Message-ID: <8462u7$7lm$1@nntp5.atl.mindspring.net>
Source record: 64629
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

At my mom's house in Oradell NJ, I have a bunch of microwave waveguides and similar stuff. Such as attenuators, things with slots, etc. I'm not familiar with microwave, but this stuff appears to be 50's vintage.

All FREE, but you eighter pick it up at my mom's house (email for directions and appointment) or you pay shipping.

5162. Elmers Directory Needs Elmers!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-26 00:00:00 UTC
From: pschleck@novia.net
Message-ID: <SWw94.12300$K7.468642@newscene.newscene.com>
Source record: 64630
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

-----BEGIN PGP SIGNED MESSAGE-----

As readers of the rec.radio.amateur.* newsgroups are probably aware, I maintain a periodic information posting and WWW Page known as the Amateur Radio Elmers Resource Directory (aka the "Elmers List") which provides a list of Internet Elmers, indexed by topic, and their E-mail addresses. (For users of threaded newsreaders, this article is linked to the base article of the directory itself). You may also access the Directory at:

http://www.novia.net/~pschleck/elmers/

In order to maintain its value to the net, I have strived to keep it accurate and up-to-date. In addition to reviewing the currency of the entire Directory every 2 years, I am constantly scouring the newsgroups for new Elmers to join the directory. Areas of expertise that are most desirable for the directory right now include:

- Any expertise from residents of states, provinces, and foreign countries not currently represented
- Advanced homebrewing techniques (surface-mount, VLSI, DSP, spread-spectrum, etc.)
- TCP/IP Packet Radio and Gateways/Internetworking (particularly local IP coordinators and/or subnet managers/operators/leaders)
- Amateur Satellites/Space Operation (particularly Microsats, SAREX, and ARISS)
- Amateur-related Software for Unix/PC/Mac/Amiga/Psion/HP-95/PalmPilot
- College Clubs and organizational guidance/strategies
- Boy Scout Amateur Radio Merit Badge Counselors
- Unix/Linux/X-Windows programming and configuration
- Amateur Radio Organizational Contacts (I am especially looking for contacts for the ARRL Field Organization, GRAPES, AMSAT, QCWA, QRP Int., NARA(?), QRZ, CSVHFS, LAMBDA, ARES, RACES, FEMA, NACEC, any state OES or EMA, as well as any regional frequency coordinating body)
- Band, Mode or, Brand-specific equipment (actual manufacturer or dealer contacts would be quite welcome, as long as they reveal their affiliation and at least provide *some* free services)
- Maintainers of unique amateur-radio-related anonymous File Transfer Protocol (FTP) sites and World-Wide Web (WWW) Home Pages (as opposed to those that are substantially a rehash of, or pointers to, existing sites).
- Maintainers of unique amateur-radio-related mailing lists
- Editors/contacts for amateur-radio-related publications

In particular, based on reduction and analysis of 7 months worth of audit logs from the geographic-area/subject search engine on the main Elmers Directory home page, the following geographic-area/subject pairs were requested two times or more, but resulted in no match in the directory (meaning that the individuals seeking assistance could not find a matching Elmer):

AUSTRALIA

ANTENNAS (4)
VERY HIGH FREQUENCY (VHF)/ULTRA HIGH FREQUENCY (UHF) (4)
REPEATERS (2)
RADIO CONTROL (RC) (2)

CANADA

10-X INTERNATIONAL (2)

GERMANY

ANTENNAS (3)
APPLE MACINTOSH COMPUTER (2)
HOMEBREWING/DO-IT-YOURSELF (2)

SPAIN

PACKET AND DIGITAL NETWORKING (2)

PHILIPPINES, THE

ANTENNAS (5)

UNITED KINGDOM (UK)

VERY HIGH FREQUENCY (VHF)/ULTRA HIGH FREQUENCY (UHF) (3)
WOMEN (YL) (2)
BRITISH AMATEUR RADIO TELEDATA GROUP (BARTG) (2)

Alaska

ANTENNAS (4)
EQUIPMENT TESTING/TROUBLESHOOTING (2)
VERY HIGH FREQUENCY (VHF)/ULTRA HIGH FREQUENCY (UHF) (2)

Arizona

CW (MORSE CODE) (3)
QRP (LOW POWER) (2)
EQUIPMENT TESTING/TROUBLESHOOTING (2)

Colorado

HOMEBREWING/DO-IT-YOURSELF (2)

Connecticut

PACKET AND DIGITAL NETWORKING (2)
REPEATERS (2)

Florida

REPEATERS (2)

Georgia

REPEATERS (3)

Illinois

NOVICE/TECH INSTRUCTION (10)
CW (MORSE CODE) (6)
REPEATERS (3)
VOLUNTEER EXAMINER (VE) AND INDUSTRY (COMMUNICATIONS) CANADA (IC) EXAMINER PROGRAMS (2)
ANTIQUE AND OLDER EQUIPMENT/BOATANCHORS (2)

Indiana

CW (MORSE CODE) (6)
HOMEBREWING/DO-IT-YOURSELF (3)
SATELLITES/ORBITAL SATELLITE CARRYING AMATEUR RADIO (OSCAR)/SHUTTLE AMATEUR RADIO EXPERIMENT (SAREX)/AMATEUR RADIO ON THE INTERNATIONAL SPACE STATION (ARISS) (2)
QRP (LOW POWER) (2)
REPEATERS (2)

Kansas

QRP (LOW POWER) (2)

Michigan

REPEATERS (5)
PACKET AND DIGITAL NETWORKING (4)
VERY HIGH FREQUENCY (VHF)/ULTRA HIGH FREQUENCY (UHF) (2)
INTERNET SERVICES (2)
TOWERS (2)

Minnesota

REPEATERS (4)

North Carolina

CIVIL AIR PATROL (CAP) (2)
AMATEUR TELEPRINTER OVER RADIO (AMTOR)/GOLAY TELEPRINTER OVER RADIO (GTOR)/PACKET TELEPRINTER OVER RADIO (PACTOR)/RADIO TELETYPE (RTTY) (2)

New Jersey

REPEATERS (2)

New York

SATELLITES/ORBITAL SATELLITE CARRYING AMATEUR RADIO (OSCAR)/SHUTTLE AMATEUR RADIO EXPERIMENT (SAREX)/AMATEUR RADIO ON THE INTERNATIONAL SPACE STATION (ARISS) (2)
YOUTH (2)

Ohio

HIGH FREQUENCY (HF)/CONTESTING/DISTANCE (DX) (4)
10-X INTERNATIONAL (3)
AMERICAN RADIO RELAY LEAGUE (ARRL) FIELD ORGANIZATION (3)
ANTIQUE AND OLDER EQUIPMENT/BOATANCHORS (2)

Oklahoma

REPEATERS (2)
ANTENNAS (2)
VERY HIGH FREQUENCY (VHF)/ULTRA HIGH FREQUENCY (UHF) (2)
NOVICE/TECH INSTRUCTION (2)

Oregon

MEDIA (PUBLICATION/WRITING/BROADCASTING) (2)

Tennessee

CW (MORSE CODE) (3)
NOVICE/TECH INSTRUCTION (2)

Texas

PACKET AND DIGITAL NETWORKING (4)

Utah

REPEATERS (2)

Washington

REPEATERS (3)
PACKET AND DIGITAL NETWORKING (2)
TOWERS (2)

Wisconsin

ANTENNAS (3)
PACKET AND DIGITAL NETWORKING (2)
SEARCH FOR EXTRATERRESTRIAL INTELLIGENCE (SETI) (2)

In addition, though the following geographic-area/subject pairs are represented in the directory, the demand ratio (number of requests to number of matching Elmers in the directory) is sufficiently high (3 or greater) to merit recruitment of additional Elmers to share the workload:

ANY

DIRECTION FINDING (DF) (10)
WOMEN (YL) (8)

ANTIQUE WIRELESS ASSOCIATION (AWA) (5)
LEAGUE OF YOUNG RADIO AMATEURS (LYRA) (4)
RADIO AMATEURS OF CANADA (RAC) (4)
AMERICA ON-LINE (3.5)

CANADA

RADIO AMATEURS OF CANADA (RAC) (10)
ANTENNAS (7)
ANY (3.66666666666667)
HOMEBREWING/DO-IT-YOURSELF (3)

Ontario

REPEATERS (4)

SWITZERLAND

ANY (3)

GERMANY

ANY (3)

SPAIN

ANY (5)

INDONESIA

ANY (3)

ITALY

ANY (7)
ANTENNAS (4)

PHILIPPINES, THE

ANY (8)

UNITED KINGDOM (UK)

ANTENNAS (4)
RADIO SOCIETY OF GREAT BRITAIN (RSGB) (3)

UNITED STATES OF AMERICA (USA)

WOMEN (YL) (5)
ANTIQUE WIRELESS ASSOCIATION (AWA) (5)

Alaska

ANY (8)

Alabama

ANY (8)
REPEATERS (3)

Arkansas

PACKET AND DIGITAL NETWORKING (2)

Arizona

ANTENNAS (6)
AMATEUR RADIO EMERGENCY SERVICE (ARES)/RADIO AMATEUR CIVIL EMERGENCY SERVICE (RACES)/SKYWARN/OTHER EMERGENCY SERVICES (3)

California

ANTIQUE AND OLDER EQUIPMENT/BOATANCHORS (6)
ANY (4.75)

Colorado

ANY (3.25)
PACKET AND DIGITAL NETWORKING (3)

District of Columbia

ANY (5)

Delaware

ANY (3)

Florida

ANY (5.14285714285714)
PACKET AND DIGITAL NETWORKING (3.5)
AMATEUR RADIO EMERGENCY SERVICE (ARES)/RADIO AMATEUR CIVIL EMERGENCY SERVICE (RACES)/SKYWARN/OTHER EMERGENCY SERVICES (3)
NOVICE/TECH INSTRUCTION (3)

Georgia

ANY (3.16666666666667)
GEORGIA RADIO AMATEUR PACKET ENTHUSIASTS SOCIETY (GRAPES) (3)

Hawaii

ANY (4)

Idaho

ANY (4)

Illinois

ANY (15)
CW (MORSE CODE) (10)
ANTENNAS (8)

Indiana

ANY (8.66666666666667)
NOVICE/TECH INSTRUCTION (8)
ANTENNAS (4)

Massachusetts

ANY (3.57142857142857)

Maryland

ANY (4.16666666666667)
CW (MORSE CODE) (4)

Michigan

ANY (17.5)

Minnesota

REPEATERS (5)
ANY (3.4)

Missouri

ANY (8)
NOVICE/TECH INSTRUCTION (4)

Mississippi

ANY (3)

North Carolina

ANY (6)

Nebraska

ANY (9)

New Jersey

HOMEBREWING/DO-IT-YOURSELF (3)

New Mexico

ANY (4)

Nevada

ANY (6)

New York

REPEATERS (6)
ANY (4.875)

Ohio

ANY (6.2)
NOVICE/TECH INSTRUCTION (5)
ANTENNAS (5)

Oklahoma

ANY (10)

Oregon

ANY (4.25)
PACKET AND DIGITAL NETWORKING (4)
REPEATERS (3)

Pennsylvania

ANY (3.75)

Rhode Island

ANY (8)

South Carolina

ANY (3)

Tennessee

ANY (16)

Texas

ANY (6)
APPLE MACINTOSH COMPUTER (3)
CW (MORSE CODE) (3)

Utah

ANY (12)

Virginia

NOVICE/TECH INSTRUCTION (5)
ANY (4)
CW (MORSE CODE) (3)
PACKET AND DIGITAL NETWORKING (3)

Vermont

NOVICE/TECH INSTRUCTION (3)

Washington

ANY (12.6666666666667)
ANTENNAS (9)
CW (MORSE CODE) (3)

Wisconsin

ANY (8.5)

If your geographic area and subjects of expertise appear in either list above, your help as an Internet Elmer is greatly needed (particularly for those subject areas followed by numbers greater than 10).

I'd like to emphasize that participation is totally voluntary, with very minimal obligations (1 or 2 polite inquiries a month, if feedback from existing Elmers is any indication). If you find that it is too much work, you are welcome to bow out, no questions asked. You don't even need access to Network News or the World-Wide Web, just a reliable E-mail address.

If you'd like to volunteer, please go to the following Web-based registration form:

http://www.novia.net/~pschleck/elmers/register.html

If you do not have access to the World-Wide Web, send a short E-mail message describing yourself and your areas of expertise to elmers-request@novia.net (the default Reply-To: of this article).

73, Paul W. Schleck, K3FU
elmers-request@novia.net

Maintainer, Amateur Radio Elmers Resource Directory
http://www.novia.net/~pschleck/elmers/

-----BEGIN PGP SIGNATURE-----
Version: 2.6.2

iQCVAwUBOGaaYCROYYq72ea1AQEmIAP+Num+n5nEJ87BIE9hIAxyOwFfRvGhX4bp
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chB7LH5uqWbQ6ofmV2e3DnDZYfVYStIvAMNavm4qhsTrLQolchJoJw/VzTtmCs6d
E4/pZ/r14Y0=
=YHCz
-----END PGP SIGNATURE-----

5163. Re: What do these parts do?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-26 00:00:00 UTC
From: Paul <paulposluszny@hotmail.com>
Message-ID: <ekx94.7839$Ke.3364@news21.bellglobal.com>
Source record: 64631

Thank you to everyone who answered my questions and to those that think I am a troll, I hope you get electricuted when you take part in your hobby. Wow, I had no clue there could be such rotten apples that cant even lend a hand to those in need. Im sorry if I am not as educated as you in this field but I wont let one a$$hole discourage me. About your library reply Jonesy, in this day of computers and the internet I thought that the internet was a good tool to exchange and receive information, but I guess to you it is only for entertainment. Just remember the library isnt the only place for information and if I can get answers at home, than I will do that. One last thing, dont take this so seriously, why respond if you think I am a troll? How many times have I posted here before? This is the second time and probably one of the last because of one d*ck head. Once again thanks to those who responded and I hope I can use this info one day soon.
Jonesy wrote in message <6gv94.811$wv4.79002@den-news1.rmi.net>...
>Paul <paulposluszny@hotmail.com> wrote:
>
><-- snip -->
>
>> I have been looking inside electrical things since I was about 6
>> and now that I am at the age, I may take some courses in college.
>
>Come on, folks! This is a either a bad troll or a lazy dolt
>that hasn't bothered to vist a library in 10-11-12 years to
>attempt to learn a little about what he is 'interested' in.
>
>In either case, we've wasted far too much bandwidth on THIS thread.
>
>Jonesy

5164. Re: Ten-Tec 1253 Regen Kit?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-26 00:00:00 UTC
From: "Al Lorona, Jr." <al_lorona@agilent.com>
Message-ID: <3866A938.F0E@agilent.com>
Source record: 64632

Hi, Will,

I built the 1253 a few years ago and fire it up occasionally to listen to AM SW. It's a real blast to use.

Its performance is outstanding in the areas of sensitivity and audio quality. Oooooh man, that AM audio is probably the best I have heard in any receiver, regardless of price. Clean, loud, and practically hi-fi.

Have you ever used a regen? The 1253 ranks as average or above average in ease of tuning. Especially on strong SSB and CW signals, it can get a bit squirrelly as the oscillator gets pulled off frequency.

I live within two miles of a 20 kW AM MW station and had to add a trap at the antenna input to keep it from overloading the receiver.

It's worth the money. Good luck building and listening to it.

R,

Al W6LX

--

While you're passing out the spam, don't forget these guys:

admin@loopback
$LOGIN@localhost
$LOGNAME@localhost
$USER@localhost
$USER@$HOST
root@mailloop.com
Chairman William Kennard: wkennard@fcc.gov
Commissioner Susan Ness: sness@fcc.gov
Commissioner Harold Furchtgott-Roth: hfurchtg@fcc.gov
Commissioner Michael Powell: mpowell@fcc.gov
Commissioner Gloria Tristani: gtristan@fcc.gov
US Postal Service: customer@email.usps.gov
Fraud Watch: fraudinfo@psinet.com
Federal Trade Commission: consumerline@ftc.gov

5165. Re: Connecting sound card to Computer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-26 00:00:00 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <t7JmOE35C4UfSNfZgTx1FSBNUFvP@4ax.com>
Source record: 64633
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

On Sat, 18 Dec 1999 20:29:33 -0500, "Bob Lewis" <aa4pb@erols.com> wrote:

>> I also heard if you just used a mono plug for the sound card's line
>output
>> (or speaker output), it will short out one of the channels and may
>cause
>> distortion. It is best to use a stereo plug and only use one of
>the
>> channels. Is this good advice?
>
>Good advice! A mono plug will short one output. It may not cause
>distortion in the other channel, but it's never good practice to
>short an output unless you know for sure that the circuit design can
>handle it.

It blew the sound chip on my card when I accidently did this.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

5166. Sanyo LA1145 chip

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-26 00:00:00 UTC
From: NANCY GIANAKOPOULOS <n.gianakopoulos@worldnet.att.net>
Message-ID: <846iq0$dk7$1@bgtnsc03.worldnet.att.net>
Source record: 64634

I picked up around 2000 of these chips. When I went to the Sanyo website, the chip was described as a single inline package (SIP). What I have are SOIC DIP packages. Does anybody have any information about the pinout of these devices? They could be very useful as an IF subsystem.

Pete Gianakopoulos
Cedar Rapids, Iowa

5167. Ramsey Raid

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-27 00:00:00 UTC
From: Bob <Bob@nospam.org>
Message-ID: <wpQ94.5$1p.365@wdc-read-01.qwest.net>
Source record: 64557

Re the Ramsey Federal raid, just read up on it...it's incredible. There is a new discussion group for information on the raid and related information, and it can be found at http://208.46.148.11/ Read the whole story and you'll be amazed! Come on, guns, troopers, all for hobby kits that the boy scouts and schools use for teaching, and for hobby and amateur use? And yet the big guys are still selling the same stuff (Radio Shack!) Give me a break!

5168. SINGLE CHIP AM/SW/FM etc RCXR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-27 00:00:00 UTC
From: "aaa@bbb.com" <aaa@bbb.com>
Message-ID: <3866B199.33BB605B@bbb.com>
Source record: 64635

http://www.elisnet.or.jp/cgi-bin/ESX/esx_service

please search this site for the chip
LA1265. This is a single chip AM/FM radio chip
like LM373 (which is AM only.)

This chip is used in grundig YB400, SONY ICF2001
almost all BOOM BOXES and STEREO receivers.

(Scrap boom boxes usually yield this cip and a number of useful
455 and 10.7 mhz coils plus the power transformer!)

(The digital stereo receivers have also the SYNTH chip
LC7128 etc which can be used/abused for HF work.)

http://www.elisnet.or.jp/cgi-bin/ESX/esx_service

5169. single CHIp AM/FM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-27 00:00:00 UTC
From: "aaa@bbb.com" <aaa@bbb.com>
Message-ID: <3866B557.75439801@bbb.com>
Source record: 64636

please try all of these sites
in order to find data about sanyo LA1265 single chip radio etc.

http://www.elisnet.or.jp/login-sanyo.htm
http://www.elisnet.or.jp/download/019/STK4152II_1_8.pdf
http://www.elisnet.or.jp/cgi-bin/ESX/esx_service

5170. Re: FEDS RAID ELECTRONIC HOBBY VENDORS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-27 00:00:00 UTC
From: Lyle Koehler <lyle@mlecmn.net>
Message-ID: <3867DD49.DCD8B660@mlecmn.net>
Source record: 64637

"David M. Brodbeck" wrote:
>
> William Ricker <wdr@world.std.com> wrote:
> > But this is the first time I've heard of anyone other than Ramsey refer
> > to Ramsey as puveyors of quality goods. I've never quite understood
> > what loophole it was that kept their kits for building devices that one
> > could only vainly hope might comply with FCC emissions regulations from
> > being open-and-shut illegal.
>
> --> My guess is that the components are not illegal, and neither is the
> information on building the devices. It's only the use or sale of the
> device *itself* that's illegal. If they were selling those FM transmitters
> pre-assembled in the US, they'd be acting illegally. Selling them as kits
> is okay.

The way I read the FCC rules, certification isn't required if you
home-brew a Part 15 transmitter from scratch, but kits must meet the
same requirements as assembled devices.

Excerpts from the FCC Part 15 rules:

"Home-built devices.

(a) Equipment authorization is not required for devices that are not
marketed, are not constructed from a kit, and are built in quantities of
five or less for personal use.
(b) It is recognized that the individual builder of home-built
equipment may not possess the means to perform the measurements for
determining compliance with the regulations. In this case, the builder
is expected to employ good engineering practices to meet the specified
technical standards to the greatest extent practicable. The provisions
of Sec. 15.5 apply to this equipment."

A kit is defined as "Any number of electronic parts, usually provided
with a
schematic diagram or printed circuit board, which, when assembled in
accordance with instructions, results in a device subject to the
regulations in this part, even if additional parts of any type are
required to complete assembly."

--
Lyle, K0LR

http://www.computerpro.com/~lyle

5171. Re: FEDS RAID ELECTRONIC HOBBY VENDORS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-27 00:00:00 UTC
From: no <body@nowhere.com>
Message-ID: <3867e94d$0$211@nntp1.ba.best.com>
Source record: 64638

Raw Power Radio <rawpowerradioNOraSPAM@go.com.invalid> wrote:
: Story at:

: http://www.2600.com/news/1999/1218.html

Gimme a break!

Don't believe all the crap you read on the net. Besides, isn't it
a bit self-serving for a bunch of anarchists like the 2600 scum
to blow everything out of proportion? Bunch of crybaby wankers.

Phaedrus

--

5172. Re: Ramsey Raid

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-27 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <848pnm$aq9$1@bob.news.rcn.net>
Source record: 64639

What kind of illegal transmitters does Radio Shack sell? I don't see any in my catalog. Some of the Ramsey kits do not meet federal requirements and they do get used by people who do not know they are illegal - sometimes in commercial applications.

Bob <Bob@nospam.org> wrote in message news:wpQ94.5$1p.365@wdc-read-01.qwest.net...
> Re the Ramsey Federal raid, just read up on it...it's incredible. There is
> a new discussion group for information on the raid and related information,
> and it can be found at http://208.46.148.11/ Read the whole story and
> you'll be amazed! Come on, guns, troopers, all for hobby kits that the boy
> scouts and schools use for teaching, and for hobby and amateur use? And yet
> the big guys are still selling the same stuff (Radio Shack!) Give me a
> break!
>
>
>
>
>
>
>

5173. MIC pinouts for Heathkit HW-101

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-27 00:00:00 UTC
From: Curtis Scholl <cscholl@izzy.net>
Message-ID: <38681773.8BB4B772@izzy.net>
Source record: 64640
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hello Group!

Does anyone out there have an ascii representation they are dying to
show someone on the pin outs of the Heathkit HW-101 MIC connector?
I bought a Yaesu Hi Impedance mic (50K ohms) but it uses a stereo Tip
Ring Sleeve rather than a 4 pin DIN. I could short a couple of the pins
together to determine the PTT switching, but I would not like to harm
anything important.
I have a manual on order, but would like to get started....antsy.

Curtis Scholl
cscholl@izzy.net

5174. Re: MIC pinouts for Heathkit HW-101

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-27 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <M5V94.124328$7I4.3188802@news5.giganews.com>
Source record: 64641
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

The HW-101 used a simple connector for the microphone. If yours has a DIN connector, someone changed it.

Ground each pin in turn to see if it keys the transmitter. That's the PTT line. The other is the audio.

73, Bob K6DDX

5175. Re: chicken mesh satisfactorily as coaxial screen

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-27 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <i2V94.115167$5W2.3195281@news6.giganews.com>
Source record: 64642

I think your wavelength calculation is off by a factor of about 10.

73, Bob K6DDX

5176. Re: Replacement for old dual/tripple capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-27 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19991227163347704 32@zetnet.co.uk>
Source record: 64643

> I wouldn't worry about their age. If they work, use them. If they fail,
> replace them. I would test any capacitor prior to shipping it to you.
> 73, Bob
==========
Suspect "old" electrolytic capacitors (even if never used) should be
reformed = revitalised and checked by repetitive re-charging them up
to the max working voltage via a high value resistor in the megohms
range, followed by de-charging via a lower value resistor . The
higher the charging resistor the slower and more effective the
reforming process ....take the time !

Frank GM0CSZ / KN6WH

Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland UK
e-mail : gm0csz.kn6wh@ukrs.org

5177. rf power amp tank question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-28 00:00:00 UTC
From: hexter@blazenet.net
Message-ID: <rIV94.16535$Ym1.691423@tw11.nn.bcandid.com>
Source record: 64544

Hi all, thank you for reading,

I built an rf amplifier using a single 4X150A, and used a conventional PI output network, with one unusual feature. The inductor is a roller type with a max of 10uh. Tuning cap is 7-70pf and loading is 40-400p. The inductor is set to short the 'unused' section. Why is this done? Also, I can get almost no output at 18,19 and 26 mhz. Got plate current, and grid drive, but little output. Lots of input, almost no output, and most amazingly, 'no smoke'. What is going on??

73 Gummi

5178. Re: Ten-Tec 1253 Regen Kit?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-28 00:00:00 UTC
From: abcd1234 <abcd1234@ix.netcom.com>
Message-ID: <84a6ogeqc1@news1.exit109.com>
Source record: 64545

hi,

I built the 1253 regen 3 yrs back.
1. its regen/reaction control is not smooth.
2.It is susceptible to audio oscillations.
3.much better performance ca be obtained even from fet transistor circuits
Ibuilt one using a fet at 1.5 volts, and this was veryvery good.

I would honestly recommened that you build one using tubes
like 12sn7/12au7/6u8 at low voltages (12-50) volts on plate.
Even the the12sn7 @24 volts on plate beats even a superhet
rx and has very smooth regen.

Use a throttle cap for regen and please use a 12-012 volt/,45 amp
transformer primary as the choke load for detector.

Ican post ckt if you need it.

Al Lorona, Jr. wrote in message <3866A938.F0E@agilent.com>...
>Hi, Will,
>
>I built the 1253 a few years ago and fire it up occasionally to listen
>to AM SW. It's a real blast to use.
>
>Its performance is outstanding in the areas of sensitivity and audio
>quality. Oooooh man, that AM audio is probably the best I have heard in
>any receiver, regardless of price. Clean, loud, and practically hi-fi.
>
>Have you ever used a regen? The 1253 ranks as average or above average
>in ease of tuning. Especially on strong SSB and CW signals, it can get a
>bit squirrelly as the oscillator gets pulled off frequency.
>
>I live within two miles of a 20 kW AM MW station and had to add a trap
>at the antenna input to keep it from overloading the receiver.
>
>It's worth the money. Good luck building and listening to it.
>
>R,
>
>Al W6LX
>
>--
>
>While you're passing out the spam, don't forget these guys:
>
>admin@loopback

>$LOGIN@localhost
>$LOGNAME@localhost
>$USER@localhost
>$USER@$HOST
>root@mailloop.com
>Chairman William Kennard: wkennard@fcc.gov
>Commissioner Susan Ness: sness@fcc.gov
>Commissioner Harold Furchtgott-Roth: hfurchtg@fcc.gov
>Commissioner Michael Powell: mpowell@fcc.gov
>Commissioner Gloria Tristani: gtristan@fcc.gov
>US Postal Service: customer@email.usps.gov
>Fraud Watch: fraudinfo@psinet.com
>Federal Trade Commission: consumerline@ftc.gov

5179. Re: rf power amp tank question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-28 00:00:00 UTC
From: troglodite@aol.com
Message-ID: <19991228090601.01031.00002172@ng-ch1.aol.com>
Source record: 64546

>
> I built an rf amplifier using a single 4X150A, and used a
>conventional PI output network, with one unusual feature.
>The inductor is a roller type with a max of 10uh. Tuning cap
>is 7-70pf and loading is 40-400p. The inductor is set to short
>the 'unused' section. Why is this done? Also, I can get almost
>no output at 18,19 and 26 mhz. Got plate current, and grid
>drive, but little output. Lots of input, almost no output, and
>most amazingly, 'no smoke'. What is going on??

Having the unused portion of the tank inductor shorted sounds like the problem to me. A shorted turn will drastically lower the Q - and obviously it gets worse as you go lower in intended inductance, hence having more shorted turns coupled. All the variable inductance resonators I've ever seen or used simply left the unused portion floating. (Output tank circuits, antenna loading coils, etc.)

Doug Moore KB9TMY (Formerly K6HWY)

5180. Re: rf power amp tank question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-28 00:00:00 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <pP5a4.156307$y45.3243789@news4.giganews.com>
Source record: 64547

The jury is still out on whether to short unused turns or not. Here is the situation:

If you leave the unused turns open, transformer action will cause a build up of potential and possibly cause arcing.

If you short the unused turns, circulating currents could cause waste of power.

Many designs have the first few turns of the inductance of heavier wire so that the losses will be less. One test would be to run the amplifier for a little while with key down then shut it off and touch the inductor to see if it's hot. With that much power seeming to be lost, it certainly should be warm or even hot to the touch.

Loss of power is common at the higher frequencies. Lead dress is often the culprit, with stray capacitance and inductance bleeding off valuable power. The leads must be kept short, components small, and kept well away from other components. I had an HF amplifier that had no output on 10 meters and after I shortened up things a bit it began to give useful power on that band. It was better on 12 meters and full output on 15 meters.

Another approach might be to make a separate 10 meter inductor in series with the roller inductor, and at right angles to it. Then the roller would be nearly totally out of the circuit when on 10 meters and it would be safe to have it open rather than shorted. The 10 meter inductor could be of tubing or other large diameter high Q material. It won't have much effect on the other bands.

73, Bob K6DDX

5181. wtb:variable capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-28 00:00:00 UTC
From: gatesplace@my-deja.com
Message-ID: <84aunk$9a0$1@nnrp1.deja.com>
Source record: 64548
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,sci.electronics.components,alt.ham-radio.marketplace

I am looking for several receiver type variable capacitors with
following maximum capacitances: (1) 300 to 400 pf single section, (1)
20-40 pf single section (1) 50-150 single section (1) 30-75 pf single
section and (2) multiple section matching 200-400 pf per section. Last
one can be a single cap with 4+ sections. All should be 1/4" shaft for
panel mounting and fairly compact. Please e-mail.

Thanks,

Andy

Sent via Deja.com http://www.deja.com/
Before you buy.

5182. John Mackey ham radio Examiner Caught selling licenses

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-28 00:00:00 UTC
From: Anon <anonymous@cotse.com>
Message-ID: <199912282124.QAA19827@cotse.com>
Source record: 64549

This message was posted anonymously:

I read that John Mackey is in trouble for selling ham
licenses. Any truth to this rumor? Who is this guy Mackey?
Why do they call him toilet-boy? John-bowl? Why would he
sell licenses?

5183. Source for Solfan modules?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-28 00:00:00 UTC
From: wbbblair@worldnet.att.net
Message-ID: <38692be6.75186970@netnews.worldnet.att.net>
Source record: 64550

I'd like to build the 10GHz wideband FM project exactly as shown at:

http://www.geocities.com/SiliconValley/Vista/7012/wideband.htm

Anyone know where I can obtain at least two of the Solfan modules
used (or any cheap gunnplexer that has been confirmed to work with
the circuits shown on this site)?

Thanks in advance for any help.

"Do not argue with the forces of nature, for you are small, insignificant, and
biodegradable."

5184. Re: Source for Solfan modules?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-28 00:00:00 UTC
From: "Robert <DC6XS> Eckelmann" <robert.eckelmann@netsurf.de>
Message-ID: <38693577.D76C1D01@netsurf.de>
Source record: 64551

William Blair schrieb:
>
> I'd like to build the 10GHz wideband FM project exactly as shown at:
>
> http://www.geocities.com/SiliconValley/Vista/7012/wideband.htm
>
> Anyone know where I can obtain at least two of the Solfan modules
> used (or any cheap gunnplexer that has been confirmed to work with
> the circuits shown on this site)?
Try www.shfmirco.com
>
> Thanks in advance for any help.
>
> "Do not argue with the forces of nature, for you are small, insignificant, and
biodegradable."

5185. Re: John Mackey ham radio Examiner Caught selling licenses

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-28 00:00:00 UTC
From: Jonesy <jonz@rmi.nospam.net>
Message-ID: <%taa4.931$wv4.122085@den-news1.rmi.net>
Source record: 64552

Anon <anonymous@cotse.com> wrote:
> Any truth to this rumor?
> Who is this guy Mackey?
> Why do they call him toilet-boy?
> John-bowl?
> Why would he sell licenses?

Why do you ask so many questions?
Why do you post anonymously?

Jonesy

--
Marvin L. Jones jonz-AT-rmi.net W3DHJ
Gunnison, Colorado
3 days to go until the Year 2000 -- So what!
369 days to go until the 3rd Millennium of the C.E.

5186. Re: rf power amp tank question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-28 00:00:00 UTC
From: Al Lorona <alforo@megsinet.net>
Message-ID: <KCaa4.3126$M56.171940@news.corecomm.net>
Source record: 64553

FWIW: I once measured a transmitting coil about 3 inches long, 1.5 inches diameter, air wound with 14 ga wire on an Boonton lab Q meter. With shorted turns, the Q was reduced by 9 percent over the value with no turns shorted. In other words, the Q was 91 percent of the unshorted turns value. Number of shorted turns didn't seem to make much difference. The change in inductance was insignificant.

Anyone else have measurement data?

73, AL, e-mail aforo@megsinet.net

5187. Re: Source for Solfan modules?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-28 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <38693A7D.7693@pop.removethistomailme.net>
Source record: 64554

William Blair wrote:
>
> I'd like to build the 10GHz wideband FM project exactly as shown at:
>
> http://www.geocities.com/SiliconValley/Vista/7012/wideband.htm
>
> Anyone know where I can obtain at least two of the Solfan modules
> used (or any cheap gunnplexer that has been confirmed to work with
> the circuits shown on this site)?
>
> Thanks in advance for any help.
>
> "Do not argue with the forces of nature, for you are small, insignificant, and
biodegradable.

Definitely check out http://www.shfmicro.com. They sell some very nice
M/A-COM Gunnplexers that can be upgraded to 100 mW output, at very
reasonable prices.

Also FYI, there's some more info on wideband FM/FSK microwave work at my
site below, along with further links to component and information
sources.

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

5188. Heathkit weather station question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-28 00:00:00 UTC
From: famille_magnan@infoteck.qc.ca
Message-ID: <19991228210924739787@ppp2-220.infoteck.qc.ca>
Source record: 64555
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I'm sorry if I did not post this message in the right NG but I could not find a NG related specifically dedicated to Heathkit.

I have been looking for a weather station for a while. A ham I met recently has a Heathkit weather station that he wants to sell. He doesn't have a clue of the value of the weather station and so do I.

As far as I can tell, the only problem with his station is the bearing of the anemometer that needs replacing. Every thing else is very dusty but semms in good working order.

Could someone tell me how much this weather station is worth ? I want to offer a fair price to this man. I don't know if there is a site dedicated to Heathkit weather stations. I have not found one yet but I would really appreciate receiving URL's that are related to the above mentionned subject.

--
Stay safe !

73 de VE2JPT

Jean-Pierre

_____
Jean-Pierre Magnan
VE2 JPT (Basic, learning code right now)
Lieutenant, Notre-Dame-du-Mont-Carmel VFD, Quï¿½bec, Canada G0X 3J0
email: famille_magnan@infoteck.qc.ca
URL: http://members.tripod.com/~Famille_Magnan/ (Go take a look -> Sorry it's in french for now)

The opinions expressed above are mine, all mine.
But I love to share them 8-)

5189. Re: Simple method for variable brightness Xmas lights

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-28 00:00:00 UTC
From: w keith griffith <kgriffit@wolfenet.com>
Message-ID: <38690D27.DCF20FDB@wolfenet.com>
Source record: 64556
Cross-posted to: sci.electronics.repair,rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.homebrew

Tried it this year,,, new lights on the tree have some solid state
blinker stuff in a little green box,,, didn't work worth a darn. OhWell

n7ivs

Hagstar wrote:

> Sofie wrote:
> >
> > Or......a cheap light dimmer works very nicely.
> > ==
> >
>
> Except for the monsterous amount of RF hash it generates.
>
> John H.

5190. Re: What do these parts do?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-29 00:00:00 UTC
From: maddog@io.com
Message-ID: <386a6bb8.91823143@news.io.com>
Source record: 64558

On Sun, 26 Dec 1999 23:15:22 GMT, "Paul" <paulposluszny@hotmail.com>
wrote:

> This is the second time and
>probably one of the last because of one d*ck head. Once again thanks to
>those who responded and I hope I can use this info one day soon.

Hey Paul!

I sure hope you don't duck out because of one or two negative (or even
mean-spirited) responses. Remember, the Internet comprises a large
pool of people, with a varied cross-section of personalities, and is
bound to include some contentious souls who want to criticize you for
the sole purpose of inflating their own egos (or whatever their
purpose is). So what? Let it slide... if you ignore it, everybody
who reads their response sizes them up for what they are... but if you
respond defensively, you've empowered a small minority of fractious
people to continue in that vein, because they thrive on your reaction.

Just look at the helpful responses you got! (you didn't seem to give
nearly as much weight to those)

And by the way, this was a perfectly appropriate question for this
group... novices and newbies and curiosity seekers will always be
welcomed by the vast majority of us.

73 (best regards),
monty N5FC

5191. Re: rf power amp tank question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-29 00:00:00 UTC
From: basil <basil@isoplethics5.free-online.co.uk>
Message-ID: <_lka4.2339$L4.59919@wards>
Source record: 64559

Often ignored problem with open-circuit turns is possibility of resonance at signal frequency with stray capacitance.
Bob <balbert@cnmnetwork.com> wrote in message news:pP5a4.156307$y45.3243789@news4.giganews.com...
> The jury is still out on whether to short unused turns or not. Here is the
> situation:
>
> If you leave the unused turns open, transformer action will cause a build up
> of potential and possibly cause arcing.
>
> If you short the unused turns, circulating currents could cause waste of
> power.
>
> Many designs have the first few turns of the inductance of heavier wire so
> that the losses will be less. One test would be to run the amplifier for a
> little while with key down then shut it off and touch the inductor to see if
> it's hot. With that much power seeming to be lost, it certainly should be
> warm or even hot to the touch.
>
> Loss of power is common at the higher frequencies. Lead dress is often the
> culprit, with stray capacitance and inductance bleeding off valuable power.
> The leads must be kept short, components small, and kept well away from
> other components. I had an HF amplifier that had no output on 10 meters and
> after I shortened up things a bit it began to give useful power on that
> band. It was better on 12 meters and full output on 15 meters.
>
> Another approach might be to make a separate 10 meter inductor in series
> with the roller inductor, and at right angles to it. Then the roller would
> be nearly totally out of the circuit when on 10 meters and it would be safe
> to have it open rather than shorted. The 10 meter inductor could be of
> tubing or other large diameter high Q material. It won't have much effect
> on the other bands.
>
> 73, Bob K6DDX
>

>

5192. OA79 device specs?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-29 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <0G8EUFAB5ea4EwPu@falstaf.demon.co.uk>
Source record: 64560
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Dear All,
A couple of questions:

1) OA79 device specs - what are they?.
2) Does anyone know where I can get a matched pair of OA79s or
equivalent.
3) what are the desirable characteristics for signal diodes when used as
a balanced modulator.

I am continuing to get a G2DAF TX going and I am now trying to get the
carrier removal from the SSB filter set up as best I can. I've got as
far as i can with alignment but would like to try and put better devices
in if possible to improve the modulator performance as I can still hear
a very small amount of carrier on the RA17 that I use in the shack and
there is a bit of a "ping" when the PTT is pressed.

Cheers and happy xmas, new year etc etc ect

Robin

Robin Birch robin@falstaf.demon.co.uk

M1ASU/2E0ARJ/M5ABD Old computers and radios always welcome

5193. Re: OA79 device specs?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-29 00:00:00 UTC
From: Snave <None>
Message-ID: <946469371.3827.0.nnrp-13.9e98250c@news.demon.co.uk>
Source record: 64561
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Robin Birch <robin@falstaf.demon.co.uk> wrote in message
news:0G8EUFAB5ea4EwPu@falstaf.demon.co.uk...
> Dear All,
> A couple of questions:
>
> 1) OA79 device specs - what are they?.
> 2) Does anyone know where I can get a matched pair of OA79s or
> equivalent.
> 3) what are the desirable characteristics for signal diodes when used as
> a balanced modulator.
>
> I am continuing to get a G2DAF TX going and I am now trying to get the
> carrier removal from the SSB filter set up as best I can. I've got as
> far as i can with alignment but would like to try and put better devices
> in if possible to improve the modulator performance as I can still hear
> a very small amount of carrier on the RA17 that I use in the shack and
> there is a bit of a "ping" when the PTT is pressed.

Unfortunately, a year after you came here (did you have the RA17?),
I had a further clear-out and out went all the Mullard geranium specs,
a whole dustbin load.

However, from other sources here.....
OA79: Geranium point-contact detector, PIV45, max rev current 350 uA
(at 45 V) , max rectifier current 35 mA

For matching any semiconductor diodes, you need only measure the
reverse leakage current because all other diode characteristics
come from this......

ISTR.....

I = Idss(e^(qv/kT) -1)

5194. Fiber Optics in Ham Radio??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-29 00:00:00 UTC
From: The Martell's <mike-n-terri@erols.com>
Message-ID: <386A4089.BDBDDB58@erols.com>
Source record: 64562

Hello All.
I am looking to find others who may be using Fiber Optics for some purpose in Ham Radio. I would like to use fiber rather that copper/etc to control and communicate with remote eq. My main interest is to find info on muxing audio and sending it via fiber to the remote site (200-300 ft from the house), any info would be appreciated.

Thanks..Mike..KA1IFQ

5195. Re: What do these parts do?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-29 00:00:00 UTC
From: Robert Lyons <boblyons@umich.edu>
Message-ID: <386A4E0D.66DFC8C4@umich.edu>
Source record: 64563

Paul wrote:
>
> I have no knowledge in radio or any other electronics, although I am
> intersted by this sort of stuff.

Hi, Paul -

Please accept my apology for the jerks that responded to you. I've yet to find a newsgroup that didn't have some.

You got some pretty good answers that may get you started. One gentleman suggested the Forrest Mims books from Radio Shack, which I agree are fine for exploring basic circuits. However, when I started out, I needed some even more basic info, and my recollection is that the Mims books don't help with *really* basic stuff. In my case, what worked was to get one of those "100-in-one Electronic Projects" type of kits. The ones I'm thinking about have an assortment of electronic components and some kind of 'breadboarding' arrangement (a way to temporarily connect them in lots of ways). The manual gives directions on making all sorts of things, like simple transmitters, amplifiers, buzzers and "shadow detectors". Start with the simple circuits and try to figure out how they work, and you'll learn fast. Feel free to email me with questions.

Who else remembers starting out with these multi-project breadboard kits? Mine was a Heathkit, and one of my fav projects was a little one-transistor oscillator that ran on the AM broadcast band and had a range of tens of feet. At 10, I thought it was absolutely the coolest thing!

Good luck, Paul.

Bob, KI8AB

5196. Re: OA79 device specs?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-29 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <DwN33GAIDla4Ew7w@falstaf.demon.co.uk>
Source record: 64564
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

In article <946469371.3827.0.nnrp-13.9e98250c@news.demon.co.uk>, Snave
<None@?.?> writes
>Unfortunately, a year after you came here (did you have the RA17?),
>I had a further clear-out and out went all the Mullard geranium specs,
>a whole dustbin load.
>
Yes I had the RA17 and it still goes fine.

>However, from other sources here.....
> OA79: Geranium point-contact detector, PIV45, max rev current 350 uA
>(at 45 V) , max rectifier current 35 mA
>
Thanks
>For matching any semiconductor diodes, you need only measure the
>reverse leakage current because all other diode characteristics
>come from this......
>
>ISTR.....
>
> I = Idss(e^(qv/kT) -1)
>
>
Ok, I'll try and get a batch followed by a lot of industrious metering
:-)

--
Robin Birch robin@falstaf.demon.co.uk

M1ASU/2E0ARJ/M5ABD Old computers and radios always welcome

5197. Re: OA79 device specs?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-29 00:00:00 UTC
From: basil <basil@isoplethics5.free-online.co.uk>
Message-ID: <Kksa4.1116$T3.41445@stones>
Source record: 64565
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

OA79s were probably germanium devices - difficult to get now

You could try a pair of Schottky low-power switching diodes. Forward voltage is about 0.4 V compared to 0.3 for germanium, so they ought to work with the drive available in the G2DAF. Also modern manufacturing make it likely that any pair from the same manufacturer and of the same type will be pretty well matched.
Robin Birch <robin@falstaf.demon.co.uk> wrote in message news:0G8EUFAB5ea4EwPu@falstaf.demon.co.uk...
> Dear All,
> A couple of questions:
>
> 1) OA79 device specs - what are they?.
> 2) Does anyone know where I can get a matched pair of OA79s or
> equivalent.
> 3) what are the desirable characteristics for signal diodes when used as
> a balanced modulator.
>
> I am continuing to get a G2DAF TX going and I am now trying to get the
> carrier removal from the SSB filter set up as best I can. I've got as
> far as i can with alignment but would like to try and put better devices
> in if possible to improve the modulator performance as I can still hear
> a very small amount of carrier on the RA17 that I use in the shack and
> there is a bit of a "ping" when the PTT is pressed.
>
> Cheers and happy xmas, new year etc etc ect
>
> Robin
> ---
> Robin Birch robin@falstaf.demon.co.uk
>
> M1ASU/2E0ARJ/M5ABD Old computers and radios always welcome

5198. Re: rf power amp tank question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-29 00:00:00 UTC
From: Tom Bruhns <tom_bruhns@agilent.com>
Message-ID: <386A527C.EF4BC704@agilent.com>
Source record: 64566

I don't have specific measurement data to contribute, but what you observed seems consistent to me. The small change of inductance says the active turns and the turns you shorted or opened aren't coupled very tightly; and that goes nicely with the lack of significant Q change. In any event, the unloaded Q of the coil should be (shorted turns or no) high compared with the loaded Q of the tank, resulting in relatively little of the power lost in the coil. IF the coil Q is 300 and the loaded tank Q is 10, then only 1/30 of the total power should be dissipated in the coil.

Note that a shield around a coil is a shorted turn, and it does change the Q -- mainly by lowering the inductance of the coil.

I didn't try to analyze the tank circuit the original poster talked about, but...what is its loaded Q? And if there's plate current and grid drive...where is the power going? You know the DC input power, and that MUST end up as either heat in the amplifier or (RF) output power. Does the pi load normally into a dummy load??

Cheers,
Tom

Al Lorona wrote:
>
> FWIW: I once measured a transmitting coil about 3 inches long, 1.5 inches
> diameter, air wound with 14 ga wire on an Boonton lab Q meter. With shorted
> turns, the Q was reduced by 9 percent over the value with no turns shorted.
> In other words, the Q was 91 percent of the unshorted turns value. Number of
> shorted turns didn't seem to make much difference. The change in inductance
> was insignificant.
>
> Anyone else have measurement data?
>
> 73, AL, e-mail aforo@megsinet.net

5199. Synchronous detector!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-29 00:00:00 UTC
From: jos <soj@sympatico.ca>
Message-ID: <386A87BE.B671CEDD@sympatico.ca>
Source record: 64567

Does anyone know of an Integrated Circuit # for AM detection like the
ones used in
short wave receivers . Thanks.

5200. Re: Heathkit weather station question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-29 00:00:00 UTC
From: WB3KUM <d.breeden@nospam.wcom.com>
Message-ID: <386A6C39.90A7BB63@nospam.wcom.com>
Source record: 64568
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Check E-Bay and Yahoo Auctions. These do show-up ocationally. If you don't find them on a search on E-Bay, check the options and there is a option to check completed auctions. Ebay prices run on the high side so adjust as necessary. Good luck.

5201. LF Transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-29 00:00:00 UTC
From: charlie <burnham@tiac.net>
Message-ID: <386A9350.9793499A@tiac.net>
Source record: 64569

I need ideas for a low power 1-2W AM transmitter that operates around 300Khz. A quarter wavelength
long wire antenna is possible but there is limited power available (12Volt batteries). This is for short range use of
GPS receivers that have built-in differential beacon receivers. The working area is hundreds of miles from civilization. I cannot find out anything about equipment/designs for this frequency range.

5202. Re: Heathkit weather station question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-29 00:00:00 UTC
From: jwfrank@toad.net
Message-ID: <CKwa4.331$Gh2.652@newsfeed.slurp.net>
Source record: 64570
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Heathkit actually put out two weather stations. One
was with 4 analog gauges that could be mounted either
horizontally or vertically and the other was a more
advanced digital display unit. The analog version sold
new for about $190. as I remember it (I have one of them).
The bearings in the anomometer were made out of teflon in
later versions of it. Where to get those, is probably an
exercise in itself. You can use the above new cost to
come up with a what it's worth to you cost. I don't
remember the cost of the digital version but I think it
was a least double. Oh, another thing to look at are the
sealed switches used for both the wind speed and direction
indicators. They tend to fail over time. You can find
replacements from a catalog from All Electronics Corportation
P.O. Box 567, Van Nuys, CA 91408-0567.

John

5203. Help Tubes Tester Info Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-29 00:00:00 UTC
From: W5IDX <W5IDX@worldnet.att.net>
Message-ID: <84e6fj$p96$1@bgtnsc02.worldnet.att.net>
Source record: 64571
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

I Recently Had The Fortune To Aquire An Accurate Instrument Company Model
257 Tube Tester.
The Problem Is That My Manual I Have Is Dated 1/68 And Is Missing The Pages
Past Number 62.
Can Anyone Help With The Missing Pages Or Does Anyone Have Any Updated
Manuals Or Info For This Tester.
73's W5IDX

5204. Re: Synchronous detector!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-29 00:00:00 UTC
From: Dale Parfitt <parinc@bellsouth.net>
Message-ID: <386AA23B.12E459E1@bellsouth.net>
Source record: 64572

jos wrote:

> Does anyone know of an Integrated Circuit # for AM detection like the
> ones used in
> short wave receivers . Thanks.

FAR circuits has an am sync pcb based on a Ham Radio mag article (for $1 they supply a copy). It uses a Motorola MC13022 device. FAR is on the WEB- don't have the URL, just do a search.

Dale W4OP

5205. Winding Transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-29 00:00:00 UTC
From: "Randall D. DuCharme" <randyd@NO-SPAMtcainternet.com>
Message-ID: <386AB64C.5DA4796E@NO-SPAMtcainternet.com>
Source record: 64573

Greetings,

I'm wondering if anyone knows of a place to purchase transformer winding components (bobbins, iron, magnet wire, etc) and knows of a good technical reference that covers winding of ones own transformers (modulation, plate, filament, etc) for tube stuff.

Thanks in advance!

--
Randall D DuCharme Proud to be 100% Microsoft Free!

Unsolicited commercial email (SPAM) received at this email address will not be tolerated. All spam is subject to a $200 per incident processing fee and possible legal action pursuant to federal regulations.

5206. Need Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-29 00:00:00 UTC
From: sbgw@southernet.net
Message-ID: <386AC1A3.99686833@southernet.net>
Source record: 64574

Hi. My name is Matt and I'm trying to learn how to get started with amatuer radio broadcasting. If anyone can help me out or direct me to a web site that I can use I'd appreciate it. Thank you. And Happy New Year to you all.

5207. bcb filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-29 00:00:00 UTC
From: inagaddadavida@webtv.net
Message-ID: <26296-386ACBA1-160@storefull-118.iap.bryant.webtv.net>
Source record: 64575

i have a crystal converter that lets me receive shortwave frequencies on my car radio. there are local mw stations getting past the front-end and causing hetrodyning when a sw station is received on that position on the am dial. does anyone have a filter circuit to eliminate mw signals but pass signals above 3mhz? the front-end i have is simply a variable cap in parallel with an inductor. its range is from 5mhz to 10mhz. it selects the frequency to be mixed with the crystal frequency, but it doesnt attenuate enough to eliminate a few powerhouse stations entirely.

5208. Re: LF Transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-30 00:00:00 UTC
From: maddog@io.com
Message-ID: <386b5b86.153222371@news.io.com>
Source record: 64576

On Wed, 29 Dec 1999 18:03:44 -0500, charlie <burnham@tiac.net> wrote:

>I need ideas for a low power 1-2W AM transmitter that operates around
>300Khz.

Just out of curiosity, what license or regulatory permission was
required for this application, and what process did you have to go
through to obtain it?

monty

5209. rf power amp tank, i experimented

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-30 00:00:00 UTC
From: hexter@blazenet.net
Message-ID: <XgAa4.22743$Ym1.1055490@tw11.nn.bcandid.com>
Source record: 64577

thank you to all who replied to the original post.

I 'unshorted' the unused section of the tank and 18, and 19
mhz became usable. sensible loading and output power. 26mhz
did not come to life, but the amp has no practicle application
at that frequency anyway. the 28 mhz operation is 'tighter'
and more predictable with the 'shorting strap' in place, and
overall, the amp is a few percent more efficient at all freq
with the short across the unused turns.

thanks again.

5210. Re: Ten-Tec 1253 Regen Kit?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-30 00:00:00 UTC
From: Udo Peters <dk3bi@t-online.de>
Message-ID: <84f461$e57$1@news07.btx.dtag.de>
Source record: 64578

Hi abcd1234,

> I built the 1253 regen 3 yrs back.
> 1. its regen/reaction control is not smooth.
> 2.It is susceptible to audio oscillations.
> 3.much better performance ca be obtained even from fet transistor circuits
> Ibuilt one using a fet at 1.5 volts, and this was veryvery good.
>
> I would honestly recommened that you build one using tubes
> like 12sn7/12au7/6u8 at low voltages (12-50) volts on plate.
> Even the the12sn7 @24 volts on plate beats even a superhet
> rx and has very smooth regen.
>
> Use a throttle cap for regen and please use a 12-012 volt/,45 amp
> transformer primary as the choke load for detector.
>
>
> Ican post ckt if you need it.

I'm also very much interested in the circuit as I intend to build a regen
with tubes. Could you post it to me?

VY 73s and best Y2K de

Udo dk3bi@t-online.de

5211. Re: LF Transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-30 00:00:00 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <4p7m6s0k1flnae84karob1ifuvkst8fv4k@4ax.com>
Source record: 64579

On Wed, 29 Dec 1999 18:03:44 -0500, charlie <burnham@tiac.net> wrote:

> I cannot find out
>anything about equipment/designs for this frequency range.

It is true that very little engineering literature has been written
since the 1950's :-).

There is quite a lot of activity on the European LF amateur allocation
at 135.7 .. 137.8 kHz and the license free LOWFER operation in the US,
so a web search on lowfer or "136 kHz" should bring up quite a lot of
links including LF transmitters, antenna tuners and antennas.

5212. PAGE WEB RTX ED RX USED

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-30 00:00:00 UTC
From: iz0ckl@libero.it
Message-ID: <386b6c1a.2585284@news.libero.it>
Source record: 64580

http:// www.geocities.com/iz0ckl/

5213. Re: Need Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-30 00:00:00 UTC
From: cartercook@aol.com
Message-ID: <19991230095432.05445.00000023@ng-cf1.aol.com>
Source record: 64581

Matt:
Take a look at www.arrl.org/hamradio.html.
You'll find some information on getting started and learn more about amateur radio. Send me an email with further questions.

It's a great hobby!
Carter Cook

5214. Re: Ten-Tec 1253 Regen Kit?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-30 00:00:00 UTC
From: Nick Caruso <nick.caruso@software.com>
Message-ID: <386B8E9D.E0AEF014@software.com>
Source record: 64582

abcd1234 wrote:

> hi,
>
> I built the 1253 regen 3 yrs back.
> 1. its regen/reaction control is not smooth.
> 2.It is susceptible to audio oscillations.
> 3.much better performance ca be obtained even from fet transistor circuits
> Ibuilt one using a fet at 1.5 volts, and this was veryvery good.

I built the ten tec kit as well. Solid construction; easy to build, and it worked when built; regen control was *not* smooth. Noted some microphonics but did not find it a problem. Seemed like the pot that controlled the regen got noisy very quickly; also had some trouble getting regeneration on all the 9 bands. Didn't work too well at the high end of it's frequency range, which I guess is no surprise in a regen. Audio had plenty of volume, but it was difficult to tune in any SW BC stations so that they were listenable. Drifty, too, which also made BC listening problematic. And I followed good tight construction practices.

My review in sum would be: fun to build; fun to play with for a while, overall, performance disappointed me in the areas cited above.

There have been a series of articles (in Comm Quarterly; recent ARRL handbook; QEX(???)) by Charles Kitchens (sp?) on regen receivers he's built; I have not built any of them. There's also a book from Lindsey Books, by an OT who has written down everything he remembers about building tube regens. He has a couple of solid state schematics as well. The key seems to be, use the throttle-cap as the regen control, as the previous poster has noted.

best regards,
nick caruso
kb1dej

> >While you're passing out the spam, don't forget these guys:
> >
> >admin@loopback
> >$LOGIN@localhost
> >$LOGNAME@localhost
> >$USER@localhost
> >$USER@$HOST
> >root@mailloop.com
> >Chairman William Kennard: wkennard@fcc.gov
> >Commissioner Susan Ness: sness@fcc.gov
> >Commissioner Harold Furchtgott-Roth: hfurchtg@fcc.gov
> >Commissioner Michael Powell: mpowell@fcc.gov

> >Commissioner Gloria Tristani: gtristan@fcc.gov
> >US Postal Service: customer@email.usps.gov
> >Fraud Watch: fraudinfo@psinet.com
> >Federal Trade Commission: consumerline@ftc.gov

5215. FS: RF comps for builders (long)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-30 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <386C101B.CFC@pop.valley.net>
Source record: 64583

Hello-- Revised 12/30/99

I'm offering homebrew builders oddball, offbeat and hard-to-find NOS RF components, including...
***
Hewlett-Packard MSA-0786 MMICs ($1.00 each, $5.00 for 6, $10.00 for 15, or $25.00 for 50 pieces); DC-2 GHz. These are taped and reeled and have leads configured for surface-mounted applications. Specs are available at HP's web site (or with your order)...
http://www.hp.com/HP-COMP/index.html
***
1N5711 Schottky diodes, full-length leads, taped and reeled, $1.00 for 10
pieces
***
1N5821 Schottky rectifiers, full-length leads, bulk packed, $1.00 for 8 pieces
***
PIN diodes, no other specs available; full-length axial-leaded packages; individually serialized in sealed-foil envelopes. $1.00 each.
***
JAN 1N748A Zener diodes: individually sealed in mil-spec foil packets for your protection<g> in 1983.
$1.00 for 6 pieces.
***
SD-201 Signetics DC-2 GHz DMOS single-gate FETs four-lead TO-72 can (like TO-18 w/shield lead). A conductive-rubber antistatic "O" ring encircles
all four leads. Specs (available on request and with purchase) include S parameter plots. $1.00 each, $3.00 for 6, $5.00 for 12 pieces.
***
TN-2219A National Semiconductor NPN general-purpose NPN transistor:
100 < hFE < 300 at Ic= 150 mA; BVcbo = 75 V min.; BVceo = 40 V min.;
Icbo = 10 nA max. at Vcb= 60 V; Cob = 8 pf max.; Ft = 60 MHz min.
at Ic = 20 mA. NF 4 dB (max.)
In TO-237 metal-tabbed plastic package (similar to TO-92); this package reduces thermal resistance from 125 C per watt for a TO-92 to 50 C per watt for the TO-237.
Ideal for building a QRP rig around a single device!
$1.00 for 20 pieces; $5.00 for 120 pieces

***
Minicircuits T1-1T (1:1 turns ratio (center-tapped)) broadband RF transformers (80 KHz to 200 MHz); leads are formed for surface mounting but you can rebend for DIP insertion. Visit www.minicircuits.com for

full specs via their catalog.
$1.00 for 3
***
Minicircuits PSCQ-2-400 90-degree, 2-way power divider, 0.9 dB insertion loss, 225-400 MHz; $1.00 each
***
Fair-Rite cores (both type 43 mix):

2643023002 (a long-cored toroid) $1.00 for 10 pieces
2843002402 (binocular (balun) core) $1.00 for 20 pieces
***
Coilcraft p/n 142-07J08 single-winding adjustable inductors.
330 nH min./ 378 nH nom. /427 nH max.; 307 nH with tuning slug removed. Q is 112 min. at 40 MHz; 7.5 turn winding on 10 mm molded form.

$1.00 for 5 pieces; $5.00 for 35 pieces.
***
RF power xfmr.: consists of two 1.125-inch long by 0.570 inch OD ferrite sleeves with tubing primaries. Two small circuit boards short one end of the tubes, and the other two are not connected. A section of Teflon (tm)-insulated wire passes through both tubes' centers twice, making a 1:2 turns ratio stepup transformer (you can easily remove this winding and replace it with more turns at a smaller gauge) At a (nonguaranteed) guess, the assembly might handle 100 watts of RF. The core specs are currently unknown.

Price: $1.25 each (scanned image available on request)

***
Pulse Engineering PE-53190 toroidal inductor for switched-mode power supplies.
Inductance = 12. 2 microhenries at zero DC; 8.7 microhenries at 2.5 A DC.

Price: $1.00 for 6
***
SAW-stabilized oscillators; intended for ECL circuits, but also reportedly usable as LOs. All are packaged in metal DIP cans.
$4.00 each, or three assorted for $10.00

Frequencies available are:
222.222 MHz (RF Monolithics HC1279; proprietary p/n marking)
350.000 MHZ (RF Monolithics HC1301)
366.667 MHz
400.000 MHz ($2.00 ea. but not NOS; removed from PC boards)
733.333 MHz
***
Teflon- and diallyl-pthalate insulated single-point turret lugs at $12.00 per 100 (many styles available-- e-mail a request for information and a jpg image showing various types).
***

Feedthrough capacitors: Spectrum Control 100 pf nominal (threaded
bushing mount, hardware included). Attenuation is specified as
-10 dB at 300 MHz, and -20 dB at 1 GHz.
$.50 each, $1.00 for 3 pieces. ***ONLY 36 PIECES REMAINING***
***
Air-variable capacitors manufactured by Cardwell (their part no.
PL6348).
NOS surplus, m'fd. sometime in the 1950s.
--Configuration: consists of two plates separated by 0.1";
--Estimated capacitance range: 1-5 pf.
The adjustment shaft is 0.25" dia. by 0.5 inches long; bushing or
isolated mounting; easily disassembled for capacitance vs. frequency
modification, etc. A more-detailed description is available on request.

Price: $3.00 each, $10.00 for 5 pieces, $20.00 for 12 pieces.
***
Caddock MS281N NONINDUCTIVE resistors:

10 ohm +/- 5 per cent tolerance, 8 watt noninductive power film
resistors
Tinned axial leads (0.75 inches long) are formed for PC-board
insertion on 1.2-inch centers. These are NOS, bulk-packed parts.
Note: these measure well within tolerance at +/- 0.2 ohms typical. Full
specs are available in PDF format on Caddock's web site
(www.caddock.com)
but highlights are:
--Temperature coefficient of resistance: 50 ppm;
--Power rating: 8 watts at 25 C, derating to 4 watts at 150 C and
0 watts at 275 C;
--Noninductive design: serpentine film layout cancels magnetic field-
equivalent inductance of a straight piece of wire of the
resistor's body plus lead length.

Applications include:
--Current sampling;
--Cathode bias;
--Dummy loads for audio and RF applications.

Price: $1.00 each ($10.00 for 12 pieces); only 70 pieces available
****
Six-lug terminal strips, like Keystone p/n 825: six isolated, tinned
steel lugs mounted on a brown phenolic insulating strip, arranged in
groups of three on either side of a central mounting bracket. There's
no center grounding lug, but you can add a jumper to an adjacent lug
or two as required. Tie-point strips work well for breadboarding if
you use unetched-copper PC board laminate as a ground plane.

The lugs are spaced on 0.375-inch centers; mounting bracket has a
0.140-inch hole (use a 6-32 screw for chassis mounting).

I've sold thousands of these, but my supply is running low. Buy a batch
now before they all go to good homes<g>. ***DEFINITELY THE LAST CALL!

ONLY A FEW HUNDRED REMAIN***

Prices: $.15 each, or $6.00 per 50 pieces, $10.00 per 100 pieces.

****
* NOS Warranty policy *
****
Scanned images or digital photos of components are available on request.

If you purchase NOS tubes or components and find them unsatisfactory upon your inspection, notify me within seven days and return items in as-received condition for a full refund or replacement (if available).

This material is subject to prior sale and is supplied as-is, as new-old-stock (NOS) merchandise, with all responsibility for safe and successful application residing solely with the purchaser.

If you're searching for oddball components of any vintage, don't hesitate to inquire about availability.

****
* Shipping per order: *
****
Postage:

Add $3.20 for priority-mail shipment (U.S. only). Add $1.80 for insurance on orders over $50.00.

Foreign purchasers: please inquire for shipping charges.

Please contact me to confirm availability and reserve components before sending payments.

I accept payment via personal or cashier's check or money order drawn in U.S. dollars and made payable to "Brad Thompson".

**********Available from:**********
Brad Thompson, AA1IP
P.O. Box 307, 202 Whitaker Rd.
Meriden, NH 03770-0307
Voice:(603) 469-3351
Fax: (603) 469-3917
E-mail: brad.thompson@valley.net

5216. Re: Winding Transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-30 00:00:00 UTC
From: paul <apollo_six@btinternet.com>
Message-ID: <W8I1bBAIw8a4EwJT@btinternet.com>
Source record: 64584

Here in the UK I've found some armature and motor rewinders very helpful. I wouldn't recommend rewinding anything much above 240 volts, basically because of the boring chore it is and also the problems of interwinding insulation.

The cheapest option for EHT transformers would probably be getting a "sample" wound of a mains toroid transformer to your spec.

There is information on wire sizes to be found in the ARRL handbook. A micrometer also comes in useful to measure wire diameter too! I also believe that's there's info on the power ratings calculated on transformer core cross sectional area.

Paul

In article <386AB64C.5DA4796E@NO-SPAMtcainternet.com>, Randall D. DuCharme <randyd@NO-SPAMtcainternet.com> writes
>Greetings,
>
>I'm wondering if anyone knows of a place to purchase transformer winding
>components (bobbins, iron, magnet wire, etc) and knows of a good
>technical reference that covers winding of ones own transformers
>(modulation, plate, filament, etc) for tube stuff.
>
>Thanks in advance!
>

--

5217. hustler antenna triple mount for home use

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-31 00:00:00 UTC
From: William Mastop <wmastop@home.com>
Message-ID: <S16b4.121860$ri.634359@news1.rdc1.bc.home.com>
Source record: 64444

Here's a thread between Dale kc2pz and I regarding a triple mount hustler antenna, for home use, with three resonators attached to one mast. The idea has considerable appeal to me, but I wanted to run it past others on the group before embarking on the project. Any ideas would be appreciated.
William

From: dale brown <dgbrown@wcnet.net>

Mike...I have a hustler antenna and I made an adapter to mount three resonators on one mast. I cut an equilateral triangle 8 inches on a side out of 1/8" aluminum plate. I drilled a 3/8" hole in the center and on each tip about 3/4" in from the apex. I then put the tip into a vice and bent over about 1 and 1/2 inches to about 30 degrees. This worked very well with my FT-890. I bolted the hustler mount on a 2 inch square tube and stuck it in the receiver hitch. The wind load is not too bad, but to be safe (above 70 mph) I tethered it to the luggage rack on the top of the vehicle....Dale KC2PZ
Thanks for the posting Dale. Very interesting idea. I have one bit of trouble with your description as set out below. You say you put the tip in the vice, and bent it over about 1.5 inches, to 30 degrees. When you say tip, do you mean the 3 tips of the triangle, not just one? If so, does this then mean that the antennas- or the resonators and whips rather, point something other than straight up? Also, how did you affix the resonators to the plate itself? Just with a bolt through the holes on the tips of the plate or???
Any help would be appreciated. I may be able to use this at home, as I have a base mounted hustler here, and hate to change the resonators. Have you noticed any compromise of your signal with this arrangement?
I look forward to hearing from you.
William Mastop (VE7WJM) Vernon, British Columbia Canada

William.....Yes, all three tips were bent over at the 30 degree angle. The center of the triangle has a 3/8 inch hole to mount to the top of the hustler mast. I bought four 1/2 inch long bolts to attach the resonators and plate at the hardware store...I believe they were 3/8 inch in dia. with 24 threads per inch..however, you can take a resonator with you to the hardware store to match the threads. The shallow 30 degree angle does not noticeably effect the received or transmitted signal. The relative positions of the three resonators and whips minimize interaction.....Dale KC2PZ

--
William Mastop in Vernon, B.C. Canada (Amateur radio call sign: VE7WJM)

5218. Radio Related GIFs and Clip Art

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-31 00:00:00 UTC
From: g0nfa@aol.com
Message-ID: <19991231131646.21982.00000104@ng-xa1.aol.com>
Source record: 64445

Hello All.

For Radio Related GIFs and Clip Art

visit http://members.aol.com/gx0vzs/gifnclip.html

For your use on Web Pages etc.

Please send feedback by email only to g0nfa@aol.com

Derek - G0NFA
Email - g0nfa@aol.com
144MHz In Europe Home Page - http://members.aol.com/g0nfa/144mhz.html
144MHz Contest Calendar 2000 - http://members.aol.com/g0nfa/contests.html

5219. Re: 13.5V, 20A switch-mode PS to build??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-31 00:00:00 UTC
From: JW <jdwalton@home.com>
Message-ID: <386D40B0.FBF9D8E3@home.com>
Source record: 64446

Last year, or rather Dec 98, Jan 99 QST had just such an article.

Larry Gagnon wrote:

> I am considering building a 13.5V, 20A power supply for my rig. There
> are many designs using standard high amp transformers (which are very
> difficult and expensive to source)...but what about a switch-mode
> design? I have never seen a circuit that a hobbyist could build. Does
> anyone know of a good circuit design for a switch-mode power supply
> that is relatively straightforward to build and to source parts for?
>
> Larry MW0AWC

5220. Grundig Movitalk help??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-31 00:00:00 UTC
From: Maci <stojanka.gracanin@ka.tel.hr>
Message-ID: <84j7k5$pk8$1@as102.tel.hr>
Source record: 64447
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

I have a Grundig Movitalk 209 UHF radio station. This station was programmed by PC but I don't have programmable cable for connected radio with PC. If anybody have some information about this, please send me to machi@email.hinet.hr or in group.

Thanks!
9A6JWI, Mario.

5221. FS - Henry 4K ULTRA and IC-746

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-31 00:00:00 UTC
From: George Benko <GBENKO@prodigy.net>
Message-ID: <84jdac$6r3k$1@newssvr03-int.news.prodigy.com>
Source record: 64448
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

I am posting this for a friend of mine, Paul, W8ZH. Please respond to him directly at w8zh@juno.com

73, George
K8BRW

I am looking for a Henry 8K. I have for sale or trade a Henry 4K Ultra, S/N 265. I have the original bill of sale, amp was built in 1982. This amp is cosmetically and electrically perfect. only defect is wattmeter needle is bent very slightly to right. meter movements are available from Henry for abt $100. goes with spare 8877. Driving with IC-746 will pin internal meter and about 3K out on coaxial dynamics wattmeter. will trade or ?. Will swap complete station, 4K Ultra and Icom IC-746, 746 purchased new in May 1999 and has less than 50 hours on it. This gear is in as new condition. I also have a homebrew pair of 8877 on 50mc. It is ugly, crude and built on used chassis, etc., but driven with the 746 it will make 3800 out on 6. Its kind of like the W6PO 2 mtr amp but uses 2 tubes and lumped inductors instead of pieces of pipe. It has 4400v, 2amp supply, Dahl 80lb plate xfmr, etc. is in junky 6ft rack. I am open to offers if any interest. Thanks, w8zh@juno.com or 440-548-4426 anytime.

Paul

5222. Re: 13.5V, 20A switch-mode PS to build??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-31 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <386D3527.77AB@pop.removethistomailme.net>
Source record: 64449

Larry Gagnon wrote:
>
> I am considering building a 13.5V, 20A power supply for my rig. There
> are many designs using standard high amp transformers (which are very
> difficult and expensive to source)...but what about a switch-mode
> design? I have never seen a circuit that a hobbyist could build. Does
> anyone know of a good circuit design for a switch-mode power supply
> that is relatively straightforward to build and to source parts for?
>
> Larry MW0AWC

There's an interesting 40A 13.8V switcher design in the '99 Handbook,
using homemade transformers. Might be in the Y2K Handbook as well, I
haven't checked.

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

5223. Re: Winding Transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-31 00:00:00 UTC
From: Corky <corkyNOcoSPAM@myremarq.com.invalid>
Message-ID: <053a541c.7bd08961@usw-ex0107-042.remarq.com>
Source record: 64450

http://members.tripod.com/~schematics/xform/xformer1.htm

* Sent from RemarQ http://www.remarq.com The Internet's Discussion Network *
The fastest and easiest way to search and participate in Usenet - Free!

5224. 10Ghz FM Experiments

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-31 00:00:00 UTC
From: Brad Dyson <n4trc@prodigy.net>
Message-ID: <84jiijtvo1@newssvr03-int.news.prodigy.com>
Source record: 64451

I am interested in experimenting with 10Ghz (or higher) wideband FM equipment (build my own). Can some one tell me more about the frequency stability of these gunn diodes? How about the lifespan of them? how often do these devices have to be replaced (if ever?) Can the resonant cavities be home made (if so, where can I get the dimensional specs, where to place the components, etc)? Can anyone give input on their impressions of Advanced Reciever Research, or Hawgplexer parts/ kits/ etc? other suppliers? Brad n4trc@prodigy.net

5225. Re: 10Ghz FM Experiments

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-31 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <386D52FB.3898@pop.removethistomailme.net>
Source record: 64452

Brad Dyson wrote:
>
> I am interested in experimenting with 10Ghz (or higher) wideband FM
> equipment (build my own). Can some one tell me more about the frequency
> stability of these gunn diodes?

They are actually not that unstable, relative to the frequencies they're running at. In terms of long-term stability, temperature is key. http://www.shfmicro.com sells a "Gunn Heater" board that can be used to keep a Gunnplexer housing at a constant high temperature to improve stability, if you want to try free-running them. The diodes I've used are rated for +/- 25 MHz temperature stability over -30 to +70 C, so if you can keep the temperature constant to within a degree or two, drift shouldn't be more than a few hundred kHz worst case. That's fine for wideband video and data modes, but for NBFM work you would have to use some sort of AFC mechanism.

Haven't really looked into the residual FM and phase-noise characteristics of Gunn diodes, but I don't recall the ones I've used being too obnoxious.

> How about the lifespan of them? how often do
> these devices have to be replaced (if ever?)

I've never heard of one burning out. Considering how many millions of them you see in supermarket door openers and such, it's probably not a big deal. There are no MTBF specs on the data sheets I have, but anecdotally, I've been running two high-power (100 mW) diodes continuously since early June with no downtime.

> Can the resonant cavities be
> home made (if so, where can I get the dimensional specs, where to place the
> components, etc)?

Sure, you could do this yourself, but shfmicro.com has some very high-quality M/A-COM 10 and 24 GHz Gunn-source cavities complete with varactor and Schottky mixer diodes and tuning screws for $60-$70 apiece. Unless you're on a real shoestring budget the M/A-COM parts are the way to go IMO. Both the shfmicro site and my Ethernet-link project page (below) have data sheets for the M/A-COM parts.

> Can anyone give input on their impressions of Advanced
> Reciever Research, or Hawgplexer parts/ kits/ etc? other suppliers? Brad
> n4trc@prodigy.net

Haven't looked into these -- do you have any URLs? I have been 100% happy with shfmicro myself, so I'm not sure what other suppliers are out

there.

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

5226. Unblocked scanner

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-31 00:00:00 UTC
From: Karl <kshoe@juno.com>
Message-ID: <386D6AAC.4F7E@juno.com>
Source record: 64453

Anyone have brand/model on a scanner with continuous coverage
from about 30 MHz to around 950 MHz? I guess the commond term is
unblocked, in reference to the cellular bands. I suspect simple jumper/
diode cut is the modification ?

--
Karl Shoemaker
kshoe@juno.com
http://www.dalek.org/srg

5227. FS: 532 pf poly-film v-caps.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-31 00:00:00 UTC
From: K3FDY <edek@mail.gcnet.net>
Message-ID: <DYVa4.52$I5.15943@typhoon2.gnilink.net>
Source record: 64585

Hard-to-find, 20 mm, 266 pf x 2 poly-film tuning caps. w. trimmer pkg.. 2
for $12.00 ,
or 100 ft. polyethylene ins. #24 ga. stranded wire and one cap for $13.00
Free shipping to U.S.A. address.

Ed Wawzinski, K3FDY
622 Deer Park Ave.
Oakland, MD 21550

5228. Re: 136kHz operation

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-31 00:00:00 UTC
From: K3FDY <edek@mail.gcnet.net>
Message-ID: <x1Wa4.48$I5.15041@typhoon1.gnilink.net>
Source record: 64586

Check-out www.amrad.org

J M Noeding wrote in message <3a3d6625.48041459@news.online.no>...
>is some particular frequencies I can listen to, and when is most
>activity on this band?
>
>73
>Jan-Martin LA8AK

5229. Re: bcb filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-31 00:00:00 UTC
From: blackm00@cam.org
Message-ID: <blackm00-3112990003270001@usrh-6-116.hip.cam.org>
Source record: 64587

In article <26296-386ACBA1-160@storefull-118.iap.bryant.webtv.net>,
inagaddadavida@webtv.net (Jim) wrote:

> i have a crystal converter that lets me receive shortwave frequencies on
> my car radio. there are local mw stations getting past the front-end and
> causing hetrodyning when a sw station is received on that position on
> the am dial. does anyone have a filter circuit to eliminate mw signals
> but pass signals above 3mhz? the front-end i have is simply a variable
> cap in parallel with an inductor. its range is from 5mhz to 10mhz. it
> selects the frequency to be mixed with the crystal frequency, but it
> doesnt attenuate enough to eliminate a few powerhouse stations entirely.

There's a filter like this in the ARRL Handbook. We were discussing it a few
months ago. I don't think it matters which edition, because the first
one I ever had, from 1971, had such a filter, though not the exact same
design as the one in more recent years.

But an important thing to watch before making a filter is where the problem
lies. A filter between the antenna and the converter won't do anything
if the car radio is picking up the signals directly, due to incomplete
shielding. Other problem areas would be the cabling from the converter
to the car radio. And of course if the converter itself isn't sufficiently
shielded the same problem arises. Try it with the unpowered converter connected
to the radio, with no antenna. If the problem signals are there, then
a filter ahead of the converter won't help.

Of course, one way around this, whether the problem is coming in
from the antenna or from incomplete shielding, is to make the converter
tuneable. Back when there were plenty of commercial converters, the car
radio was fixed. It was easier to pick a locally unused frequency in
the broadcast band than to have to deal with tuning the radio across
a band where there might be strong local signals.

Michael VE2BVW

5230. Re: HELP! Kenwood TS-440SATinterface.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-31 00:00:00 UTC
From: Stephen Strock <sstrock@dreamscape.com>
Message-ID: <s6org22e5k2133@corp.supernews.com>
Source record: 64588

ME Too!!!!!!!!

I am looking for the a schematic for the Kenwood IF-232C to connect to my TS-440SAT. Finding the IC-10 chipset is not going to be a problem.

I have not looked at the Handbook yet as mentioned in another response. I have just started working on this phase of the project. There is one manufacturer on the net - http://www.apci.net/~jbi/jbikits.htm - that mentions a CW Keying option

Any and all help would be greatly appreciated. I am also going to post new message for this.

Stephen
sstrock@dreamscape.com

>Is it possible to interface my Kenwood TS-940S with my computer and what
>will I need to do it? I can't fine anything in the 940 manual about an
>interface.
>
>Thanks for your help,
>
>Charlie - KA8BLO
>ka8blo@net-link.net
>
>
>

5231. Wanted - Schmatic for Kenwood IF-232C

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-31 00:00:00 UTC
From: Stephen Strock <sstrock@dreamscape.com>
Message-ID: <s6orp6lk5k267@corp.supernews.com>
Source record: 64589

Greetings.....

The subject says it all!!! I would like to build the computer interface for my Kenwood TS-440SAT. I recently saw a posting regarding a project in the Handbook although I haven't gotten that far yet. Just started on this little venture. Also there is a manufacturer - http://www.apci.net/~jbi/jbikits.htm - that lists a CW keying feature that I might be interested in.

Anybody have any drawings laying around or have reverse engineered one of these interfaces??????

Thank You in Advance

--
Stephen P. Strock
WA2FDU
sstrock@dreamscape.com

5232. heathkit pars needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-31 00:00:00 UTC
From: bujiaj8@aol.com
Message-ID: <19991231054717.07909.00000029@ng-cj1.aol.com>
Source record: 64590

I need a a couple of knobs for the old hw or sb 101 series radios. If you have any available or know of any pse email me with info.

Bill
KD5FXT

5233. anyone build the PA0FRI 70 watt amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-31 00:00:00 UTC
From: gagnon@gagnon.fakeu-net.com
Message-ID: <386c902b.1716571@news.u-net.com>
Source record: 64591
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Has anyone ever built the PA0FRI KISS 70 watt HF amplifier as seen in Radcom some 5 years ago or recently reprinted in Technical Topics scrapbook? If so I'd like to hear from you on where you obtained your parts and how well the circuit works. Contact me by direct email.

Larry MW0AWC

5234. 13.5V, 20A switch-mode PS to build??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-31 00:00:00 UTC
From: gagnon@gagnon.fakeu-net.com
Message-ID: <386c8f4e.1495585@news.u-net.com>
Source record: 64592

I am considering building a 13.5V, 20A power supply for my rig. There are many designs using standard high amp transformers (which are very difficult and expensive to source)...but what about a switch-mode design? I have never seen a circuit that a hobbyist could build. Does anyone know of a good circuit design for a switch-mode power supply that is relatively straightforward to build and to source parts for?

Larry MW0AWC

5235. Re: bcb filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-12-31 00:00:00 UTC
From: inagaddadavida@webtv.net
Message-ID: <11335-386CCE4E-51@storefull-114.iap.bryant.webtv.net>
Source record: 64593

i will check that handbook. i think its shielded ok. its completely contained in a steel box, with coax ant connections. i have put a choke in series with the power to kill rf there. this set contains a pre-amp, and the problem is only there when the power is on and the bypass switch is in the in service position.